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CANADIAN

JOURNAL OF MEDICAL SCIENCE:

A Monthly Iournal

OF

BRITISH AND FOREIGN MEDICAL SCIENCE, CRITICISM AND NEWS.

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VOLUME VI. JANUARY, 1881, TO DECEMBER, 1881.

T O R O N T O : GUARDIAN BOOK AND JOB PRINTING OFFICE, 80 KING STREET EAST.

100000000000

1881.

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Canadian Journal of Hedical Science.

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A MONTHLY JOURNAL OF MEDICAL SCIENCE, CRITICISM, AND NEWS.

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SUBSCRIPTION, S3 PER ANNUM.

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TORONTO, JANUARY, 1881.

Original Communications.

BRAIN LESIONS AND FUNCTIONAL RESULTS.

BY DANIEL CLARK, M.D., TORONTO.

(Read before the Canada Medical Association, at Ottawa, Sept. 1st, 1880.)

There is great danger in medical research to accept as theories preconceived notions based on a few isolated cases, and then to fortify these dubious interpretations of physical or mental phenomena by dragging in, neck and heels, every iota which seems to corroborate our views. On the other hand, the ardent but discreet investigator will adopt no great general principles until he has at his command sufficient data upon which to base them, beyond the bare presumption of vague probabilities. Richet, in his "Histology and Physiology of the Cerebral Convolutions," says in the preface: "There is nothing more baneful than to treat hypotheses as certainties. On the contrary, when serious criticism has revealed the defects and feebleness of an experiment, a real service has been rendered, for it may incite to new experiments and unequivocal conclusions. Inductions from probabilities or ill-demonstrated experiments are unreliable, and intelligent scepticism is more valuable to the advance of science than unbridled enthusiasm."

This honest expression of such an investigator should lead us to pause before drawing conclusions and establishing theories with insufficient proofs. It will be seen in the cases adduced of lesion of the brain, that this organ can stand more rough treatment in many of its parts than almost any other organ of the In fact, such laceration of its delicate body. structures can take place without any serious mental or physical disturbance, that we almost unconsciously take for granted that many parts of it must be of secondary importance in the animal economy. It is true that a large majority of those injured in the brain are afterwards afflicted with such diseases as epilepsy, paralysis, head distress. loss of memory, and the like; yet it is remarkable how many examples of the most extensive lesions of the brain can be found with no such results. In a monograph published by me a short time ago, I endeavoured to show that localization of functional power resided only in the basal ganglia, and that the masses of cerebral substance above them were only depositories of nervous energy. If this opinion be based on a physiological fact, it would help to solve this enigma.

It is well known by all medical readers that a sharp controversy has been carried on, and antagonistic opinions have been uttered by the leaders of thought in our profession, on the functions of the convolutions of the brain. They have been mapped out with the accuracy of the streets of a city, and each district has been allotted its own work to do. Although no dividing line exists in the substance of the brain, yet the comparatively slender divisions of many of the sulci are made to be boundaries of functional energy, in which great differences of operation exist. It is not the province of this paper to take up this subject in detail, but rather to show by the record of cases how foreign bodies and diseases can virtually destroy many of these so-called centres without any commensurate functional disturbance such as might be expected if these parts were distinct organs; also to show that mentality is not interfered with in these cases to the extent which at one time we were led to believe. The psychical results would be a good nut for the bumpologist to crack in these days of infidelity in the doctrines of Gall and Spurzheim.

All anatomists know that although the fissures of the brain in man maintain a certain degree of uniformity in direction and outline. vet the differences in detail are considerable. It will also be observed that these fissures do not make distinct divisions of the surface. The even continuity of the surface of every convolution, by means of an isthmus (so to speak) at the extremities and sides of each, indicates no striking dividing line between each of them. The dips in the grey matter, lying underneath these fissures and in proximity to the white substance, show that a certain degree of uniformity in quantity of grey matter is present throughout the periphery of the brain. It is true that differences in cell formation are seen in the various layers of the cortical substance, but these cellular distinctions are found only in each layer. There is no physiological distinction found in the various convolutions distinct from one another, to account for the varied functions in these so-called motor centres, as claimed by the Ferrier school. The uniformity of cell structure in the separate layers of the cortical substance is continuous. and nowhere bounded by the surface fissures and convolutions. In other words, all the convolutions are similar in structure, and were sections of each cut out from without inwards. and submitted to the closest analysis, no microscopist could tell where to locate each part. All are as uniform as would be sections of the contical substance of the liver or kidney. If we compare the convolutional structures of the cerebrum with that of the cerebellum, it will be seen that they are constructed on the same plan (Richet). In the region where the distinctive giant cells exist (i.e., in the fine layer type of the ascending frontal and parietal convolutions), all the cortical regions of grey matter have no distinctive anatomical

characteristics except the presence of giant cells. Charcot suggests that all the different sized cells may be of the same kind in different degrees of development. In this way he thinks it possible that even motor centres may change their centres. This is a convenient theory to account for the fact that such an attack as aphasia often passes away, although its so-called motor centre remains impaired.

This want of dividing lines on the external surface of the brain is, on physiological grounds, a momentous objection to distinct centres in the cortical substance. Let us now consider this subject from another point of view. Fritsch, Hitzig, and other experimenters, agree that in no appreciable degree do mechanical or chemical agents excite motion in the cerebral substance. Excitation by galvanism is said to be very feeble and very limited in either the cerebrum or cerebellum, and this want of response is seen throughout. It is evident that in this way-powerful as the agent isno functional centre could be found on the surface. Herrman shows that even after the grey matter is destroyed by chemical cauteries. a very feeble current of galvanism applied to this surface produced a slight movement, and significantly adds that in cutting away slices from the brain, the effect was more decided in proportion as the central regions were approached (Richet). In other words, the focus of nerve energy seemed to be in the ganglia at the base of the brain, and that the destruction of the cerebral substance did not produce that disturbance of the system commensurate with the loss of substance once supposed to be so necessary to the continuance of physical life and mental action.

Richet says, in speaking of the localization theory as propounded by Ferrier and his ardent followers, that "Absolute inflexible localization of the motor zones is impossible. There are zones which encroach upon each other, but none of these zones have limits of determined, vigorous constancy. The best proof of this is the difference existing among authors." If this mean anything, it is that although paralysis and abnormal functions of the brain in many instances follow the destruction of certain cortical parts, or are the results of disease, and although a certain degree of uniformity in physical results follows, yet it is equally true that these same areas may be destroyed without any such manifestations following. Their own experiments are taken as proofs of this fact. These circumscribed areas cannot, therefore, by any show of reasoning, be *the* organs which are the centres of distinct functional activity. These local changes may affect the co-ordinating and mental powers, but the centres of these activities must be sought for elsewhere.

To reconcile these undoubted variations in results, and possibly arrive at the truth, let it be assumed that the basal ganglia are the centres of these functions. Let it also be assumed that the cerebrum and cerebellum are not directors of motion, but only conservators of nerve energy, both receptive and functional. Let us say that these ganglia are focal centres to all the nerve tracts of the system. What, ever nerve injury may do in other parts of the nerve mass within the skull without dangerous results, it is evident by experiments and the havoc of disease, that no serious impairment can take place in all or any part of these ganglia without disaster; hence their supreme importance : in fact, this focus of influence might be called the metropolis of life. Maudsley, in "The Pathology of Insanity," says: "The disturbance of the cortical cells is in reality secondary; it is a reflex functional result of the primary morbid action that is going on in the neighbourhood." And again : "Portions of the hemispheres may be cut away without the patient feeling it, though he is fully conscious." Ferrier locates the motor centre of the opposite upper limbs in the upper part of the ascending frontal convolution: in the first frontal convolution, the movements of the head; in the second or centre convolution, the motive power of the facial movements; and in the third convolution, the centre of the movements of the tongue and lips in monkeys and the centre of the faculty of articulate speech in man. This is often called Broca's convolution. In the superior parietal lobe is located the centre for the movements of the lower limbs.

The gyrus angularis is said to possess some

influence over sight. Dr. Laffont, in a paper read before the Paris Anatomical Society of last year, states that "the centre which controls the circulation of the abdominal viscera is in the floor of the fourth ventricle, because local irritation of this part produces unusual activity in the blood movement of the liver and intra-abdominal organs." Other investigators equally credible say that the grey substance of the fourth ventricle is the motor centre of respiration; the occipital lobes, the centres of vision.

Aphasia, or the loss of ideo-motor coördination, is circumscribed by some to disease or injury of the posterior part of the third left frontal convolution. In passing, it may be said that Ferrier still farther divides his functional foci, and puts "subjective auditive sensation" in the first temporal convolution, and "subjective olfactory sensation" in the cornua ammonis. In short, it may be said that, in cerebral localization, the encephalon does not represent a homogeneous organ, an. unit, but rather an association or a confederation composed of a certain number of diverse organs. To each of these organs belong distinct physical properties, functions, and faculties (Charcot). It is well to keep these views in mind and see if they are corroborated by facts.

It is to be remembered that there is no direct nervous communication with the body from the cerebrum and cerebellum except through the basal ganglia, notwithstanding statements to the contrary. Whatever injury disease or traumatic lesion may inflict on these upper nerve masses with comparative impunity. analogous injury from the same causes cannot be inflicted on the central or base organs without dangerous results. In other words, these are, in my opinion, the true motor and sensory centres of the system, and there is no necessity of going beyond them to prove a localization theory. The distinction between these by well-defined boundaries and the want of uniformity in structure point strongly to distinct functions. The outshoot of the spinal cord, and the numerous nerve ramifications. not only to the organs of special sense, but also to the locomotive and organic systems;

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point out these districts as being the peculiar focal centres of functional and psychical life. If this theory be correct, it can explain all the phenomena manifested by experiments made, and pathological conditions found, on the cortical substance, without resorting to the chart made out by such shifting, incomplete, and changeable boundaries as the sulci of the con-The "bumpologist" convolutions afford. veniently locates all mental centres in the cortical substance nearest to his manipulations, and ignores all the similar surfaces at the base and between the hemispheres, because this terra incognita is not convenient to men out. He cannot reach these parts; therefore they must be useless appendages. He forgets nature has no lumber room. In somewhat the same way the Ferrier school of investigators find certain functional disturbances following the abrasion, excision, or galvanism of definite cortical parts, with a considerable degree of uniformity. Based on these manifestations. already, with considerable confidence, it is said nearly all the functions of the body are located on the exterior part of the nerve mass, which is within reach of experiment, and somewhat hasty conclusions are drawn from the results. All the rest of the brain mass, which has a substance exactly similar in structure to the external grey matter, is practically ignored, in spite of its paramount importance, which is evident from the complexity of the structure, and from the fatal results which flow from injury to these central parts. It seems to be overlooked that any injury to the cortical substance must necessarily affect the lower ganglia, to which it lies in juxtaposition. and to which it stands so nearly related. The periphery of the brain doubtless has much to do in stimulating to action these centres. In the latter are found the distinctive seats of functional activity, and in the superimposed mass the residuary power to impel, but not to direct-to give additional vitality, but not to indicate the mode and direction this force is to take. This discriminative power is left to be performed by these central glands, which are safely situated in the centre of these sympathetic and active auxiliaries. Not only is this true in respect to function, but it is equally

Sensation and true as respects sensation. function have a community of interests, and Dr. Symonds, in the are *focalized* together. Gulstonian lectures, says : "Pain does not seem to be in the nervous matter, whether vesicular or tubular, of the cerebral hemispheres, or of the cerebellum. No evidence of feeling has been obtained by vivisectors till they approached the sensory ganglia-the thalami optici and corpora quadrigemina. But these are the centres of sensation to all parts of the body as well as to the head."

(To be continued.)

PLASTIC OPERATIONS ON THE EYELIDS.

BY R. A. REEVE, B.A., M.D. Lecturer on Ophthalmology and Otology, Toronto School of Medicine, and Surgeon to Andrew Mercer Eye and Ear Infirmary.

(Read at Meeting of Canada Medical Association, Ottawa, Sept. 2, 1880.)

I need hardly remark that pari passu with the advances of the past few years in general surgery, new operations and improved surgical methods have been introduced into ophthalmology. Procedures which were not thought of a few years ago, or not practised because not considered feasible, are now carried out with The restoration of the eyelid by success. transplanting a flap without pedicle (see case one), is a striking instance in point. To refer only to others somewhat akin, formerly it was regarded as quite creditable to relieve symblepharon where the lid was only partially adherent to the eyeball. Now, by transplanting conjunctiva from the lid or globe or both, cases of extensive union can be cured or materially relieved. And even where the whole lid has become fused to the eyeball, and conjunctiva could not be used, the delicate skin of the lid has been utilized, being drawn through a button-hole incision in the tarsus after the latter had been dissected free from the globe. The conjunctiva of rabbits has already been successfully transferred to the cul-de-sac of the human eye, and portions of cornea have also been transplanted; and the day may not be far distant when men will be enabled to see their fellows, and perhaps gain a livelihood, by means of the cornea of other animals.

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The cases which I have the honour to present illustrate some points in recent improved methods of correcting deformities and removing diseased conditions about the eye by plastic operations.

CASE 1.—Complete ectropion of upper and lower eyelids treated by transplantation of flap without pedicle.

The patient, Flora McQ., æt. 12, was admitted into the Andrew Mercer Eye and Ear Infirmary (Toronto General Hospital) on Aug. On Dec. 30, '78, she received a 12, 1879. severe burn on the right half of the face. Cicatrization was completed in about three months-at the end of March, '79. Present condition: The patient is healthy and well nourished. There is complete eversion of both eyelids on the right side, the conjunctiva being vascular and somewhat hypertrophied from exposure; but the eyeball and edges of the lids The margin and cilia of the upper are intact. lid take the place of the eyebrow, which has been destroyed; and the edge of the lower lid is drawn down so as to form in part the upper border of a large, raised, and indurated cicatrix, which extends from the mesial line on the nose to the angle of the jaw. The skin above and on the outer side of the orbit is almost altogether cicatricial, being pale, very thin, and mostly glazed. The subject presented a most unsightly appearance. As the general integument was quite healthy, and it seemed impossible to get a large enough flap from the forehead without danger of sloughing, I decided to transplant one from a distant part, without a pedicle. This method, originated by Wolfe, of Glasgow, and already followed a few times on both sides of the Atlantic, would, at least, not increase the deformity if it should fail. The keloid character of the cicatrix rendered marked contraction somewhat improbable, and at any rate immediate interference was indicated in order to prevent inflammation of the cornea from exposure.

The operation was done on August 13. An incision was made a little above the margin of the upper lid and another just below that of the lower, and some dissecting done until the lids could be brought together in the normal position, when their free edges were united by

sutures at three points which had been pared.

The raw surface on the upper lid was of triangular shape, and was an inch and a quarterlong at its base, its vertical diameter being the same. To cover this, an oblong piece of skin two and a quarter inches long by about the same width in the middle was dissected off the arm from the inner aspect of the biceps. thoroughly freed from all subcutaneous tissue, -being dipped into warm water, from time to time,-and was trimmed and fitted, being left somewhat larger than the area to be covered so as to allow for further contraction. It was then carefully adjusted in position, being puckered slightly in the middle, and especial pains taken to make the edges coapt with great nicety. To effect this the better, and prevent incurving or displacement, three sutures of the finest silk were put in, but were only passed through the epidermis.

Instead of covering also the lower raw surface by transplantation, as had been intended, I merely utilized a triangular piece of the skin taken from the arm, one-third of an inch long by one-fourth wide at the base, placing it at the inner angle, and adjusting the edges carefully, without any stiches, and leaving the rest of the denuded surface to heal by granulation and grafting.

The upper and lower lids were then covered with gold-beater's skin, and upon this a thick compress of cotton wool and a bandage were applied.

No pain or inflammatory reaction ensued. Forty-eight hours after the operation (Aug. 15) the bandage and wool were removed and readjusted. As seen through the gold-beater's skin, which, by the way, was left undisturbed on the upper lid for about a fortnight, the edges were coapted and dry: So also on the fifth day, as indicated by a fine dark line as of dry blood, excepting on part of the lower border where the flap had retracted a millimeter. Just above this the skin seemed somewhat puffy, the rest being smooth and apparently closely adherent to the subjacent surface.

In a few days the epidermis separated at the spot where the skin was swollen, leaving a small moist patch of the true skin such as would be caused by a tiny blister; but the greater part of the flip retained its epidermis, and, indeed, looked as if it were the normal tissue of the part, save that it was paler than that of the opposite side.

On the eleventh day, Aug. 23, the goldbeater's skin was still attached to most of the flap, which was all firmly united. On the seventeenth day the patient was presented at the meeting of the Toronto Medical Society; the small excoriation still persisted, and owing to tension caused by contraction of the ·large keloid cicatrix, the lower lid had separated from the upper about a quarter of an inch at the inner canthus. Hoping to effect a still greater improvement, and by keeping the lids united and distributing the traction to be able to prevent further eversion of the lower lid, another operation was done; an incision was made below the eyelashes, and after a little dissecting to relieve tension, the lids were reunited near the puncta, leaving a raw surface one inch horizontally by three-quarters vertically. To cover this a piece of skin, $1\frac{3}{4} \ge 1\frac{1}{4}$ inches, was dissected off the arm, carefully cleaned and trimmed by means of scissors, and then adjusted; goldbeater's skin, cotton, wool, and bandage being applied.

The next day a thin layer of the discharge from the excoriated surface on the upper lid and the conjunctiva was found covering the lower lid, but the flap was adherent all around, though swollen in the middle. The parts were bathed with weak carbolic lotion, and the dressings reapplied.

On the third day the same state of things existed; the transplanted skin was thin and free from moisture at its margin, closely applied to the surrounding skin, and apparently well attached in situ. In a few days the epidermis peeled off, leaving the moist true skin, which soon healed over, without any granulations developing; but the inner suture cutting out again, the tension on the free edge was re-established, the new skin became much reduced in size and the inner part of the lower lid again drooped somewhat.

The patient left the hospital, Oct. 3, '79, the intention being to divide the bands of adhesion at a subsequent date, possibly not until the large cicatrix had ceased to contract, when also another operation would be done to correct the remaining ectropion.

(To be continued.)

CANCER OF OMENTUM,

UNDER THE CARE OF W. T. AIKINS, M.D.

For the following notes we are indebted to Mr. H. W. Aikins, M.A.:---

Mrs. J., æt. 48-Still menstruating. First seen by Dr. A. upon October 25th last; prior to that date had for several months "not felt as well as formerly," and it was stated by one of the relatives after her death that she had been losing ground for as much as two years previously. About October 4th she first detected a "lump" situated in the abdomen, upon the right side of the median line, between the navel and cartilages of the lower ribs, rapidly increasing in size. When first seen by Dr. A., it was about the size of his wrist, and four inches in its vertical length. There was a question raised at first as to whether there was a fecal accummulation in the colon; this idea, however, was soon abandoned. In the early progress of the case the liver was not found to be involved, though during the last ten days or fortnight it was pushed partially beyond the costal cartilages of the ribs.

Skin examined upon various occasions, and found satisfactory:

Urine examined on two or more occasions and found normal:

Temperature very slightly elevated until a few days before death, and pulse slightly quickened:

Irritability of stomach for over a fortnight preceding death, and jaundice markedly present during last eight or ten days.

Death occurred 4th December.

Post-Mortem.—Limited to abdomen, made 36 hours after death: Body well nourished; surface jaundiced; abdomen discoloured and tumid; the discolouration being due to the employment of concentrated St. Catharines water as a topical application. From half a dozen to a dozen blackish crusts distributed over surface, one of which, having been cut through in the central incision, appeared to dip down into the subcutaneous fat. The peritoneal cavity contained between two and three quarts of bile-stained fluid. On deflecting the flaps, a large pancreas-like mass in midabdomen came into view, stretching across from side to side, which proved to be the shrunken remains of the great omentum, thoroughly infiltrated with cancer. This was adherent to the abdominal wall on the cadaver's, right side of the median incision, but was quite free to the left. The mass enveloped a portion of the colon, and was attached by continuity of growth to the lower border of right lobe of liver. The gastro-hepatic omentum likewise was involved. The parietal subserosa contained numerous scattered deposits of new growth, and the ovaries were likewise implicated, one containing besides a blood cyst. On the left the descending colon, as well as the junction of the transverse, was folded over in front of the neoplasic omentum-i.e., between it and the abdominal wall. Circumstances did not permit of a further inspection.

ACUTE SPINAL CONGESTION.

UNDER DR. GRAHAM'S CARE.—REPORTED BY MR. DUNCAN.

P. O'Connell, æt. 33, born in Ireland, labourer, admitted into the Eye and Ear Infirmary (T.G.H.) July 17, 1880, with trachoma and vascular keratitis: present examination Sept 8th. Married 10 years ago; four children, all living.

Hereditary predisposition.—Father died young; doesn't know cause of death; never knew anything about mother; never had brothers or sisters.

History.—Enlisted and was sent to India in '66; about one year after ('67) had soft chancre apparently. No subsequent manifestations, according to his account. Was healthy up to that time.

Same year ('67) had fever and ague; lasted off and on for three years. Then, for the latter part of time there, had "jungle fever" off and on during hot weather; as a result of this latter fever, had palpitation of heart for eight months. Was then invalided home ('71). One month in English hospital. Went to Ireland; stayed there 1½ years; came to Canada ('72). Eyes began to trouble him two years ago; 18 months ago inflamed so was obliged to give up work; heart and costive bowels have troubled him since that time.

Present disease.—Saturday, Sept. 4th, hal taken a bath; afterwards felt numbness of right heel, but had often felt it so before, therefore thought nothing of it. Next day felt left heel numb in same way, and on Monday same feeling in little and ring fingers (both hands), and

the numbness extended up and affected both arms. On Tuesday, the legs got numb gradually from below upwards, reaching the body. Tuesday took to bed; feels getting worse constantly.

Present condition.—Half sitting in bed; is sure he could not walk; feels like a lump of lead all over. Neck and every part of the body and limbs stiff; head cool, feet very cold, hands and body moderately warm; general anæsthesia. Pulse, 84; respiration, 24; tongue clean; no appetite; some thirst.

Soreness along spine, head, jaws (especially when opening them) chest, and all over. Partial but increasing paralysis of legs and arms.

Sept. 9th.—Worse; eats nothing; feels as though cord tied around chest; respiration laboured; cyanotic before death; power of deglutition gone. Died in the evening.

Sept. 10th.—P.M. by Dr. Zimmerman. All the organs—heart, stomach, &c. healthy except brain and cord, liver and kidneys, which are reported as congested. Nerve centres saved for microscopic examination.

DISLOCATION OF THE INFERIOR TIBIO-FIBULAR ARTICULATION.

BY A. M'PHEDRAN, M.B., TORONTO.

On Nov. 22nd, 1879, J. D., a young man working in a planing mill, while walking over some lumber, fell, with his foot turned under him, injuring the ankle. He was brought to me a few minutes afterwards, and on examination I found the foot considerably inverted and slightly extended, and the ankle admitting of but little passive motion. The external malleolus was displaced forwards, apparently lying in front of the ridge forming the anterior border of the external surface of the lower end of the tibia. Measurement from the malleolus to the tendo achillis was about twice what it should be.

On grasping the foot by the toes and heel, and everting it, the malleolus returned to its place with almost as distinct a sound as is heard on reducing a dislocated shoulder. Complete recovery resulted in a few weeks.

Hamilton, in his work on "Fractures and Dislocations," says there is only one case of dislocation of this articulation on record. It was reported by Nélaton, and occurred in the practice of M. Gerdy. It was caused by the passage of a cart wheel obliquely across the leg, pushing the mallcolus backwards, so that its posterior border hay almost in contact with the tendo achillis. It was not seen till the 39th day; and as there was but little interference with the movements of the joint, no attempt was made to reduce the dislocation.

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PLEURISY—ASPIRATION.

BY R. WHITEMAN, M.B., SHAKESPEARE, ONT.

I was called, September 14th, to see a patient, who, I was informed, had been ill for some time with inflammation of the lungs. On enquiry, I was told that he was not at the time under medical treatment.

He informed me that his name was Robert Gordon, age 24 years, two years out from Ireland; had been working on a farm. In the early part of harvest was ill for a time, had a severe pain in right side, and was off work for about a week, when he resumed his duties, but never felt quite so well again. Soon got out of breath, and was tired upon very slight exertion. In this way he continued until about three weeks ago, when taking seriously ill he was again laid up, and had, as he said, been able to do nothing since. I found him a stout, able-bodied man, dark complexion, slightly emaciated. Pulse 84. Respiration 32. Temperature normal. On proceeding to examine his chest, I at first noticed that right side did not move so freely as left, with complete dullness over right side on percussion, and absence of breathing sounds, also half inch enlargement on right side. I informed him that there was a collection of fluid in the pleural cavity. Prescribed salines with iron and strychnia, also blue pill, and directed him to come to my office on the 17th.

On his arrival he thought he felt better, but I found no change in physical conditions, and informed him that his quickest and easiest way of getting over his trouble was to submit to an operation; and in order to convince him of the necessity of it, I ran in a hypodermic needle and brought out a drachm of fluid.

On the 18th, assisted by Dr. D. B. Fraser, of Stratford, I proceeded to aspirate his thorax, inserting the aspirator needle between the fifth and sixth ribs, behind the median line, and brought out 79 ounces of wine-coloured fluid sp. gr. 1025, alkaline, coagulated by heat or nitric acid, and containing flakes of lymph with blood, and a few large cells, very like pus cells. He complained of some pain just after the operation, but felt that he could breathe more easily. After the operation I

put a bandage around him, having first covered the aspirator wound with adhesive plaster.

September 19th—Went to see him; found pulse 76, respiration and temperature normal. Some thirst, slept well, good appetite. Some pain at apex on deep inspiration.

September 23rd—Chest measures alike on both sides. Pulse 92 (he came to my office). Respiration 26. Temperature normal. Appetite good. Slightly costive. Can now lie on either side. Gave jalap and calomel with magnes. sulph. Continue iron and strychnia.

October 8th—Called to-day. Has been at work for the last ten days. Pulse 72. Feels, and is, in perfect health; weighs 172 pounds, having gained 26 pounds since operation.

DISLOCATION OF THE HIP—REDUC-TION BY MANIPULATION FIVE WEEKS AFTER.

Under the care of H. T. MACHELL, M.B., L.R.C.S., Edin.

(Reported by Mr. RAIKES.)

The patient, Frank O'Donnell, aged seven, was admitted into the Hospital for Sick Children, Toronto, on Nov. 14th, suffering from a dislocation of the femur, upwards and backwards, upon the dorsum ilii. According to his statement, on or about the 10th of October (five weeks before), he was sitting on a door step, when another boy jumped on his back, throwing him forwards. On attempting to get up he found he was unable to use his left leg ; after being carried home, noticed a swelling and great pain in vicinity of left hip. medical man was called in, and gave it as his opinion that "the ligaments of the joint had been stretched," and prescribed stimulating lotions and complete rest in bed, where he was confined for four weeks. When he got up was still unable to use the leg, though he managed to get about, with the aid of a crutch, with very little pain. About this time Dr. Machell saw the patient, and diagnosed dislocation upon the dorsum ilii; there was considerable freedom of motion, active and passive, with no pain.

On November 15th, just five weeks after the accident, the dislocation was reduced, under chlorof rm, by manipulation, by Dr. Machell, the whole operation not lasting ten minutes. A long splint was applied, and the patient ordered perfect rest in bed.

November 22nd, splint was taken off and reapplied without any pain to patient. Three days after, splint was again taken off and motion made. This was repeated every day for a week, when the patient was allowed to walk about the ward, and the splint discontinued.

Selections: Medicine.

THE TREATMENT OF ASTHMA BY THE INDUCED CURRENT.

BY I. BURNEY YEO, M.D., F.R.C.P., Physician to King's College Hospital, and Senior Assistant-Physician to the Brompton Hospital for Diseases of the Chest.

The recent discussion on Asthma at the meeting of the British Medical Association at Cambridge gives special interest to the following notes of a case which has lately been brought under my own observation. Two or three days after taking part in this discussion I found myself at the baths of Neuenahr, the guest of that able physician, Dr. Richard Schmitz; and I had an opportunity of seeing and examining with him an aggravated case of asthma, which had been treated by the application of the induced current, and apparently completely cured thereby.

This patient, a gentleman about forty years of age, had suffered from paroxyms of asthma for more than six years, originally induced, he believed, by a severe attack of catarrh. He had tried numerous remedies and visited several climates, but without any considerable relief. This year he was spending a second season at Neuenahr, but without any relief to his asthmatic attacks. Quite recently he was seized with an attack of unusual severity and duration, which had lasted, with but slight intermission, for three whole days and nights, when, as all other resources had failed, it occurred to Dr. Richard Schmitz to try the effect of the induced current applied in the manner suggested by Dr. Max Schaeffer, of Bremen. The relief afforded was immediate, and after twelve applications-i.e., an application twice a day for six days-the patient appeared quite well. I examined his chest carefully, and there was no trace of wheezing or of dry or moist râles of any kind. I examined his throat, and found evidence of chronic pharyngitis, the mucous membrane being very granular from the presence of many enlarged swollen follicles; but it was quite clean, and free from mucous secretion. The tonsils were scarcely at all enlarged, although they had been much so formerly. I mention these facts with respect

to the condition of the throat, as they bear on the theory of the action of the remedy to which I shall immediately allude. The influence of the remedy had been so complete that the patient's gait and carriage were totally changed; and instead of assuming the bent, stooping figure of the asthmatic, he walked as upright as his fellows.

The galvanic current had been applied to the throat in the situation of the great nerve trunks, the vagus and sympathetic, each pole being applied just below the angle of the jaw and in front of the sterno-cleido mastoideus. The current, mild at first, was gradually increased in intensity until it could be distinctly appreciated by the patient as passing through the soft palate from one side of the throat to It was continued for fifteen the other. minutes at each sitting. It was noticed that the pupils, widely dilated at first, became strongly contracted as soon as the application of the current gave relief. Dr. Max Schaeffer. who has recently advocated this treatment, agrees in the main with Biermer as to the pathology of idiopathic asthma, meaning by idiopathic asthma those attacks in the intervals between which no evidence of morbid changes in the lungs can be found. He regards these attacks as a tonic spasm of the middle and finer bronchial tubes; but he looks upon the spasm as secondary, and agrees with Weber in believing the primary change to be a swelling or tumefaction of the bronchial mucous membrane, dependent on a fluxionary hyperæmia, itself due to a vaso-motor nervous influence, the principal rôle being pla,~1 by the pulmonary fibres of the vagus. According to this view, asthma is an irritative and reflex It agrees, in many pulmonary neurosis. respects, with the theory of asthma adopted by Dr. Andrew Clark in the discussion to which I have alluded, and which I have held myself as the most consistent with the clinical history and phenomena of the asthmatic paroxysms.

The morbid state, upon which the asthma depends, may affect—(1) the nerve itself, or (2) the coverings of the nerve, or (3) the tissues adjacent to the nerve.

Max Schaeffer lays great emphasis on the third of these conditions-viz., that morbid

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states of the structures adjacent to the nerve may influence and disturb the nervous currents. Tumours such as nasal polypi, hypertrophied tonsils, swollen cervical or bronchial glands (temporary hyperæmia of these glands), can, according to their position, cause irritative pressure on nerve filaments connected with the respiratory centres. He found that many of his asthmatic patients were the subjects of nasal catarrh, or pharyngeal catarrh, or laryngotracheal catarrh. He noticed that swellings of the mucous membranes of these parts were attended with asthmatic paroxysms, and patients would constantly refer the seat of their discomfort lower or higher in the throat, according to the seat of the swelling, and he concludes that all the symptoms of asthma are symptoms of irritation brought on by pressure on nerves which are in connection with the pulmonary portion of the vagus, and especially in the upper part of the respiratory tract-the pharynx, larynx, and trachea.

He examines carefully the nose and throat, and applies the electrodes according to the seat of the disease. Usually the two electrodes are placed on each side of the neck about two centimetres below the angle of the jaw, and sometimes a little lower down in front of the sterno-cleido mastoideus. The current must be of good strength, so that the patient can feel the stream go across the larynx and soft palate. In bad cases it should be applied twice a day, from fifteen to thirty minutes each sitting. He states that in the most severe cases it has acted "like witchcraft." He has never found the constant current do any good, but he has never failed with the induced current.

Certainly the result of the application of the induced current in the case that came under my own observation was very remarkable.— London Lancet.

PHOSPHORUS POISONING.—"In phosphorus poisoning there is one certain antidote, viz. :— Carbonate of magnesia in 3j doses every 15 minutes, until no phosphorescent breath is observed. Phosphate of magnesia is formed; the uncombined magnesia, by its mechanical action, protects the coats of the stomach from any further action of the phosphorus, and any free phosphoric acid is neutralized by it as it is formed."—Birmingham Medical Review.

REDUPLICATION OF THE HEART SOUNDS.

Dr. Sansom read a paper (at the Medical Society of London) on the causes and significance of Reduplication of the Sounds of the Heart. He first reviewed the various theories adduced in explanation of doubling of the first sound. These might be reduced to two. 1. That reduplications of the first sound are real, and are due to a want of synchronism in the systolic tension of the auriculo-ventricular valves of the right and left sides. 2. That they are apparent, and due to an auricular immediately preceding the ventricular systole. He could not agree that the auricular systole is directly audible, but that it might cause a sound by communicating a presystolic tension to the mitral curtains under certain conditions. He adduced cardiographic tracings to prove that in certain cases of apparently reduplicated first sound the auricular systole was greatly augmented, and showed that the phenomenon might be the precursor of an undoubted presystolic murmur. As regards reduplication of the second sound, he had observed it in eleven out of thirty-seven cases of mitral stenosis. All observers are agreed that mitral constriction was the most common condition in which it was observed. He considered, from a review of the cases, that the reduplication of the second sound was often apparent, and due to a tension communicated to the mitral curtains early in diastole, just as in quasi-reduplication of the first sound it was communicated later in diastole. The moment the ventricle becomes relaxed after its systole, the blood retained in a state of tension (the pressure in the pulmonary circuit being heightened) in the auricle enters with force into the ventricle, and finding its way on the parietal side of the curtains of the mitral valve, causes them to bulge towards the ventricular cavity, and in so doing occasions the "click" of valve-tension, which, coming so soon after the second sound, closely resembles a reduplication of the latter. Although a frequent, it is not a universal explanation of this reduplication. In some cases it is very probable that the reduplication is real, and due to non-simultaneous closure of the semilunar valves of the aorta and pulmonary artery. He

agreed with Dr. James Barr, of Liverpool, who held that over-repletion of either of the ventricles was the cause, not of delayed but of anticipated sound .- Dr. Galabin argued that reduplication was often rather apparent than real, cardiac murmurs closely approximating cardiac sounds, especially in the case of direct mitral murmur. Thus in mitral stenosis, the presystolic might be mistaken for a loud first sound, and the true first sound for the second sound of the heart. He could not understand how valvular tension could occur when the valve was converted into an indurated ring. The apparent second element of a reduplicated second sound might be due to a short diastolic murmur of direct mitral character; and reduplication of the first sound apart from cardiac disease, due to the sudden tension of the ventricle after the closure of the valve.-Dr. Mahomed believed that reduplications of the sounds were chiefly valvular in origin, although in mitral stenosis other sounds are often mistaken for reduplication of the normal cardiac sounds. He exemplified the cause of reduplication of the second sound by the recoil of two equal pieces of elastic, the one stretched to four inches, and recoiling to three inches; the other stretched to three inches, and recoiling to two inches; if stretched simultaneously they would not complete their inch of recoil simultaneously. He thus attributed the reduplication of the second sound to the asynchronous recoil of the aorta and pulmonary artery subject to abnormal variations in pressure in either one or the other. This explained the frequency of this reduplication in mitral stenosis when the pulmonary pressure was heightened. He similarly explained reduplication of the first sound, and he believed these views were identical with those advocated by the late Dr. Sibson. He did not think deduction could be drawn from cardiographic tracings, which did not signify the time of closure of the valves .- Dr. James Barr (of Liverpool), in the course of his remarks, stated his belief that reduplication was due to asynchronous action of the ventricles, so that a normal doubling of the first sound occurs at the end of expiration from the increased stimulus to the right ventricle, and of the second sound at the end of inspiration from the

early cessation of the right ventricular systole. In disease, that ventricle which is best supplied with blood initiates the systole, although it may not complete its contraction until after the other ventricle has finished its systole; or both ventricles may begin systole together, but one may lag behind the other. He was certain that there was this asynchronous contraction of ventricles (and of auricles also), each side of the heart having its own fibres.—Dr. Sansom replied, and the Society adjourned.—London Lancet.

PART OF A CLINICAL LECTURE AT JEFFERSON MEDICAL COLLEGE HOSPITAL.

CLINIC OF ROBERTS BARTHOLOW, M.D., Professor of Therapeutics and Materia Medica. Treatment of Obstinate Malarial Attacks.

The case before us is a simple ordinary one of intermittent fever. He has a chill every other day. The fever is, therefore, of tertian type, and, after the chill, the hot stage lasts two or three hours, and is terminated by sweating. This has been kept up for some time, and will prove what I say, that an attack of intermittent fever in a malarious district is not to be despised. After checking the disease with quinine, the paroxysms will recur, and the treatment will thus often be brought into discredit. unless 'some few points are borne in mind, as regards the method of administration. Give the quinine at least three hours before the expected paroxysm. Shall we give small doses frequently repeated, or large doses less often ? The latter is the true You will then give fifteen grains three mode. hours before the expected paroxysm. I prefer this to the former method, for this reason, which I regard as indisputable : Quinine, though not eliminated from the system with great rapidity, yet is eliminated, and chiefly by the urine. If we were to give it in small doses early in the morning, by afternoon it would be eliminated, and would require to be repeated, and in larger amount, in order to check the paroxysm. Therefore, it is more economical, as well as more effective, to give a single large dose, which is also more agreeable to

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the patient; for I affirm that fifteen grains given at once will give much less distress than one grain every hour until the same amount be taken. Large doses obtund the sensibility of the cerebral centres, while smaller ones cause excitement of the brain and tinnitus.

By giving a single large dose of a gramme of quinine at least four or five hours before the time for the appearance of the expected chill we break up the paroxysms. What shall we do to prevent their return? We ordinarily hear that the chills are apt to return at septenary periods; but if you will look into the mat ter you will find that they recur in multiples of the original number. Thus, tertian would return in six days, or if not, then on the ninth, twelfth, fifteenth, eighteenth, or the twentyfirst day; and in quotidian they are apt to be manifested in multiples of two. On these critical days, the remedy should be repeated. If we break up the chill to-day, on the day after to-morrow, although he may not have a decided chill, he will have some significant symptoms, that are evidences of systematic disturbance; he will excrete more urine, he may have a diarrhœa, general muscular soreness, or something else indicating the influence of the malarial poison. We must, therefore, give our quinine again, and repeat it on subsequent days, muliples of the original attack, administered in anticipation of the former hour of the attack. On the morning of the sixth and seventh, the thirteenth and fourteenth, the nineteenth and twentieth and twenty-first days, doses of ten grains shall be given on each of these days.

What else ? Do you abandon your patient in the interim ? Ten grains of quinine will not be sufficient to relieve a damaged liver, or to reduce an enlarged spleen ; in other words, the condition of chronic malarial poisoning. Treatment must be directed to this object as well as to breaking up the chills, or they will inevitably return. Lugol's solution, in five-drop doses, given in water before meals, and Fowler's solution, three drops after meals, always prove most efficient aids. It is best, about the twenty-first day, to give a full antiperiodic dose of quinine for three days, for by this time there is a much greater accumulation of morbid material in the blood than at the other periods named.

Please bear in mind these rules which I have just given you, for you will find that they will stand you in good stead in all these cases of obstinate malarial attacks.—*College and Clini*cal Record.

NEW THEORY AS TO THE PATHOLO GICAL CHANGES IN THE BLOOD IN ACUTE RHEUMATISM.

At the last meeting of the Cambridge Medical Society, held on Friday, Nov. 5th, Professor Paget, President, in the chair, Professor Latham advanced a new theory as to the pathology of acute rheumatism. He maintained that the first step was a lowering of the action of the "inhibitory chemical centre," or nervous centre, which controls oxidation in the muscular tissue. Following upon this, the oxygen from the oxyhæmoglobin, instead of entering the muscular tissue to be exhaled therefrom in the form of carbonic acid gas, had its sojourn in the tissue shortened, and passed into the blood in the form of lactic acid (a substance which appears in muscle almost instantaneously with its death); that the oxygen acted also more energetically on the muscular tissue, and the resulting lactic acid being oxidised rapidly in the blood, instead of in the muscular tissue, an abnormal amount of heat or pyrexia was developed.

He then argued that quinia lowered temperature by simply impeding the carrying of ozone from the lungs to the tissues by the red bloodcorpuscles, as in Binz's experiments with ozonised turpentine and guaiacum; and so the remedy *might* act beneficially in rheumatism, but would have no effect on the materies morbi. Salicylic acid, on the other hand, lowered the temperature and cured the disease by chemically combining with the substances from which the lactic acid is derived, and producing less heat than would result from the oxidation of that substance. He showed how the theory advanced explained the relapses which so often recur after apparent cure with salicylic acid, the necessity for large doses of the remedy, and the reason why it should be less curative in other pyrexial disorders, such as pneumonia, typhoid fever, &c. Referring to locomotor ataxy as an example, he suggested that possibly the local symptoms might be the result of the lactic acid acting upon the posterior columns of the spinal cord, producing functional change; and, in reply to a question in the discussion afterwards as to the connection between rheumatism and chorea, considered that this disorder was the result of the lactic acid inducing functional change in the nervous centre which co-ordinates muscular movement, that centre being weak, and therefore a point of minimum energy, and this condition being hereditary or acquired. He also applied his theory to explain why the same cause (cold) which in one person appears to produce acute rheumatism, in others produces pneumonia, tonsillitis, &c.

Since the meeting Dr. Latham has extended his theory to diabetes. If it be true, it ought, he says, to explain the phenomena of that disease with a normal or subnormal temperature, and he maintains that the lowered nerve action is sufficient to do this. Salicylic acid may then (whilst the patient perhaps is taking ordinary diet) cause the sugar to disappear from the urine and lessen the amount of that secretion without even altering the condition of the nervous system upon which the symptoms depend.—London Lancet.

HYDROPHOBIA FIVE YEARS AFTER INOCULATION. —At a late meeting of the Académie de Médecine, M. Colin related the case of a patient who had just died under his care of hydrophobia of two days' duration, the result of a dog bite received in Algeria on the 2nd November, 1874. One of the man's comrades, who had been bitten at the same time by the same dog, died of hydrophobia in eight days after the receipt of the bite. That virus may be deposited locally, and remain innocuous for a variable period until accidentally absorbed into the blood, has been experimentally proven by M. Pasteur in his investigations into the "cholera of fowls."

THE STOMACH AND PANCREAS IN THE DIGEST-ION OF FAT.—The commonly received opinion, resulting from the experiments of Bernard and Brücke, that the oleaginous constituents of food must be emulsified by the intestinal and pancreatic juices before absorption, appears to be contradicted by the later experiments of Cash in Ludwig's laboratory, which go to show that fats are absorbed in the free state, and that their conversion into an emulsion first takes place after absorption is effected.—London Lancet and Archiv. für Anat. und Physiologie.

Surgery.

THORACENTESIS.

M. POTAIN.

The indications for thoracentesis result from the nature of the liquid effused into the pleural cavity—a liquid which may be either serous, or from an hydatid cyst, or blood, or pus.

In the first case, the abundance of the effused fluid and the accidents which are a consequence of it are an indication to tap the chest, also the presumption of the existence of hydatids.

When blood is effused, which can hardly be known in an absolute manner unless an exploratory puncture is practised, not a serous fluid more or less tinged with blood, but truly an effusion of blood pure and primitive, it is absolutely necessary to abstain from practising thoracentesis. It is necessary to abstain, in the first place because we are not sure that the effusion has ceased, and because an evacuation of the pleura may in these conditions favour a new hemorrhage; again, because this blood may be coagulated, and that in this case we can extract nothing, or almost nothing, numerous clots blocking up the mouth of the canula.

Finally, if the effusion is purulent, it is almost indispensable to operate, although sometimes we may have seen it absorbed. But before all it is necessary to be assured by an exploratory puncture if the fluid is truly pus or only a purulent serosity, for until then we can only have presumptions and not an absolute certainty. The motives of presumption vary according as the pleurisy is acute or chronic.

In the first case, the liquid is very probably purulent if the disease from the beginning affects an extreme intensity; if it is accompanied by a violent pain and a grave general condition; if it is the consequence of a traumatism of the chest, or even if it supervenes secondarily during the course of a grave general affection, as variola, scarlatina, puerperal accidents, etc.

In the chronic form, where the fluid is transformed little by little into pus, the prolongation of the disease and the irregular chills, as well as the edema of the thoracic wall at the level of the last intercostal spaces, are signs of a purulent effusion. But the truest indices are yet found in the general condition—in the enfeeblement of the patient—a pale yellow countenance, chills, and persistent fever.

Another sign has also been pointed out some years ago by an Italian physician, and certifie i to by M. Gueneau de Mussy to distinguish a serous from a purulent effusion. In the first, the transmission of the whispered voice can be perceived as far as the base of the chest; in the second, this voice has absolutely disappeared.

However, in investigating matters more closely, we will recognize that, if the whispered voice heard clearly as far as the base, or perfect aphonic pectoriloquy, constantly indicates a serous effusion, it is necessary to know how to differentiate in the case in which this pectoriloquy is imperfect, whether the patients speak low or loud; it is necessary also to remember that the presence of false membranes in the pleural cavity may modify and even suppress aphonic pectoriloquy.

This sign then is good only, when perfectly clear, to diagnose a sercus effusion; but from the moment it has lost its clearness, it has no more value either for or against the presence of pus: and these are, unhappily, the most numerous cases.

As to the counter-indications of thoracentesis, they are less numerous. Fever has been pointed out, but in my opinion, save in a few exceptional cases, I do not admit it. It has been said that it might exaggerate the inflammatory phenomena; but experience does not prove that this is well founded, and the operation develops only a slight febrile movement and of very short duration. Far from it; the fever rather tends to fall: thus it is that in 25 operations on cases with fever, this disappeared from the second to the fifth day in 17 cases. So the operation would tend, contrarily to what has been said by some authors, to abridge the duration of the febrile state.

It is very certain that, if the patient is a prey to a violent fever and to intense inflammatory phenomena, one ought, before thinking of proceeding to any operation, to have recourse to antiphlogistics, which, in an acute pleurisy, may by themselves produce absorption of

the effusion. Likewise in cases of extreme pulmonary fluxion, accompanied by a scanty effusion, one ought to abstain. If, on the side opposite to the pleurisy, the lung is the seat of a very extensive bronchitis, the indications are variable, and we ought to act only in presence of an asphyxia or a threatened suffocation.

Tuberculosis is also regarded by some physicians as a counter-indication, even in the case of an abundant effusion. However, if this affection is recent; if it is yet only in the second, and especially in the first degree; if there exists no cavity, and if the collection is of recent formation, it appears to me, on the contrary, useful to interfere in order to evacuate the fluid mass, and permit, by so doing, the lung to be distended a little and to recover its normal volume.

Should the tuberculosis be advanced, should there exist some large cavity, act then only with the greatest caution, thoracentesis having at times produced a rupture of the cavity into the pleura, and given rise to a pneumothorax, which is in nowise an advantage. Formerly thoracentesis had been proposed for pneumothorax alone, and this had been considered one of the most precise indications for operating. This is absolutely erroneous, for the withdrawn air being immediately replaced, the operation is then of no utility.

To sum up, the indications of immediately practising thoracentesis are these : suffocation, asphyxia, and a considerable effusion distending the thoracic cavity. When the phenomena are less menacing, when you see no immediate danger, when no symptom appears to be increasing and effecting a rapid progress, operate less precipitately; but operate, whatever may be the quantity of liquid effused, if the effusion dates already for some time-if there is already a duration of from fifteen to twenty days. Finally, if no treatment has been attempted when you are called for the first time to your patient, have recourse before any operation to antiphlogistic means, to purgatives and diuretics, and if you obtain no result, practise thoracentesis.

As to the nature of the effused fluid, when you are certain or have a sufficient presumption of the presence of pus in the pleural. cavity, puncture.

Such are the indications and counter indications of thoracentesis.—*Gazette des Höpitaux*.

TARSAL TUMOURS TREATED BY. ELECTROLYSIS.

BY JULIUS ALTHAUS, M.D. (Synopsised from London Lancet.)

In February, 1880, Mr. White Cooper sent me a lady, aged 30, suffering from tarsal tumours, occupying nearly the whole of both upper eyelids, and recommended electrolysis. The conjunctiva being involved and very sensitive, Mr. Clover induced anæsthesia by his mixture. I then applied both poles of the voltaic battery by means of my four-pointed electrolytic needle conductors alternately to both tumours, so that each of them received the influence of the cathode and anode successively. Twenty cells of the Becker-Muirhead battery were used for ten minutes, after which the whole of the tumours, both inside and outside, appeared completely shrivelied up. Not a drop of blood was lost, although the subconjunctival portions of the tumour were highly vascular. The surface of the lids was covered by goldbeater's skin and flexile collodion. When seen a month later, the tumours had entirely vanished; no scar was visible anywhere, and no eversion of the lids had occurred.

DECALCIFIED BONE DRAINAGE TUBES .- Surgeon Shirley Deakin, F.R.C.S. Eng., I. M. D., writes to the British Medical Journal as follows: "In the long bones of the limbs of poultry and small birds I have found capital drainage tubes ready turned to hand. The bones, collected by the cook, and well boiled to free them from the soft parts, are soaked for about ten hours in a mixture of one part of hydrochloric acid and two parts of water. Immersed for this time they become sufficiently soft and flexible for use, and to be cut with ordinary scissors. The ends of the hone are now cut off with scissors, and the medullary canal, well cleaned out with a thick wire or rat-tailed file. The bone tubes should then be boiled in a 5%solution of carbolic acid, to which some boraxan antiseptic procurable in every bazaar at a very cheap rate-has been added. The tubes are to be kept in a 5% solution of carbolic oil. If the ends of the bones are cut off with bone nippers before being decalcified,

they are very liable to split. If soaked too long in acid, the walls of the bone tube become too soft and gelatinous, and the lumen is liable to be closed by the pressure exerted by the edges of the wound into which the tube is inserted.

TREATMENT OF FRACTURES AT THE ELBOW .--In a recent paper, Dr. Lewis S. Pilcher draws attention to the outward obliquity of the forearm, and records some measurements he has made with the purpose of testing its degree and constancy. He has measured the angle formed by the axis of the humerus and ulna. and found that not only does it vary considerably in different people, but even on the two sides of the same subject. The full, free, and proper use of the limb depends upon this angle. and it is necessary to attend to its maintenance when setting fractures near the elbow-joint; but as the sound limb is no certain guide for the injured one, it is difficult to determine upon the normal obliquity if it has been altered by the injury. Dr: Pilcher also urges the relaxtion of all muscles fixed to the fragments, and immobility of them until firm union has taken place; but we are unaware that these are other than the plainest and most universally held principles in surgery, although perhaps too often lost sight of in treating fractures near joints, from fear of anchylosis and the intervention of the bone-setting quack .-- London Lancet.

RARE MALPOSITION OF RECTUM AND COLON IN ADULT. --- Mr. Alfred Baker, F.R.C.S., Eng. (Birmingham), records in the British Medical Journal an important case of this description, in which he had performed colotomy for cancer in rectum. Post mortem, it was discovered that the sigmoid flexure, forming a very large curve, was in the right iliac fossa. The caecum and appendix occupied the left iliac fossa, and in the left lumbar region the caecum was found open, empty, and fixed in the operation wound by sutures. The small intestines were normally placed, except that the lower, part of the ileum ran transversely from right to left to terminate in the caecum. No other malposition existed.

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CANADIAN JOURNAL

BACILLUS MALARIÆ.-The rods and spores of the bacillus malariæ have been found postmortem in the lymph, blood, spleen, and medullary cavities of bones as long ago as last The presence of the bacillus in autumn. the blood of living patients had never been demonstrated, the specimens being taken from patients during the hot stage of the fever. Lately, specimens of blood taken during the period of invasion, and in the cold stage, and during the last hours of the intermittent period, have been examined, and the bacillus found in every specimen. The spores alone could be seen when the fever is at its height. Observations are to be made in Italy of the blood of the spleen aspirated during the last hours of the intermittent period, and also of the urine and perspiration during the stage of resolution. A good illumination is required, and at least a one-eighth-inch object-glass.

Two new anæsthetics have recently been experimented with by Dr. Edward Tauber, of Jena. They are isomeric bodies, and were discovered by Regnault in 1838 and 1840, and are named respectively Monochlor-Ethylidenchloride, or Methyl. Chloroform (CH., CCl.,), and Monochlor-Ethylenchloride (CH. Cl. Both smell like chloroform; the $CHCl_{\pi}$). former has a spec. grav. of 1.372, and boils at 167° Fahr.; the latter of 1.422, and boils at 249° Fahr. Experiments made upon animals and on himself proved the rapid production of complete anæsthesia with little or no effect upon the pulse or respiration, and no preliminary excitement or diminution of blood pressure.

·· PERFUMED CARBOLIC ACID.

R.Acidi carbol. cryst.,1 partOlei limonum,3 partsAlcoholis (36°),100 parts.

This mixture, which appears to be quite stable and has only the odour of lemon, is what has been known as "Lebon's perfumed carbolic acid," the formula for which has long been a secret, but has now been made known in the *Moniteur Scientifique* of Paris. The antiseptic properties are in no way affected by the oil of lemon.—*Philadelphia Medical and Surgical Reporter*.

Midwifery.

THE COMMUNICABILITY OF PUER-PERAL FEVER BY THE MEDICAL ATTENDANT.

BY ANGUS MACDONALD, M.D., ROYAL INFIRMARY, EDINBURGH.

(Synopsised from the British Medical Journal.)

The observations of Mayrhofer, Orth, Heiberg, Haussmann, Spillmann, Pasteur, Doléris, and others, have within the last ten years accumulated such an amount of evidence, that it seems to me next to impossible to refuse credence to the belief that the septic changes which take place in the lying-in woman are dependent upon the action of certain micrococci, which can always be detected in the fluids of the dead, and usually also in the blood of the living who are affected with puerperal septicæmia.

According to Dr. Amédée Doléris the power for evil is taken away from septic micrococci by the addition of an equal part of a one per cent. solution of carbolic acid to a solution in which they are found.

It would thus appear that a solution of carbolic acid, which will not injure the hands of the physician, is sufficient to destroy the minute organisms on which, according to the modern idea, the poison of puerperal septicæmia depends for its existence and activity.

I therefore believe that we have now arrived at the time when we are able to state that, with the employment of extreme care and cleanliness, coupled with the use of proper antiseptic precautions, we may, without danger, attend patients suffering from puerperal fever, and do all that is required of us as doctors, without the slightest risk of communicating the disease to our other patients.

But a distinction ought to be made regarding what is the duty of a doctor as compared with what is incumbent upon a nurse. A medical man, to avoid carrying the infection, must not stoop to perform the work of a nurse. He must be careful not to expose his clothes to any discharge that comes from the patient's genitals, or that is about the bed—or indeed to allow them to touch the bedclothes, I have seen medical men lifting puerperal patients by pushing the coated arm below their legs, and then carefully disinfecting their own hands. Such conduct can only end in disappointment. Before such an act were admissible the coat should be removed and only the bare arm used; after which, the arms and hands should be thoroughly disinfected.

In proof of the practicability of what I maintain, I may mention an experience of my own in the spring of 1879. It was then my misfortune to meet with a case of puerperal fever The social position of the in my practice. patient, and certain other considerations, rendered it necessary that I should do more than is usually required of the medical atten-The case was a well-marked one of sepdant. ticæmia, and ultimately terminated fatally. L watched the case very closely for ten or eleven days; and twice daily, with my own hands, washed out the vagina with a disinfectant solution, and dressed a vulvar ulcer which had formed. Being at the time on duty at the Royal Maternity Hospital, and satisfied in my own mind that my disinfectant applications were sufficient to prevent any harm to my patients, I continued my services there. It so happened, that during these ten days there were several specially interesting cases treated Accordingly, I had to perin the Maternity. form craniotomy on an out-patient for ob-The operation was tolerably structed labour. difficult, and took up considerable time. The patient never had a bad symptom, and made an excellent and rapid recovery. I also had occasion to employ forceps in a case in the hospital in which the head was arrested high up. That patient also presented no febrile symptoms, and recovered uninterruptedly. I likewise performed version in another case, in which the head and arm presented. This patient, like the rest, did well. In consultation I saw and examined a patient suffering from hæmorrhage after abortion. In this case I passed my finger into the interior of the body of the uterus, to make certain that no portion of membranes had remained behind. No bad symptom of any kind followed this manœuvre.

Had the remotest bad symptom appeared in the first case. I certainly should have at once

desisted. But the success in it emboldened me more and more to trust to the disinfectant measures I had adopted. Besides, I had before me the experience of Dr. Thos. Keith, in his statement that with due attention to antiseptics he felt at liberty to perform an ovariotomy operation, although half an hour previously he had had his hands in the filthiest mess possible.

When called to treat such cases, however, it is my invariable rule to attend to the strictest antiseptic measures. If I have to examine or lift a patient suffering from puerperal septicæmia, I always take off my coat and roll up my shirt-sleeves. After doing this, I wash my hands in turpentine or rub them with carbolic After examining the patient I again wash oil. my hands, and, if need be, arms, in turpentine and soap and water, using the nail-brush freely. Then I wash my hands in a five per cent. solution of carbolic acid, and finally pour a stream of running water over them from the tap. Considerable importance appears to me to be attached to the latter proceeding, as the running stream makes it certain that everything is carried away as well as washed off the hands. If a basin be employed, the hands are brought from time to time into contact with any septic matter that might remain undestroyed in the basin.

In common with every consultant obstetrician. I am from time to time summoned to see and examine cases of puerperal septicæmia with my professional brethren. I am in the habit of doing as I have indicated in such cases, and I am satisfied that thereby no harm has resulted to any of my own patients. Nothing could be further from my intention in this contribution than to inculcate carelessness or do anything which could bring danger to patients or disgrace to obstetricians. But, on the other hand, I am anxious that everything should be done for unfortunate patients suffering from puerperal septicæmia, which is consistent with fairness to the unaffected and to the obstetrician in charge.

I am further certain that the rules as to abstinence from seeing infectious cases, and as to suspension from professional duty so loudly preached by many heads of the profession, are not acted upon by them. Indeed, I believe they are neither necessary, nor would they be effective for the purpose indicated. I agree entirely in the object, I disagree with the proposed means.

For aimless and haphazard suspension from professional duty, I would substitute the most thorough cleanliness and disinfection, believing that in the latter means the real safety of the patient lies. I have published my experience in this matter, in the hope that it may encourage others to trust to and practise disinfectant appliances in similar emergencies.

The principle of thorough, rapid, and complete disinfection ought also to be practised by nurses and midwives. If such measures were intelligently adopted, we should find less need to place nurses on a lengthened period of probation after attending a case of septicæmia than we do at present.

Their case is no doubt different from that of the medical attendant, if the latter restrict himself to his legitimate duty of superintending the nursing only. The intercourse of the nurse, and even of the professional midwife, with the patient, is more constant and more close than that of the doctor. But this fact only implies that the nurse and midwife should exercise greater care and thoroughness in disinfectant applications after attending a case of The disinfection should include septicæmia. both the clothes and person of the nurse. But, provided such measures are adopted, there appears no good ground for suspending a nurse for a series of weeks or months. Indeed, in the mere suspension there appears to be no real safety, as, unless measures of disinfection are duly adopted, it is impossible to say how long the person and clothes of a nurse may remain a source of danger. A very valuable contribution on this subject is made by Ahlfeld in the Centralblatt für Gynäkologie, 21st May, 1880. In this article the author protests against the State regulation adopted in Saxony, which compels a midwife, when a case of puerperal fever occurs in her practice, to cease from it for a stated period, instead of insisting upon rapid and thorough disinfection.

Diphtheria has caused from 30 to 65 deaths a week in New York for several months.

Translations.

TREATMENT OF SYPHILIS.

M. Martineau has made known, in some lectures published in the Union Médicale, the means he employs against Syphilis. The first year, for three or four months he prescribes mercury, followed for three or four months by the iodide of potash, then for two months mercury, and one month's rest.

The second year he prescribes one month mercury, two months iodide of potash, and two months rest; then again, one month mercury, three months iodide, and three months rest; during this last stage of rest he begins the sulphurous treatment. The third year of treatment is the same as the second year-one month mercury, two months iodide and three months rest. If after using as a touchstone a second sulphurous cure, new manifestations supervene, he recommences the treatment for This prolonged treatment is, the third year. according to M. Martineau, the sole means of preserving the patient from the visceral complications actually so frequent. He prescribes the iodide of potash from the first year, but always causes its administration to be preceded by that of mercury, observation having shown, he says, that its anti-syphilitic action can be aroused only after that produced by mercury. If tertiary manifestations resist large doses of the iodide of potash, cease the potassic medication, and for a few days give mercury; at the end of this time you will see the symptoms give way to the iodide. ' The sulphurous waters constitute an important auxiliary to the mercury by facilitating the elimination of this medicine, by accelerating its specific action, and by contributing to its toleration by the organism.

The recrudescences of syphilis being coincident usually with the renewing of the seasons, above all, with spring and autumn, M. Martineau chooses these periods to take up again the mercurial treatment, or to increase the dose of mercury, or of the iodide of potash.

M. Martineau does not prescribe mercury at the time of the chance's appearance, but only at the beginning of the secondary symptoms. This is at least prudent when the diagnosis of the indurated chancre is not perfectly clear. It would doubtless be no indifferent matter to cause a patient, in spite of himself, to undergo for three years M. Martineau's treatment for being guilty of a soft chancre.

M. Martineau prefers to administer mercury by the mouth, and he prefers Sédillot's pills one pill the first week, two for six weeks, then one for the following months. In the course of the second year he gives a teaspoonful a day of Van Swieten's liquor, or a Dupuytren's pill. M. Martineau indicates many formulæ for Van Swieten's liquor. Here is that of M. Mauriac:

Distilled water	550	grammes.
Syrup of morphine	250	
Orange flower water	100	66
Tincture of mint	4	"
Rectified spirit		"
Sublimate	` 1	"

One teaspoonful in a cup of milk.

For Dupuytren's pills the physician of Lourcine usually employs the following formula :

Bichloride of mercury ... 0.005 grammes, Extract of opium 0.01 "

for one pill, to be taken before breakfast.

The iodide of potash is likewise administered in moderate doses of 50 centigrammes to 1 gramme a day. Here is the formula usually employed:

Distilled water 400 grammes. Iodide of potash 40 "

One to two teaspoonfuls at night in half a wine glass of water, sweetened with syrup of bitter orange peel.

The sulphides, the third therapeutic agent in syphilis, ought to be employed from the end of the second year. If the patients cannot betake themselves to some mineral station, he prescribes sulphur baths, and to drink for fifteen days of each month, and this for about three months, Challes water, sulphurous bromoiodide water, in the dose of half a glass morning and evening, mixed or not with milk. The sulphurous water facilitates the absorption and the elimination of mercury, permits of its being given in large doses without provoking mercurial stomatitis, and even combats this last as efficaciously as chlorate of potash. A tonic and reconstituant regimen and a

severe hygiene are indispensable. M. Martineau greatly appreciates the effects of café nègre taken in the form of wine elixir or infusion. When there exists a rapidly threatening visceral lesion, he orders frictions of Neapolitan ointment, or subcutaneous injections of biniodide of mercury.

In infantile syphilis mercurial frictions are employed with advantage—one gramme of ointment a day, or Van Swieten's liquor, half a teaspoonful mixed in the milk of the feeding bottle, unless the medicine is made to pass through the milk of the nurse. The mercurial treatment is followed by the iodide of potash, 20 to 50 centigrammes a day for two or three months. This treatment is continued for two years, at the end of which time they may take every day for a fortnight, one to two tablespoonfuls of Challes water.—La France Méd.

PATHOGENY OF THE ICTERUS OF NEWLY-BORN CHILDREN.

In a recent work, Dr. Ribell after having described the parti-coloured aspect of the skin of the infant during the first days that follow its birth, either that it may disappear promptly, or that it may endure for many weeks or even for many months, or that, more tenacious still, it persists until the death of the child succumbing to marasmus or carried away by some acute affection, passes in review the different theories emitted to explain the icterus of the new-born.

Admitting only the icterus from biliary retention, and that from modifications supervening in the elements of the blood liquid under an undetermined morbid influence, he absolutely rejects icterus from cutaneous congestion or generalized ecchymosis.

To the author, the disease presents itself under three forms: 1st, simple icterus, which may be at once bilious and hematic, with a colouration of variable intensity and of short duration. It appears the first or second day after birth, to disappear twenty-four or fortyeight hours later. The urine presents the green reaction with nitric acid only if the icterus is general: 2nd. The second form is nothing else than hematic icterus, characterized by a yellow colouration, in general not deep, although

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there exist numerous varieties of it : yellowish-red or amber-yellow reaction of the urine with nitric acid. 3rd. Lastly, the icterus symptomatic of an hepatic affection : it is the parenchyma itself of the liver which is attacked. But it is necessary to distinguish between affections with a rapid progress in which ieterus is frequent, such as cirrhosis, cancer and stenosis, and affections that progress slowly like the active and passive hyperæmias.

Although the author may not as yet draw a definitive conclusion from his researches, still, if one reflects an instant, says he, on the profound modification that the hepatic circulation undergoes at the moment of birth, as well as of the composition of the blood liquid, we shall be convinced of the frequent possibility of the production of icterus, and we cannot do less than consider these physiological modifications as the veritable pathogenic cause of this affection in the new-born. If to these causes we add the inconveniences, to the foctus, of a laborious accouchement, of an accident experienced by the mother during gestation --- as for instance, a fall, an external violence, or even an inflammation of one of the elments of the cord-we are obliged to admit that the icterogenic process is complex and that its pathogeny is extremely variable.

It is in having regard to all these conditions that Dr. Ribell emits the following opinion, supported on many observations reported in his original memoir : 1st. That simple icterus, precocious or tardy, of the new-born is a hematic icterus, the hemapheic of Gubler. 2nd. That the grave icterus of the new-born is always a bilious icterus, symptomatic of a disease of the liver or of the biliary passages.—Gaz. des Hôpitaux.

Contribution to the Study of the Passage of Emboli through a Patent Foramen Ovale.

BY LITTEN.

At the autopsy of a woman, aged 43, who presented a gangrene of the right leg, the femoral artery and vein of that side were found obliterated by a thrombus, multiple emboli in both lungs, and older foci in the spleen and kidney, without being able to find any source of the emboli in the domain of the general circulation. Virchow, to whom the preparations were submitted, found a thrombus in the right auricle and a permeable foramen ovale by which the embolus had been able to pass into the arteries.—Lyon Méd.

Correspondence.

To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.

SIR,-I was a good deal surprised at your account of the late case of Brodie vs. Scott, under the head of "Malpractice." Permit me to state that you have been grossly imposed upon by whatever informant you derived your information from (and it is not hard to guess who your informant was). I will now give you a true statement of the case for the sake of fair play, and also for the benefit of the profession. Mr. Brodie, in opening a bottle of Liq. Ammon. F. on the 10th of July last, received the vapour in his face, and immediately rushed out of the shop, where he was stopped by Mr. Frayne, who immediately called in Dr. Scott, whose shop was only about six rods off. The whole time from the accident to Dr. Scott's attendance was not five 'minutes, instead of fifteen or twenty, as you state. Dr. S. bathed his face, and gave him a large emetic dose of vin ipecac., helped him home, and ordered him milk. Next day (Sunday), I went to call upon Mr. B., not as a doctor, but as a friend. I met Dr. S. on my way, and had a chat with him, when he did not seem to regard the case as at all critical. On my arrival, about twelve o'clock, I found Mr. B. propped up in bed, gasping for breath, respiration at least 80 or 90. The only means I have, of course, of timing the respiration was breathing in a similar manner myself afterwards, and taking the time then. I immediately sent for Dr. Hutton, with instructions to bring acetic acid with him. The messenger on the way met Dr. Boyd, and brought him along too. In the meantime I had applied large mustard plasters. When Drs. H. and B. arrived, I applied the acetic acid on a handkerchief, and the effect was instan-Within 10 seconds the respiration taneous. fell to 32. All these facts can be sworn to by us three medical men, and by others present. His fingers at this time were blue up to the second joint. We then gave drinks of lemonade and acetic acid, and he became comparatively easy. Within an hour of the first application of the acetic acid the blueness began to go down, was down to the finger nails at night, and had disappeared altogether next morning, when he partook of a little beef tea; and as he had drank large quantities of milk the night before, showed no signs of exhaustion. The respiration fell to 20 towards evening, and he had a very fair night's rest. On Monday morning he had two severe spasms, followed by coughing up what seemed to be thickened mucus. T was not present at the time. The occasional use of On Monday the acetic acid was kept up. evening, the spasms showing signs of returning, we administered Tinct. Benzoin Co., combined with Chloral Hyd., by means of a steam atomizer, which always gave immediate relief. I soon found, however, that the Tinct. B. Co. clogged the instrument, and discontinued it, using the chloral alone. At his request I gave him a dose of Hydrarg Submur., grs. x, and the bowels not being moved, I gave an injection on Tuesday morning, which operated well, and he was perfectly regular in his evacuations ever afterwards. Tuesday he passed comfortably, having slight spasms from time to time, which yielded promptly to the chloral. On calling on Wednesday morning, the attendant informed me that the chloral didn't seem to have as good an effect, and I noticed that his breath had become fætid. Suspecting gangrene, I at once added a little carbolic acid to the inhalation, which he said gave him great relief. I was then called away to the country, and saw him no more alive. He died about 11.30. A similar statement to this, signed by Drs. Hutton, Boyd and myself, has been in Mrs. Brodie's lawyers' hands these three months. Further, a case occurred last summer, within 10 miles of here, where a bottle, containing 5lbs. of Liq. Ammon. F., exploded in the hands of Dr. Cornell's clerk, only about 11b. remaining in the bottle. The clerk was affected precisely as Mr. B. was. Dr. Cornell used the acetic acid at once, the patient being immediately relieved, and able to return to his work within a week, the delay being caused by one of his eyes being badly inflamed. Now, you further state that Mr. B. "was at all times a delicate man." I am ready to swear (and so is every man who was intimately acquainted with him) that he was possessed of a very hardy, rugged constitution, and of very regular habits. In my seven years of intimacy with him, I never knew him

sick but once, and that was only a mere triffe. Now, with regard to the withdrawal of the charge on account of the witnesses, &c., I will merely state that all the witnesses for the prosecution, with one exception, were anxious for the case to go on; and it was withdrawn, I am given to understand, without even the consent of the plaintiff. All the medical witnesses (with one exception) for the prosecution were ready to swear (to the best of their belief) that the man's life would have been saved if the acetic acid had been used at first. The doctors employed by the defendant went on the theory that all the ammonia had escaped after the lapse of eighteen hours. Apparently a very good theory, but how then will they account for the instantaneous relief given by the acetic acid? If the membrane had been destroyed, the acetic acid would have had no effect, good or bad; its having such direct effect, proves evidently that the ammonia had not left the system. So much for theory. For my part, I have little doubt that had the case gone on the plaintiff would have got a verdict, as nothing could excuse the patient being left without antidotal treatment for eighteen hours. As it is, the case stands thus: The defendant is wealthy (by marriage). The plaintiff is a widow in almost destitute circumstances, and I understand the case will be brought up again if she can raise the means. If not, it will not be the "iniquity" of the cause, but the poverty of the plaintiff, that will prevent the matter being thoroughly ventilated. The defence being that the case would have terminated fatally any way, and no medical man on either side pretending that proper antidotal treatment had been used for eighteen hours, I think the defendant has very little reason to complain. In conclusion, I will merely state that I have no interest whatever in the case, except that of a sincere love of fair play; nor would I have now used my pen had I not found the conduct of a highly estimable lady (in every sense of the expression) stigmatized as "iniquitous." With all due apologies for trespassing so far upon your valuable time. H. J. NASH, I remain,

L.M.B. & M.C.P. & S., Ont.

Forest, Dec. 7th, 1880.

P.S.—With regard to your remarks about altering the law, the only alteration that would bear upon the case would be to make the plaintiff give security for both costs before entering action, which would shut the gates of justice forever against the poor, and give carte blanche to ignorance and negligence to play with human life ad libitum.

A LETTER FROM LONDON.

SURGICAL NOTES.

MR. EDITOR: SIR,-It is generally acknowledged that Mr. Jonathan Hutchinson is "the best all-round man" in London, as the His manner of speaking is very saving goes. quiet, but his views are expressed with great clearness and conciseness ; at the same time there is the greatest candour, and no evidence of professional pride or obtrusive egoism. Jonathan Hutchinson's style and manner-in fact the entire demeanour of the man-is a rebuke to the self-important, dogmatic, assertive class of medical practitioners. He is not ashamed to say before a class of medical students, "I do not know exactly what is the state of matters in this case." It has seemed to me, Mr. Editor, that this eminent surgeon's views on any matter must be of great interest to your readers in Canada.

Mr. Hutchinson most explicitly stated his belief that erysipelas is not a specific fever. Some surgeon, not resident in London, first expressed this opinion, at least in England; but the school adopting this view of the disease is still a small one, and, as is well known, the majority of text-books on surgery adopt a contrary theory. Mr. Hutchinson's definition of erysipelas is, "An inflammation characterized by pitting, and vesication, with a definite outline, which has a strong tendency to shift its position." It is contagious, and arises de novo. Local treatment by poultices is condemned; a lead and spirit lotion which Mr. H. is very fond of being preferred. Great stress was laid upon the statement that erysipelas has no period of incubation. Most of your readers will probably think as I do, that a good deal might be said on both sides of the argument; however, the fact that I have witnessed time and again that erysipelas can be arrested or aborted certainly seems to militate against the view that it is a specific fever.

Mr. Hutchinson's views on transverse fracture of the patella also struck me as at variance with the common teaching on this subject. They may be summarized thus: The greatest danger is from separation of the fragments by *effusion*. "There is no spasm of the quadriceps extensor." There is no special advantage in bony union, provided the fibrous or semiosseous union be firm, as it generally is. The treatment is to be directed specially to getting rid of the effusion. A very striking example of unilateral atrophy of the face was presented at the afternoon Clinic of the London Hospital, of which Mr. Hutchinson is the principal surgeon. The individual who was such a clinical curiosity had exhibited himself to many distinguished men in Europe, and had numerous photographs of himself in different positions.

The affection began at nine years of age, and affected not only the muscles, which were much atrophied, but also the bones and the half of the tongue on the affected side; so that this organ, when protruded, pointed very decidedly to the affected side. Mr. H. supposed that this atrophy had been subsequent to Addison's cheloid.

An admirable example of the latter was at that time in the wards.

Mr. Hutchinson's views on Addison's cheloid, or, as he would prefer to name the disease, morphœa, may be stated in brief : It is allied to herpes, being due to some affection of the nerves. Neither herpes nor morphæa occurs in young infants; both follow the course of nerves. Morphœa is due probably to inflammation of the vaso-motor filaments, and is characterized by oval patches of indurated whitish tissue, as though "infiltrated with lard or inlaid with ivory." On the very same day that the middle-aged man with atrophy of the face appeared, a young woman was also shown with well-marked hypertrophy of the temporal and masseter muscles on both sides. This patient's general health was excellent, as her appearance indicated, and no special cause could be assigned for the deformity. Mr. H. suggested that this was probably an example of an hypertrophy due to a state of the vaso-motor nerves directly the opposite to that of morphea, giving rise to dilatation instead of contraction of the vessels of the part. On skin diseases and syphilis Mr. Hutchinson is considered to have no peer in England. But the latter subject has been by no means exhausted even by Mr. Hutchinson's extensive observations, for Dr. Thomas Barlow, of the Children's Hospital, believes that *craniotabes* is much more frequently associated with syphilis (hereditary) than with rickets. This is an observation of greatvalue, and one not yet recognized, I think, by writers on syphilis. As Dr. Barlow's *clinique* is very extensive, his observations must be accepted as reliable and of very great value. Thus far I have noted in Mr. Hutchinson's remarks the following points of interest in connection with syphilis :

(1.) Syphilis detects any peculiarities or weaknesses of the patient. A relapse of a secondary rash with a tendency to ulceration in a young man with feeble constitution, Mr. H. considered as illustrating this proposition.

(2.) The Treatment of Syphilis.—Mercury in the second stage; iodide of potassium, or the latter with bichloride of mercury, in the third stage, or so-called tertiary syphilis, which should be considered rather as the sequelæ of syphilis than a distinct stage.

If there is any want of tone in a particular case mercury may be combined with tonics, especially with iron. "I never combine mercury with quinine or bark;" it prevents the action of the principal remedy, as is illustrated by the fact that quinine will prevent salivation. Yours truly,

T. W. M.

ONE OUTCOME OF THE NURSING DIFFICULTY AT GUY'S .--- On the conclusion of their Clinical lectures in November, Dr. S. O. Habershon, senior physician, and Mr. Cooper Foster, senior surgeon, of Guy's Hospital, tendered their resignations, which were accepted by the We wonder what the public governors. opinion will be of a body of men who could thus prefer to retain the services of a matron, whose presence in the Hospital has been a source of discord only, to those of such able and distinguished servitors as the past forty years of Guy's Hospital's history have proved Samuel Habershon and Cooper Foster to have been. Dr. Hilton Fagge and Mr. Davies Colley have been elected to the vacant posts.

ACUTE ICTERUS FROM PRESSURE. — Litten reports in the *Charité Annalen*, Band V., the history of the case of a woman, 37 years old, in whom repeated attacks of intense icterus were produced by the pressure on the gall bladder of a movable kidney. — Brit. Med. Jour.



TO CORRESPONDENTS.—We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by forwarding reports of the proceedings of their Associations.

TORONTO, JANUARY, 1881.

MATRICULATION EXAMINATION FOR THE ONTARIO MEDICAL COUNCIL.

When it was decided at the last meeting of the Ontario Medical Council to substitute the Provincial Intermediate High School Examination for the Matriculation Examination, as held under the previously existing regulations, we believe it was a source of satisfaction to the majority of medical men in the Province. The history of our Collegiate Institutes and High Schools during the last few years has been somewhat remarkable. They have advanced with such amazing rapidity that we can scarcely recognize them as the old Grammar Schools of They show their efficiency by the Ontario. thorough training they give their students, as we may see by their standing at the various Examinations they are called upon to pass, including those of the Professions, and the various Universities. While looking with pride upon the marvellous growth of these most important Educational Institutions, we can fully appreciate the wisdom of the Council in choosing their Intermediate Examination as the portal through which young men must pass before engaging in the important studies of the Medical Profession. In considering the quality of any Examination, we can never judge simply by the number of the subjects prescribed. We must take into view the standing of the Examiners, the nature of the questions, and the percentage required. The thoroughness, correctness, and impartiality of this Examination are beyond question; and its severity is proved by the large proportion of the unfortunate "plucked" candidates. Its standard is high—we believe higher than the average on this Continent or in Great Britain. We fully realize the importance of this statement, and before making it have instituted a careful study and comparison.

The Council have not, however, accepted the Intermediate as it stands, but have made some additions to that Examination, which make it very inconvenient, and in some cases impossible, for the High School Teachers to prepare their pupils for matriculation. The original resolution, as proposed by Dr. Burns, reads as follows: "Moved, that on and after July 1st, 1881, in lieu of the Matriculation Examination heretofore in force, the Council accept the Provincial Intermediate High School Examination, with Latin included as a compulsory subject, and that upon presentation of the official cer. tificate of having passed the said Examination to the Registrar, and the payment of fees, the holder of the same shall be entitled to register as a medical student." We had supposed that this resolution, after coming under the consideration of the Educational Committee, was passed by the Council, but on examining their announcement we find the important additions above referred to. Some of our readers may wonder at our reference to these "additions," when no subjects are specified which are not included in the ordinary curriculum of the High Schools; and we will endeavour to explain our meaning.

Group	I. {	Arithmetic, Algebra, Euclid.	
Group	II. {	English Grammar, Composition, Dictation.	
Group	III. {	History, Geography, English Literature.	

Every candidate is compelled to take these nine subjects, and in addition to these, there are four optional departments, of which he must choose one. It is also expressly stated that "no candidate will be allowed to take more than one of the four optional departments." 1st Optional Department:

Group IV. Structure of the second structure of the s

4th Optional Department: German.

The Council have not only decided on the nine compulsory subjects, and chosen from the optional departments that of Latin, but have also totally ignored the regulation quoted above, and have added all the optional departments, leaving only a choice between French and German. We cannot help thinking that this has been done inadvertently, without fully appreciating the results of such a course.

We have taken considerable pains to enquire at the Education Office in Toronto, and to communicate with some High School Inspectors and Teachers throughout the Province, and find that, with their existing regulations, it is impossible to prepare students in all these subjects without extra work after the completion of their ordinary duties. The reason is this: the compulsory subjects are taught at different hours, so that every pupil may receive instruction in them, but the optional subjects are taught "concurrently," that is, at the same hour. It is thus impossible for the students to receive instruction in more than one of the optional subjects according to the present arrangement of their time-tables. It must be remembered that the larger High Schools are institutions of considerable magnitude, having large staffs of teachers, and it is no trifling matter, when they have made their arrangements to suit the ordinary Intermediate and University Examinations, to ask them to make the radical changes here indicated. We may say that those to whom we referred spoke in the most kindly way of the new regulation, and expressed their anxiety to do all in their power to accommodate the wishes of the Medical Council. It was thought by some that they might manage to teach both Latin and Natural Philosophy, but entirely impossible to teach all the optional subjects without adding many hours in the week to their already very laborious duties. Some of the Masters have expressed their intention of undertaking this

extra work, if it be required ; while others say they are unable to do so, and will be compelled to refuse to prepare any pupils for the Exam-The candidates attending the latter ination. Schools will be compelled to take the ordinary work as laid down in the programme, and look elsewhere for instruction in the extra subjects. Let us glance at these extra subjects demanded by the Council: French or German, Chemistry, Book-keeping and Natural Philosophy. Surely, all will admit that in the aggregate they constitute a very formidable addition to an already severe examination. It is almost equivalent to fixing a standard equal to a university degree. We hope that before very long it will be considered advisable to ask candidates for medicine to take a course in Arts, but the time for this has not yet arrived. It is well to be an accomplished linguist, but we do not consider a knowledge of French or German an absolute necessity for the medical student. There is no more reason why Chemistry should be demanded than the other primary subjects, such as Anatomy, Physiology and Materia Medica. We approach the subject of Book-keeping with considerable diffidence, as we labour under the disadvantage of not possessing a minute knowledge of the intricacies of double or treble entry. Not knowing what the result of such ignorance may be, we will venture no opinion, but leave the subject to those who are competent to discuss it. Every medical student should have a fair knowledge of Natural Philosophy ; but as it is one of the subjects taught in our Common Schools, we might presume that such knowledge is possessed by those able to pass the Intermediate Examination. However, if the Council be desirous of examining candidates on this subject, the High Schools and Collegiate Institutes might be able to make such arrangements as would allow the pupils to take both Latin and Natural Philosophy.

We must, after all, return to our formerly expressed opinion that it is simply an oversight. In the College announcement the words are, "the High School Intermediate Examination, with Latin included." In the original resolution, as proposed in the Council, the words are, "the Provincial Intermediate High School Ex-

amination, with Latin included as a compulsory subject." This surely includes only the ordinary compulsory subjects, and Latin among the optional: the Council making the choice of the latter, instead of leaving such choice to the candidate. If such were not the intention of Dr. Burns and Dr. MacDonald, as shown by their remarks when moving and seconding the resolution, we very seriously misunderstood The mistake appears to have occurred them. in making the addition to Regulation 5, before referred to, which (addition) commences as follows: "The said Examination to embrace the following subjects," &c. ; the subjects named being those before mentioned.

We are in a position to state that this mistake (supposing it to be such) has caused much perplexity and anxiety to both High School teachers and students, and we hope it will be rectified as soon as possible. With this end in view, we would ask the Executive Committee to consider the question at their first meeting, and, if our views are right, correct the error, and at once inform the High School Teachers of their decision.

SHUTTLEWORTH'S FLUID EXTRACTS, &c.—We are pleased to learn that our friends in the city find Mr. Shuttleworth's Fluid Extracts very reliable, and are now using them largely. This is more especially true with reference to his preparation of ergot. With so many uncertain specimens of this drug in the market, it is very important to obtain one that is thoroughly trustworthy, and we therefore cheerfully recommend all practitioners to try Mr. Shuttleworth's preparation. In addition to his Extracts, he has a large variety of new remedies —pure chloroform, and all kinds of McKesson and Robbins' gelatine-coated pills.

PERSONAL.—We are pleased to observe that Dr. H. H. Wright, who has been for some time past in ill-health, and latterly confined by iritis to a darkened room, is again about. We congratulate our old preceptor most sincerely upon his emancipation from the thraldom of an enforced inaction, which, in one of his mental activity and untiring energy, speedily consumes the zest of life,

FRATERNITY.

How good a thing it would be if brethren would only dwell together in unity! But, alas! the communication published in another column, from Dr. Nash, of Forest, very plainly proves that such a consummation, so long and so devoutly wished, still "misses the flower of its accomplishment."

The letter, too, discloses the persistence in our midst of an evil which has been the subject of a thousand homilies by the censors of the profession; and abundantly bears witness to the already well-established fact that ill-feeling, jealousy and spleen amongst members of the profession are the potent cause of malpractice suits, and that wherever such actions are rife. "envy, hatred, malice, and all uncharitableness" likewise abound. Dr. Nash is entirely mistaken in supposing that we have derived our information from a biased source. Our notice of the case of Brodie vs. Scott was published entirely in the interest of the profession, and not at all in that of Dr. Scott, who is neither a subscriber, nor in any sense a friend, to this Journal.

With reference to Dr. Nash's friendly call upon Dr. Scott's patient, we would venture to remark that it is, in our opinion, highly undesirable for medical men to do more than leave a card of kind enquiry at the house of a sick friend, who is at the time under the actual care and attendance of another practitioner, since the stigma of suspicion will attach to the cleanest skirts, and patients too often ask awkward questions even unintentionally; and the manner of receiving these, whether answered or avoided, is over apt to impress their lay perceptions with a seeming censure of the practice to which they have been submitted. We are clear, therefore, that had Dr. Nash not visited Brodie, no action would have arisen. But Dr. Nash does not in this case claim the extenuating consideration of being trapped into a condemnation of the treatment, and, in truth, we can discover no reason why we should extend it to him, since he voluntarily states that finding the patient "gasping for breath," and yet breathing "at least 80 or 90 times" in the minute, he immediately sent for Dr. Hutton and acetic acid. But why, we would ask, did

he not send for Dr. Scott, as the canons of our etiquette direct? In the meantime Dr. Nash had applied mustard plasters, but whether to the patient (and if so, to what part,) or to the empty ammonia bottle (as our forefathers did) our correspondent deposeth not. On the arrival of Drs. Hutton and Boyd, the acetic acid was applied on a handkerchief, but where to is not stated; suffice it, however, that "the effect (relief?) was instantaneous," and that "within 10 seconds the respiration fell to 32."

Now, we would like to be informed as to what was, in the opinion of these gentlemen, the cause of the excessive frequency of respiration (at least 80 to 90 per minute) at the time, according to Nash's statement, some 18 hours after the inhalation of the ammonia; and what is the explanation of the marvellous fall to 32 within 10 seconds? The disappearance of the cyanosis was only in keeping with what had gone before; as was also the extraordinary tolerance of the patient's stomach for milk curd, since he was able to imbibe, at frequent intervals on the same evening, copious draughts of lemonade and acetic acid, and large quantities of milk. But the most marvellous feat recorded by Dr. Nash in his account is the interlarding of a day (which he omits to name otherwise than by the denomination "next,") between Sunday and Monday, and so prolonging the patient's life by 24 hours at least. When the spasms returned on Monday evening, however, the acetic acid, which had before proved so exceedingly beneficial, was now abandoned, for reasons withheld, and its place supplied by pulverizations of Tr. Benzoin Co. and Chloral Hydrate. This, too, always gave immediate relief, notwithstanding that the Benzoin clogged the apparatus-a circumstance not altogether unfavourable, we opine, to the denuded mucous membrane. Did the Benzoin and Chloral likewise act as antidotes to the caustic alkali?

We must commend to the notice, but not to the imitation, of our readers, Dr. Nash's ingenious and superlatively accurate method of counting a patient's respiration. We can scarcely credit the doctor when he says that he is prepared to attest under oath the accuracy of observations made in such a haphazard manner. Certainly it would demand as much elasticity of conscience on his part, as of credulity in his auditors.

Now with reference to the antidotal treatment of ammonia poisoning. Acids have, of course, been found beneficial as neutralizants in the case of ingestion or topical application of the other caustic alkalies, and also in some few cases of ammonia poisoning, but their employment needs to be instantaneous, and more especially so in the case of the volatile alkali; since the destructive effects of these caustics is so rapidly accomplished, and ammonia is so speedily volatilized. The authorities, however, do not contain the record of improvement following the use of acids in cases of ammonia inhalation after the lapse of any appreciable time, to say nothing of a few hours; and common sense rebels against the acceptance of the view that a neutralizing effect could be manifested after the expiry of 18 hours. Spasm of the glottis is oftentimes induced by the inhalation of ammonia, and indeed death has thus resulted from its application to the nostrils in cases of faint; but it must be exceedingly rare that any of the vapour finds access to the lungs, since the sole portal of entry is by its irritant effects immediately closed. Supposing, however, that in this case the vapour did find its way into the lungs, inflammation of the bronchial and vesicular mucous membrane wherever touched must have ensued, but we entirely fail to find the signs and symptoms of such a complication in Dr. Nash's report of the case after it came into his hands. We are, therefore, constrained to ask the question : Of what did the patient die? And why did not the initial improvement manifested on the change of medical attendant continue? Did the man die in consequence of Dr. Nash's visit to the country ? Why was not a post-mortem made to determine the cause of death ?

With reference, in conclusion, to our correspendent's connection with the case, we have only to say, in brief, that, in our judgment, the course alleged by Dr. Nash to have been pursued throughout, by himself and associates, demands the severest censure that can be imposed upon it. We have faith, and doubt not that the sense of justice and propriety which

pervades the great body of the profession will not fail in its infliction.

That the action can be entered again (or any number of times with the same result) is only too true, and we feel it our duty to strenuously urge upon each individual practitioner in the Province the necessity of using his utmost influence, great or small, with our legislators on the floor of Parliament to promote the statutory imposition of some reasonable restriction of the limits of such vexatious, expensive, and, in the majority of cases, idle litigation.

ANNUAL DINNER OF TRINITY MEDICAL SCHOOL.

We are very glad that the custom of having an annual dinner in connection with each of the Schools of Medicine in Toronto has become thoroughly established. Of the various forms of social reunions, we know none better than this, as it not only brings the teachers and students together in a pleasant social way, but both are brought in contact with all classes of citizens, who are represented at these dinners by a large number of our most prominent men. We are convinced that much good has been, and will continue to be, accomplished by these annual gatherings. The public have discovered that the medical students are not simply a lot of noisy, boisterous schoolbovs, but, as a rule, are a body of thoughtful, intelligent men, who, when brought in contact with their professors and the public, are able to conduct their proceedings, not only "in decency and order," but also with marked ability.

The Trinity School dinner, which was held at the Rossin House on the 25th November, was a pronounced success. The guests were numerous-the members of the Faculty were all present. Many of the graduates were on hand-not enough, however. The students made up for the deficiency in the number of the grads by turning out in full force, thus showing their loyalty to the School and its The dinner was one of Mr. Irish's Faculty. best: we can give it no higher praise. Mr. Baugh acted as Chairman, and Messrs. Krauss and O'Reilly as Vice-Chairmen, and the success of the entertainment was to a large extent due to the ability displayed by them in conducting the proceedings.

It is now well known that cold water, tea or coffee are the only beverages at these dinners. A "cold water dinner" has not been a popular institution in the past, but the medical students have proved during these last few years that such a dinner can be made a thorough success in every sense of the word. His Worship the Mayor gazed with pride on his glass of clear, untainted city water, which he held up for the inspection of the company while responding for the Corporation. Some of those present "couldn't see it," but that was, no doubt, due to its transparency. The Chairman, 1st Vice-Chairman, Mr. Lauder, M.P.P., Prof. Pernet, and others, spoke in pleasing terms of the cordial good feeling which existed between the Trinity Medical School and its rivals; and Dr. Thorburn, the representative of the Toronto School, on rising to reply to the toast of the "Sister Institutions," was received with a perfect storm of applause from the students, showing the reality of this friendly feeling towards his School, and their appreciation of his own well-known popularity.

The Chancellor of Trinity University, Hon. G. W. Allan, in his response, congratulated the Trinity School on its success, and spoke in a most kindly way of the medical profession. Dr. Geikie, Dean of the Faculty, expressed his pleasure in meeting the guests, graduates, and students. He alluded in happy terms to the success of the School, and the efforts of the Medical Council to advance the interests of the profession in every possible way.

Dr. Stark, of Hamilton, responded for the graduates, and Messrs. Ferguson and Kennedy for the undergrads. Prof. Goldwin Smith, who was present, received, as he always does, a warm welcome from the students; but objections are frequently raised about the length of his speeches, as he will persist in "cutting them too short." Dr. O'Reilly and Mr. Gillespie responded for the "Toronto General Hospital." Among the other speakers were Drs. Allison and Burns, Prof. Pike, and Rev. Mr. Rainsford.

Among the most pleasing features of the evening's entertainment was the really excellent singing of the students' quartette, Messrs. Fairchild, Gaviller, Jenner and Handbridge, assisted by Dr. A. J. Geikie, who presided at the piano. The dinner was concluded at a "seasonable" hour, and the general feeling was "happy to meet, sorry to part, happy to meet again."

AN ADMONITION TO OUR LAY CONTEMPORARIES.

Sometime about the beginning of December, we were surprised to observe in both our morning dailies the announcement in a conspicuous place of the fact that Dr. Alt had removed to St. Louis, and that Dr. Ryerson had succeeded to his appointments here. We noted at the time that the two announcements in the different papers were verbatim ac literatim "counterfeit presentments." Again, on the morning of the 11th December, the Mail contains the same announcement in its column of the city news; and à propos of this we desire to point out to the editors of our lay contemporaries the desirability of exercising a close supervision over the authorship of such announcements, which generally emanate from the misguided zeal of some lay friend, and always offend the upholders of professional proprieties. We, of course, at once acquit Dr. Ryerson of all knowledge of, or complicity in, these paragraphs; for even if he were capable of treading the highway to professional success through the columns of the daily press-which we do not believe-yet here the fact that Dr. Ryerson succeeded to Dr. Alt's appointments more than six months ago, proves that the author of the paragraph knew not whereof he wrote. We shall join most heartily with our professional contemporary in the endeavour to suppress this species of tradesman-like advertisement, before which every sense of professional etiquette and scientific modesty recoils in disgust.

Alfred Hudson, M.D., Physician in Ordinary to the Queen in Ireland, last born and latest left of that illustrious triad—Graves, Stokes, and Hudson—in whose hands the lamp of medical science erstwhile burned so brilliantly in Dublin, passed over to the majority on the 19th November last, in the 73rd year of his age.

CANADIANS ABROAD.—Edwin F. Hatton, of the Toronto school, passed the Primary Examination of the Royal College of Surgeons of England on the 9th of November. John E. Shaw, Chatham, Ont.; Eyre M. Thuresson, Ancaster, Ont.; William J. Cross, Barrie, Ont.; and James A. Todd, Barrie, Ont., were admitted L.R.C.P. and L.R.C.S., Edin., in November.

PERSONAL.

Dr. J. P. Lynn, who has lately removed to this city from Ottawa, received an eulogistic address from the Rideau and Bathurst Medical Association. The address was signed by Drs. Grant, Sweetland, and 130 others. Dr. Lynn has been 20 years in practice; has been Coroner and Health Officer in Ottawa, and is an old and esteemed student of St. Michael's College, in Toronto.

MORAL INSANITY.—At the Canadian Institute, on the 11th ult., Dr. Joseph Workman read a very able and characteristic paper on this subject. Space will not allow us to do more than make a bare mention of the fact, in the hope that, if the paper be subsequently published, all our readers will make an effort to possess it. The subject is one upon which every medical man should hold a decided opinion, and be prepared with a reason for the faith that is in him. An imperfect synopsis appeared in the *Globe* of the 13th ult.

WICKERSHEIMER'S PRESERVING FLUID :---

	Fo	r Injecting	. For	Immersing.
Arsenious Acid	16	grammes	s. 12	grammes.
Sodium Chloride.	80	65	60	**
Potas. Sulphate	200	66	150	"
Potas. Nitrate	25	65	18	**
Potas. Carb	20	"	15	**
Water	10	litres.	10	litres.
Glycerine	4	"	· 4	"
Wood Naphtha		"	34	"
-	-	-Br	rit. Med	l. Jour.

THE DIPLOMA MILLERS.—On Dec. 6th, the notorious "Dr." (?) Buchanan the diplomamill grinder, of Philadelphia, was fined \$500 and sentenced to ten months' imprisonment; Chapman, his accomplice, was fined \$509 and sentenced to a year and ten months' imprisonment. [We commiserate the fellow-prisoners of these rascals, and would suggest solitary confinement for them.—ED.]

Book Notices.

Atresia of the Genital Passages of Women. By Edward W. JENKS, M.D., LL.D., Chicago.

Electricity in Medicine and Surgery. By JOHN J. CALDWELL, M.D., Baltimore.

The "Abdominal Method" of Singing and Breathing as a Cause of "Female Weaknesses." By CLIFTON E. WING, M.D., Boston.

Report on Obstetrics, read before Canada Medical Association, September, 1880, by Prof. WM. GARDNER, M.D., McGill.

The Use of Electricity, Damiana, etc., in the Treatment of the Genito-Urinary Organs. By JOHN J. CALDWELL, M.D., Baltimore, Maryland.

The Electric Laryngoscope. By A. WEL-LINGTON ADAMS, M.D., Colorado Springs, Colorado. Reprinted from "Archives of Laryngology, Vol. I., No. 3, September, 1880.

Higher Education of Medical Men, and its Influence on the Profession and the Public. Presidential address delivered before the American Academy of Medicine, 28th Sept., 1880. By F. D. LENTE, A.M., M.D. New York: Chas. L. Bermingham & Co., 1260 and 1262 Broadway.

A Case of Combined Intrauterine and Abdominal Twin Pregnancy; the first child born naturally at 8 months; the second delivered alive at term by Laparotomy. By H. P. C. WILSON, M.D., Baltimore. Reprinted from the American Journal of Obstetrics. New York: Wm. Wood & Co., 27 Great Jones St.

Codman and Shurtleff's Catalogue, containing a Paper on the Inhalation of Atomized Fluids, by H. BEIGEL, M.D. (Lancet); on the Treatment of Chronic Diseases of the Lungs by the Inhalation of Atomized Fluids, by MORRELL MACKENZIE, M.D. (Med. Times and Gaz.), and on the Inhalation of Nebulized Fluids, by J. SOLIS COHEN, M.D. Codman & Shurtleff, Boston; Lyman Bros. & Co., Toronto. Photographic Illustrations of Cutaneous Syphilis. By GEO. H. FOX, A.M., M.D., Clin. Lect. on Dis. of Skin, Coll. Phys. and Surg., N.Y., &c., &c., &c. Forty-eight Plates from Life. Coloured by hand. Complete in 12 (monthly) Parts. New York: E. B. Treat, 757 Broadway.

We have received the first three numbers of this admirable Atlas, comprising plates of Syph. Erythematosum (3 plates), Pigmentatio Post Syph., Leucoderma Post Syph., Syph. Papulosum, Do. Lenticulare, Do. Miliare, Do. Squamosum (2 plates), Do. Circinatum, Syph. Papulo Squamosum, Syph. Papulo Pustulosum, and Syph. Pustulosum. All are of equal merit and exceptionally good. Each plate is accompanied by two quarto pages of letterpress, which all who are acquainted with Dr. Fox's fame as a Dermatologist, and his contributions to the subject, will look for and assimilate with avidity. The plates of "Cutaneous Syphilis" form a fit and necessary complement to the author's unrivalled "Photographic Illustrations of Skin Diseases," and should be possessed by all. For even those who eschew Dermatology as a whole, and have not large special Hospital advantages, cannot afford to be without any available means of recognizing the frequently puzzling and too often overlooked or misunderstood manifestations of that Protean and chameleon-like scourge which besets us on every side.

The Orthopragms of the Spine—An Essay on the Curative Mechanisms Applicable to Spinal Curvature. By ROBERT HEATHER BIGG, Assoc. Inst. C.E. London: J. & A. Churchill, 1880.

This little book of 149 pages is admirably written, in a clear and interesting style, and contains in its four chapters a most lucid exposition of the mechanical relation of the natural spine, the modes and causes of its deformation, and the means and methods of its restitution.

Chapter I. deals with the natural spine, whereof it contains an interesting mechanical view, which, however, need not detain us.

Chapter II. treats of the unnatural spine; and in it the author divides "curvature" into two classes, according to their causation, intrinsic and extrinsic—the former being determined, "by the getting out of gear of the

spine itself as a piece of mechanism;" and the latter arising whenever "the spine itself, being structurally and functionally perfect, yet the discharge of its duties under altered circumstances (defect or deformity of other parts) of base or to be balanced mass, compels a consequent change of curves to accommodate the difference." The secondary or visceral symptoms of curvature receive a passing notice in this chapter.

Chapter III. enunciates the principles of reversion from unnatural to natural; affords a definition of the terms "orthopraxy" and "orthopragm;" and most unhesitatingly affirms that of all materials for orthopragmatic purposes steel easily bears off the palm.

The fourth and concluding chapter occupies just one-halt of the book, and is devoted to the solution of the problems: "What are the holds the body is capable of affording to a spinal orthopragm ? and these once secured, what forms of orthopragms are appropriate for the prevention or reversion of the varied types of spinal curvature ?" We have not the slightest hesitation in referring our readers to the book itself for the answer to these questions, being persuaded that its persusal will be a source of interest and of profit alike to all. Suffice it for ourselves to say, that we do not believe that those who have had large experience of Sayre's Plaster Jacket will subscribe to the aspersions and the strictures cast upon it by the author. Of the typographical and material excellence of the publication itself, the names of the publishers render any mention superfluous.

Medical Heresies. By GONSALVO C. SMYTHE, A.M., M D. Published by Presley Blakiston, 1012 Walnut Street, Philadelphia.

This is a small octavo of only 218 pages, but it contains much interesting and not a little amusing matter. The portion devoted to the early history of medicine is rather brief; but as the majority of medical readers care less for learning the infant state of their science than for useful information as to its modern progress; it is probable that they will not regret the brevity with which Dr. Smythe has disposed of the doctors and dogmatists of antiquity and the middle ages. In truth, it would appear that he has introduced this part as an appetizer to the more gustatory repast which he presents in the rest of his book. If there be in the present day any rational practitioner of medicine, or (if that be possible) any rational believer in the mysteries of Homeopathy, who desires to obtain a clear view of this wonder of our wondrous century, we can, with perfect sincerity, commend to his perusal Dr. Smythe's unpretentious little book. It is cleverly and forcibly written, and exhibits a very commendable minimum of those grammatical abnormalities and rhetorical excrescences which would appear to find a congenial soil in the great valley of the "Father of Waters," where not only a new variety of the Anglo-Saxon family is being rapidly evolutionized, but also a new and far less tight-laced dialect of the English tongue.

Dr. Smythe's exposition of the original won ders of the theory of Hahnemann, and of the harmonies of its present interpreters, is amusingly instructive, and cannot fail to edify all who feel a desire for more ample knowledge of this marvellous conception of human mentality. It would be more than sufficient to make the crumbled bones of Hahnemann shake in their decayed cerements, to hear, or even to dream of, the transmigrations and transformations which his inspired revelations have undergone within the past quarter of a century. The once happy family of his disciples is now split up into discordant anarchical sections, the majority of whom not only repudiate his most cherished and most potent dogma of the infinitesimals, but also question that of the similibus, whilst a very large percentage of them, if not indeed the whole fraternity, are either professed freebooters, or stealthy poachers, ready for bagging game on either side of the boundary, with either the popgun of their own battalion or the blunderbus of their antagonists, just as their dupes may prefer.

Great and graciously acceptable in all ages has mystery ever been, and let it not be said, as long as homeopathy lives, breathes, and fattens on human credulity, that our age is unworthy of association with any that has preceded it. Should any one question this asseveration, we would simply ask him to read Dr. Smythe's little book: it will not cost him much, and he may read it leisurely, at little loss of time. When he gets through, he may not turn it to bad account by lending it to the first strong believer he chances to meet with, and watch the result.

But here we are reckoning without our host. It is one thing to lead a horse to the water, and quite another to get him to drink. We will now offer a bet, at large odds, that of the first twenty patronizers of homeopathy to whom any so-called allopathist will read a page of this book, reproducing even the very words of Hahnemann, or his modern interpreters, and drawing from them their inevitable deductions. he will be told by nineteen, as the writer of these lines has been by an earnest disciple, "it's all lies; " yet this repudiator saw a homeopath dip the tip of his finger into a drop of some infinitesimal, and touch with it the navel of a baby yelling with colic, and cure it as quick as lightning. Great is mystery !

Diseases of the Pharynx, Larynx, and Trachea. By MORELL MACKENZIE, M.D., London, Senior Physician to the Hospital for Diseases of the Throat and Chest, Lecturer on Diseases of the Throat at the London Hospital, &c., &c. New York : William Wood & Co.; Toronto: Willing & Williamson.

This is an age of specialties, and probably one of the worst abused of them all is that of the "Throat." Quackery has reaped rich harvests from this diminutive portion of the body during the last few years. The man who studies diligently this region, and at the same time knows but little about the system generally, should never presume to say he understands the treatment of "Diseases of the Throat." Such diseases are so often only the local manifestations of constitutional disorders that none but wellinformed physicians, in the broadest sense of the term, should be trusted with their treatment. Of course we cannot object to the latter class paying special attention to the throat, or any other portion of the body, if they are so disposed, but we must protest against the abuse of specialties by superficial one-sided men, which is so common at the present time. Every student of medicine should study diseases of the pharynx, larynx, and trachea as carefully as he does those of the lungs, liver and kidneys, and should be taught to use the laryngoscope as skilfully as he does the stethoscope.

Dr. Morell MacKenzie is an able physician, and probably the greatest living authority on diseases of the throat, and we would like to see his work cccupying a place in the library of every medical practitioner in the country. He describes carefully the various kinds of instruments required, and his descriptions are always accompanied with excellent plates. He treats fully the different forms of pharyngitis and the diseases of the pharynx, such as cancer, tumours, syphilis, phthisis, neuroses, and disorders of traumatic origin. His chapter on Diphtheria and True Croup, which he considers identical, is especially comprehensive and in-The chapter on Diseases of the structive. Tonsils also deserves special mention. He describes and treats in the same thorough and scientific manner all varieties of diseases found in the larynx and trachea, whether of local, constitutional, or traumatic origin.

In the Appendix he gives a number of special formulæ for topical remedies, such as steam and spray inhalations, gargles, lozenges, pigments, and insufflations; and specially indicates those which he has found most beneficial in his own very extensive practice. We regret exceedingly that our limited space prevents us from a more extended notice of many of the subjects he discusses so ably, and we only hope that our readers will supply the deficiency by a careful perusal of the work.

Biological Atlas. A Guide to the Practical Study of Plants and Animals. Adapted to the Requirements of London University, Science and Art Department, and for use in Schools and Colleges, with accompanying text. By D. M'ALPINE, F.C.S., Lecturer on Biology and Botany, Edinburgh, and A. N. M'ALPINE, B.Sc., Lecturer on Botany, School of Medicine, Edinburgh, &c. W. & A. K. Johnston, Edinburgh and London, 1880.

We are in possession of a copy of the aforesaid Biological Atlas by the Messrs. M'Alpine, of Edinburgh, and feel called upon to say a word or two in its praise. It rarely happens that one engaged in giving instruction in a

special subject meets with a book so well adapted to the wants of his class. The truthfulness, accuracy and neatness which mark each of its pages, compel us to speak in very high terms of this book. In fact, after carefully scanning its contents, the only regret felt is that the authors should have stayed their hands so soon in such a good work. Had they extended their labours so as to include the Insecta, Reptilia Proper, Aves and Mammalia, we feel assured the Atlas would have been still more useful and instructive. However, with its present compass, perhaps, while inexpensive, it contains all that is absolutely required by the average college student with but little time at his disposal. It is a volume of fifty pages, and has twenty-four plates, comprising 423 coloured figures and diagrams. Eight of the plates are devoted to the vegetable kingdom; the remaining sixteen illustrate the comparative anatomy and histology of the animal kingdom. The cryptogamic plants taken up are Yeast, Bacteria, Mould, Chara, Protococcus, and the Bracken Fern. Plates VI., VII. and VIII. exhibit parts of flowering plants, and, we think, might be somewhat improved; for example, microscopic views might be substituted for those of the leaf of the Pea, the Horse-Chestnut and the Honeysuckle, which leaves themselves may be readily obtained by all students.

The Proteus and Bell Animalcules, Freshwater Polype, Earth-Worm, Lobster, Crayfish, Mussel, Snail and Frog, are the animal types, the last seven plates being monopolized by the Frog, an amphibious creature that has frequently contributed to the advancement of science, and whose structure, physiology and development form a most interesting and profitable study. In order to give our readers some idea of the character and value of this Atlas, we here enumerate a few of the objects therein beautifully figured. In Plate XVII. portions of the edible Snail are represented, among which are the horny upper jaw, the radula, longitudinal vertical section of anterior portion of odontophore, subradular membrane. with its longitudinal muscles, auricle and ventricle of heart with cephalic and abdominal. arteries, the colourless, nucleated and amœbiform blood-corpuscles, blood-vessels in the lining of the pallial chamber, duct of salivary gland, the eye with its cornea, conjunctiva, sclerotic and choroid coats. retina and lens, the optic nerve, buccal nerve-ganglia, cerebral, pedal and parieto-splanchnic ganglia with branches, albumen gland, ovotestis and its duct, end of follicle of ovotestis, oviduct, vas deferens, duct of spermatheca, dart and dartsac, auditory canal and sac with otoliths in fluid. Plate XIX. shows the foog's skeleton with all necessary minuteness, different colours being employed to distinguish cartilage from true bone, as well as those bones that originate in cartilage from those that have their origin in membrane. Again, in Plates XX. and XXI. we find the ventricle and auricles of the heart of the frog, the bulbus arteriosus, right and left aortic arches, the cœliac, mesenteric, gastric, hepatic, dorsal, iliac, femoral, sciatic, splenic, carotid, and lingual arterial branches, the chief cranial nerves, a transverse section of the spinal cord and neural canal, the nervous supply to the muscles of the eye, and the vertical and horizontal longitudinal sections of the brain. Finally. in Plate XXIV. we have, what is of great interest and importance, a comparison of the histology of Rana and Homo.

Meetings of Medical Societies.

TORONTO MEDICAL SOCIETY.

This Society met on the 18th Nov., 1880, the President (Dr. Covernton) in the chair. After preliminaries, Dr. Geo. Wright related two cases of syphilis; in one, in which the primary sore appeared on the lip, the source of infection was traced to a pipe which had been smoked by a person having mucous patches in the mouth. The second case was one of syphilitic psoriasis, in which the only source of infection appeared to arise from sleeping in the same bed and using the same towels as a friend with syphilis.-Dr. Graham had met with four cases of a similar character-the first in a male, with labial chancre, from the use of a syphilized pipe ; the second and third both in girls, resulting from inosculation; and the fourth with a superciliary chancre without history .- Dr. Reeve mentioned a case of conjunctival chancre in an infant a few months old.

Dr. McPhedran related a case of luxation of lower end of the fibula forwards (published in another column).—Dr. Reeve then proceeded to read his paper upon some diseases of the Nasopharynx, Tympanum and Mastoid (will be published). The discussion was adjourned till next meeting. After some general business the Society adjourned.

At the meeting of Dec. 2nd, the President in the chair, Drs. T. S. Covernton, Rolph Lesslie and J. Lesslie were proposed as members.

Dr. Davidson exhibited a patient with a skin affection pustular in character, and confined exclusively to the back, and said to be of two years' duration. It resembles acre vulgaris.

Dr. Graham stated that a case of elephantiasis arabum under his care was improving under the administration of chaulmoogra oil internally and externally.

The adjourned discussion on Dr. Reeve's paper then came up; and after some remarks by Drs. Ryerson and Palmer, and a few questions from Drs. Nevitt and Cameron, Dr. Reeve closed the debate with a most able reply.

Dr. Graham then presented some pathological specimens from a case of lymphatic leucocythæmia under his care for four weeks. The disease ran a typical but rapid course. The lymphatic glands were universally enlarged. The spleen was not enlarged, weighing $5\frac{1}{2}$ ounces. A small *lien succenturiatus* also existed. All the organs were unusually firm, and presented well-marked lymphatic infiltration. The lower lobe of left lung was perfectly white and almost absolutely solid.

Dr. Machell presented a patient, the subject of fracture of lower angle of scapula (published last month).

Dr. Geo. Wright related a case of chancroid in a boy of 13, said to have been caught from a girl of 11 or 12. He also related a case of cardiac syncope, in which a most alarming condition was brought on by slight exertion. There was no organic valvular disease and no pericardial effusion. The patient was improving under rest, ammonia and digitalis.

Dr. Workman read a translation of Gélineau's case of narcolepsy, and offered some remarks upon it. Any excitement caused the man to fall into a sleep in which the pupils were dilated.—Dr. Cameron regarded the case as epileptic.

The following resolution was adopted: "That, in the opinion of this Society, the formation of an Ontario Medical Association is highly desirable, and that this Society will render what aid it can in such formation."

The meeting then adjourned.

ELGIN MEDICAL ASSOCIATION.

A regular meeting of the Elgin Medical Association was held at St. Thomas on Nov. 24th. Present: Drs. Going, Williams, D. McLarty, McLay, Vanbuskirk, Sinclair, C. McLarty, W. E. Smith, Tweedale, Cross, Kains, Fulton, and R. W. B. Smith.

The first order of business was the reading of the inaugural address of the President, Dr. F. B. Going, St. Thomas. The address, which was most suitable for the occasion referred to the objects of the Association, and exhorted the members of the Profession to take a lively interest in its welfare. One paragraph from the address was: "I think it is needless to enter much into the relations we owe to one another in our daily-practice, as we have fully laid down in the code of ethics the course we should pursue, and which, if fully and conscientiously carried out, should enable us, at all times, to meet our brethren on the most friendly terms, and rise above the little jealousies that are so apt to separate us one from another, and which our friends outside the profession are but too glad to magnify and increase."

The address was highly appreciated by the Association, and a cordial vote of thanks tendered to the President for the same.

Dr. Vanbuskirk read an interesting and elaborate paper on "The Etiology and Pathology of Puerperal Fever." The discussion which followed was taken part in by all the members present; and the pleasant interchange of opinions which followed added largely to the interest of the meeting. The paper was well received, and Dr. Vanbuskirk received the thanks of the meeting for his contribution.

The Secretary read a communication from Dr. J. E. White, Toronto, regarding the formation of a Provincial Medical Association, Dr. W. E. Smith moved, and Dr. Vanbuskirk_seconde¹, "That in the opinion of this Association it is desirable to recommend the formation of a Provincial Medical Association, in accordance with the objects stated in the communication of Dr. White."

Dr. D. McLarty was appointed to read a paper at the next meeting, which will be held at St. Thomas on Wednesday, January 11th, 1881, at 2 p.m.

R. W. BRUCE SMITH, Secretary.

Miscellaneous.

NITRO-GLYCERINE IN ACUTE AND CHRONIC BRIGHT'S DISEASE, AND IN THE VASCULAR TENSION OF THE AGED—THREATENED APO-PLEXY, ETC. — Mr. A. W. Mayo Robson, F.R.C.S., of Leeds, writing to the *British Med. Journal*, details a number of cases of the above-named affections, in which striking benefit resulted from the employment of one minim to three minim doses of a one per cent. solution of nitro-glycerine. The most constantly observed effect of the diminished intra-vascular pressure was a copious secretion of urine.

TEMPERATURES OF THE SKIN OF THE THORAX -M. Redart communicates the results of his researches on the temperatures of the skin of the thorax in the physiological state, and in pleurisy and pneumonia. It results from the researches of M. Redart that the temperature of the skin of the thorax is liable to consider able variations A temperature of 10° or 12 C. (50°-53.°6 F.) being applied to a portion of the skin of the thorax, the temperature is lowered from one degree to one degree and This or some other portion being covered half. over with wadding, its temperature rises in notable manner, and is comparable to that of the axilla. The average temperature of the skin of the thorax is in the normal state from 35.°5 to 34.°6 C. (95.°9 to 94.°28 F.). There are differences of three, four, or five-tenths of a degree between the two sides of the chest according as the extremity of one of the upper limbs is placed in hot water or cold.

In pleurisy, if the healthy is compared with the discased side, in a great number of case no differences are found. In pneumonia there is generally a slight hyperthermy of the diseased side, but it is produced over the whole side, and not only at the level of the diseased portion. In no case is the temperature of the thorax superior to that of the axilla and rectum

All these researches and experiments have been made by the means of, not thermometers, but thermo-electric apparatus.—Gaz. des Hôp.