# Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below. Canadiana.org a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

	Coloured covers / Couverture de couleur		Coloured pages / Pages de couleur
	Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
	Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
	Cover title missing / Le titre de couverture manque		Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
	Coloured maps /		Pages detached / Pages détachées
	Cartes géographiques en couleur	$\checkmark$	Showthrough / Transparence
	Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)		Quality of print varies / Qualité inégale de l'impression
	Coloured plates and/or illustrations / Planches et/ou illustrations en couleur Bound with other material /		Includes supplementary materials / Comprend du matériel supplémentaire
	Relié avec d'autres documents Only edition available / Seule édition disponible Tight binding may cause shadows or distortion		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais,
]	along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.		lorsque cela était possible, ces pages n'ont pas été numérisées.

 $\checkmark$ 

Additional comments / Commentaires supplémentaires:

Continuous pagination.



A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE, CRITICISM AND NEWS.

Vol. XXIII.] TORONTO, JUNE, 1891. [No. 10.

# Original Communications.

# ON THE TREATMENT OF DIABETES.\*

BY A. J. JOHNSON, M.B., M.R.C.S.E., F.R.M.S., F.O.S. LOND.

Mr. President and Gentlemen,—The constant desire that must exist in the mind of every general practitioner to find some remedy or remedies for the cure of Diabetes Mellitus, has prompted me to bring before you the results that I have obtained with one or two comparatively new remedies. Not because I believe that any one of these remedies that I am about to speak of will prove curative in all cases, but because I think that one at least possesses advantages over those more commonly in use, in being perfectly harmless when pushed, and unirritating to any stomach.

Whether diabetes is the result of cold, as has been shown by Pieper of Greifswald, or of a certain condition existing in the liver, as is claimed by Zimmer, or from the production of too small an amount of carbonic acid in the tissues, or from any other cause, the symptoms as we all know are much the same, viz., loss of flesh with increased appetite, increased thirst, polyuria and glycosuria. And we all know further, that these symptoms are more or less relievable by the avoidance of all articles of diet which contain starch or sugar. As we might expect, if we exclude the carbohydrates, less sugar will be found in the urine, if only from the fact that the glycogenic function of the liver must be influenced by the composition of its blood supply.

The difficulty, however, of inducing patients to restrain themselves in these particulars, is one of the greatest difficulties experienced in the treatment of these cases, as, from the very nature of the symptoms, we see that we must ask our pa-

\* Read before the Ontario Med. Association, June, 1890.

tients to desist not only from partaking of those things for which they have a natural liking, but from those, the desire for which is greatly increased, by the very disease that we propose to treat. Therefore, if it is possible by any means to treat these cases without restricting their diet, we will have succeeded in overcoming one of the greatest difficulties that we have to contend with. Nor can any treatment be said to be very satisfactory, until we have succeeded in producing our best results by the exhibition of the remedy under the ordinary every-day circumstances, under which our patient exists. For otherwise there is little or no proof that that good obtained is not the result merely of the restricted diet, knowing as we do that in a great many cases this of itself is sufficient to produce the most beneficial change.

Now, speaking of diabetes generally, that is, without taking any note of the cause in any particular patient, the chief means which it is generally conceded we have at our disposal with which to control the disease are-diet and opium. The first cannot be continued for any length of time without producing such disgust in the mind of our patient, that it is eventually abandoned. The second, if continued long enough, must result in the acquirement of a habit which eventually drags our patient down to the miserable condition of a hopelessly confirmed opium eater, and at all times increases the probability of producing that most dangerous of all symptoms in this disease-diabetic coma; a condition which it has seemed to me may result from a combination of the acetone with urea, when that urea would, under other circumstances, have been found alone. It is easily seen, then, how great the value of a remedy for diabetes would be that had none of these objections.

The first remedy that I would particularly draw your attention to is the Rhus Aromatica. This is the common fragrant or sweet sumach, or "stink bush," which grows in this country and the United States, and must be well known to many of you. It is a shrub, about two to six feet. high, with a yellow flowering top, and grows on high rocky soil. The preparation that I have used is a fluid extract of the bark of the roots, made by Messrs. Parke, Davis & Co., of Detroit.

My attention was first drawn to this plant by reading an article on its uses, published by J. T. McClanahan, of Brownville, Mo., in 1879, in which he stated that his father and grandfather had been in the habit of using the bark for very many years as a remedy for diabetes, and in which he went on to detail the effects he himself had obtained. These were so encouraging, that I decided at once to give it a trial in a case that I was treating at that time that was giving me a good deal of anxiety. As it is in this case that I have had the best opportunity of studying what I take to be the effect of this remedy, it may be well here to give you a short sketch of it.

The subject of the disease was at that time a lady of sixty-one years of age, above the average height, stout in proportion, who for some time had been under some form of treatment without improvement. She had always lived well, and had been accustomed to eat and drink those very things which were most likely to increase the condition from which she suffered. Therefore, although there was a history of exposure to cold before the attack came on, still, from her general appearance, and from further study of the case, I made up my mind that the carbohydrates, instead of going to form fat, and contribute to force production, were now being excreted as glucosethat the glycosuria, in fact, was of the alimentary kind. She had constant and unquenchable thirst, was losing flesh at the rate of five pounds a week, although her appetite was particularly good, and she was passing an unusually large quantity of water even for a diabetic. The sugar excreted amounted to more than 1600 grains, or about  $3\frac{1}{4}$ ounces per day.

In this condition I put her upon the Rhus treatment, beginning on July 9th, 1883. She continued to lose flesh for a week or two after the treatment was begun, but very shortly, the thirst grew very much less, the excretion of sugar improved, the amount of water passed grew rapidly less, till it reached a little above normal. I tried to restrict her diet, but found it of little use; but I continued the treatment more or less, always with the same result however, viz. : whenever the treatment was discontinued the old symptoms reappeared; when it was again persisted in for a week or two, they as regularly improved. On her return from a visit to the salt water, she was much improved, so much so, that it was thought that she had quite recovered. But as the cooler weather came on about November she complained of drowsiness, with inability to sleep at night. Her conversation was rambling and disconnected, with a decided difficulty in pronouncing certain words. The medicine had been discontinued and the sugar had again appeared in the water, though the thirst and polyuria had not returned. These symptoms increased till she became almost comatose, in which condition she remained for about a month. She took fluid nourishment when it was given to her, at times partly waking, always with the idea that she was away from home, or with the remnant of some horrible dream firmly impressed upon her mind.

As, up to the time of the appearance of the coma, she had been taking a mixture of bromide of potash, chloral, and syrup of codeia, to obtain sleep at night, I attributed the character of the dreams to the use of these drugs. But these hallucinations and illusions continued for weeks after I ceased giving this mixture. Her convalescence from this attack seemed to date from a time when, after having given a full dose of hydrarg submur., I followed it for some days with saline purgatives. She now rapidly regained her former position of health and continued so during the summer. And when, in the following autumn, I saw again this cloudy condition of the intellect returning, I sent her off to the Bahamas, still continuing the same treatment. Her medical man at Nassau continued the treatment for some time, then left it off, and wrote me, saying that he thought her well. To all appearance she was so, but on her return here the following spring, she had a sharp attack of the pruritus vulvæ peculiar to diabetics, which however immediately disappeared on the use of Goulard's Extract. She was eating everything, but was not taking any beer or spirit. She continued very well for two years, until she got a severe chill while going up the Saguenay. On her return here many of the old symptoms were present, and she showed every sign of another attack of coma coming on. I again resorted to the Rhus with the salines, having first given a full dose of the submuriate. The attack completely passed off in ten days. From that time to the present she has had no return.

On May 10th of this year I examined the water with the following result:-Sp. gr. 1025. Picric acid test and Moore's test give negative results. Trommer's test first gave a negative result, but in another specimen showed a trace of deposit, though this had not the characteristics of sugar.

My patient now tells me that she is perfectly well, that she sleeps well, never being disturbed at night; that she has no pruritus, and has not had for a very long time; that she is up to or above her usual weight, and is able to walk as far and with as much ease as she could some years ago.

Another comparatively new drug in the treatment of diabetes mellitus is "Jumbul seed." The Jumbul is the Java Plum, and is common all over the East Indian peninsula. I find very little reported of the use of these seeds, and what there is is not very promising. In the British Medical Journal for 1887, one case is reported, and a few more in the London Lancet for the same year. In all these cases there seems to have been decrease of the amount of water passed. No case is reported as having been cured, but all were more or less relieved by the treatment. In all, however, except the first, the patients were put on a restricted diet.

In the only case that I know of in Toronto, in which this drug was used and persevered in for any length of time, it did not arrest the disease, nor was it found to produce any marked change in the symptoms. The quantity of sugar never materially lessened, nor did the amount of water decrease, though it is only right to say that polyuria never was a prominent symptom in this case at any time.

The treatment of diabetes by free phosphorus was suggested a year ago by Dr. Balmano Squire, of London, and bids fair to be of great value. 1 have recently had an opportunity of trying this drug, and the results are, so far, encouraging, but by no means as brilliant as those obtained by Dr. Squire. This may, however, have been due to the fact that I had to give the phosphorus in the form of granule, and it may not have been dissolved in the stomach. In Dr. Squire's case he gave  $\frac{1}{30}$  of a grain dissolved in olive oil, in a soft capsule, three times a day, and the quantity of sugar excreted fell in the first week, from 25 to 7 grains per ounce of the water passed. The case which I have at present under this treatment is in a man of 48 years of age, who first noticed symptoms of diabetes about a year ago. At that time he lost flesh rapidly, which, however, has been partly regained. On the 25th of April of this year, I found that he had constant thirst; was passing about 160 ounces of water in the 24 hours; that the water contained about 24 grains of sugar to the ounce, so that he passed in the neighborhood of 8 ounces of sugar per day.

On May 1st I began the use of the phosphorus, ordering  $\frac{1}{25}$  of a grain in pill three times a day. This was continued for three days, when the dose was doubled;  $\frac{2}{25}$  being taken after each meal. Then in four days 3, and in a day or two afterwards  $\frac{5}{25}$  or  $\frac{1}{5}$  of a grain of phosphorus was taken three times a day. After ten days, in looking over the daily record, I find, 1st, that the water is reduced to two quarts. 2nd. That there is some slight improvement in the thirst. 3rd. That he is still dull in the mornings but otherwise is very With regard to the quantity of sugar passed, well. on the whole it is less, but there has been no regular and continuous fall in its quantity. It varies very much on different days, falling once to 8 grains per 3j, and rising at another time to 34 grains, but the daily average was in the main reduced by at least 5 grains per ounce. For the next two weeks all the symptoms improved. The quantity of water was reduced to three pints in the 24 hours, though this might have been partly accounted for by the increasing heat of the weather. The quantity of sugar excreted was less, that is, the average per ounce was less, and this, taking into consideration the lessened amount of water passed, has reduced the daily weight of sugar to about one ounce.

The result so far, as I said before, is encouraging, as the patient has improved in all his symptoms, and the daily amount of sugar passed has, after one month's treatment, fallen from 8 ounces per day to about 1 ounce. At this stage I suspended all treatment for ten days. When I again saw my patient his symptoms were much as they had been when taking the phosphorus, but the sugar had increased, and showed an average of about 24 grains to the ounce-exactly the amount that existed before treatment was begun. As I had by this time secured the phosphorus "perles," as they are called, from Messrs. Parke, Davis & Co., who made them for me, I at once began to give them, again beginning with the smaller dose of  $\frac{1}{3}$  of a grain and gradually increasing it.

[To be continued.]

#### RUPTURED PERINEUM.\*

#### BY CHAS. M. SMITH, M. D., ORANGEVILLE, ONT.

The subject of my paper is one that may be considered hackneyed, but is, nevertheless, of vital importance, both to the patients so affected and to the general practitioner. It is from the standpoint of the latter that I introduce the matter, as it would be "carrying coals to Newcastle" were I to dilate on such a casuality before a meeting of specialists. I have come across practitioners of thirty years' standing who stoutly denied that they had ever had a case of lacerated perineum; but, gentlemen, we all know that there are none so blind as those who will not see.

I shall first give a brief synopsis of cases that have come under my observation, closing with a few remarks on the cause, prevention and treatment of the injury.

Case A.—Was an illustration of Capulet's aphorism, namely, "Too soon marred are those so early married." A primipara, aged 16, in labor 15 hours; liquor amnii escaped; livid arm protruding from the vulva, the latter as well as the perineum discolored and devoid of natural secretion, owing in a great measure to the prolonged efforts of the sagacious attendant (a rural sage femme) to deliver the focus by pulling on the arm. A tedious recovery followed the delivery, which was effected with great difficulty by podalic version; the subsequent sloughing laying bare the sphincter ani.

Three months afterwards, pared the surfaces by means of tissue forceps and scissors, brought them in apposition with silver wire sutures (six in all), three vaginal and three perineal, introducing the former from above downwards, the latter from below upwards, or in other words, those nearest the sphincter ani being introduced and tightened first when operating on the perineal surface. Union was perfect, although I was unable to see patient oftener than every alternate day. A daily evacuation of the bowels was secured by enemata, while the patient was allowed to micturate while on her knees in bed.

Attended same patient in next confinement: presentation vertex l.o.a., perineum remained intact. Case B.—A primipara, presentation vertex, 4th position. Attempted to rotate occiput anteriorly by aid of bipolar manipulation, but was forced to apply forceps, as the uterus, partly emptied of its contents, failed to respond by contracting.

Patient was in the left lateral position ; a sharp and sudden contraction took place, she drew her knees up to the body, whilst the nurse, instead of resisting this action, separated the thighs widely at the same moment. Suddenly the tissues gave way with an audible report, and the head escaped : a laceration took place involving the perineum, posterior wall of vagina, and perineal body. Primary operation with sutures of silk in the vagina and wire on the perineum failed, owing perhaps to constitutional causes, as she subsequently exhibited symptoms of infection by syphilis, the infant subsequently dying of syphilitic marasmus. Α secondary operation, six months afterwards, resulted in a partial success, affording the patient a degree of control over evacuations, which had formerly been almost involuntary if at all relaxed.

Case C.-Was also a primipara, who had loved "not wisely but too well," 33 years of age, and of masculine conformation. Liquor amnii escaped early, the perineum on my arrival was distended, hot and dry; head presented in fourth position. With considerable difficulty I delivered the child by aid of short forceps, and only by utmost care and attention to lubrication of genitals and the preservation of the extended position of thighs did I succeed in preventing a laceration exceeding one inch in extent. Four sutures of iron-dyed silk were at once introduced by the aid of ordinary full-curved needles, while an antiseptic injection of carbolized water (previously boiled) was ordered to be used three or four times daily. I removed sutures on seventh day, perfect union having taken place.

Case D.—A primipara was delivered by long forceps (Barnes' improved) in the dorsal position, thighs flexed and knees separated; the only abnormal condition present being the shortness of anteroposterior diameter of outlet and disproportionate breadth of ano-coccygeal perineum. A laceration occurred involving about half an inch of the vaginal and three-fourths of an inch of the perineal surface. A very profuse leucorrhœa prevented me from attempting the primary operation. I waited six weeks, and operated, using three catgut sutures

 $\mathbf{292}$ 

<sup>\*</sup> Read before the Ont. Medical Association, June 1, 1890.

and three silver wire sutures, the former lying within the vagina, the latter being secured by perforated shot, which lay close together on the perineal surface. This patient lived in town, and was under the care of a moderately well-qualified nurse, so that although affected with atony of bladder and requiring catheterization every eight hours, she progressed favorably to recovery. Bowels were kept regular by aid of pulv. glycyrrh. co. and enemata. The result was all that could be desired, although convalescence was retarded by hasty removal of patient to another room during great excitement caused by a fire in the building.

Case E.-Had a previous miscarriage at third month, and had reached term in second pregnancy. She resided ten miles from town; and when I arrived the liquor amnii had escaped, while the pains had been strong and frequent for a period of about seven hours. Occiput was almost directly in the hollow of the sacrum, and I barely succeeded after placing patient in genu-pectoral posture, in rotating head to first position. Patient was extremely nervous and unmanageable; the attendants fearful of chloroform, allowed her to inhale just sufficient to make her restless; the consequence of which was that with the final expulsive pain, until which all had gone well, she drew up the thighs, abducted them strongly and induced a slight tear of perineum. After delivery I introduced three sutures of ordinary linen thread, previously soaked in a sublimate solution; removed them the 6th day and found union complete. In this case also, bowels were kept relaxed and the urine evacuated while patient knelt over the vessel on the bed.

Case F.—A primipara, æt. 40, labor powerless, head presenting in fourth position. Short forceps were applied by consulting practitioner and direct efforts at traction used. I advised patience and at the same time suggested that the operator pay attention to the arc described by the handles at each pain. In the course of a few minutes, the head assumed the second position and delivery was effected. My attention was drawn to the laceration subsequently, and an operation was performed six weeks after delivery, two catgut sutures being used in the vagina, and two wire sutures being employed on the perineal surface.

Whether owing to imperfect asepticism of cat-

gut sutures or some other cause, considerable irritation was set up by them subsequently. A shallow pocket was left just within the introitus, and a slight tendency to rectocele still exists in this case.

Case G.-Resided at a distance of seven or eight miles from town, and was attended during a season when roads were almost impassable, owing to drifts, in consequence of which the subsequent watchfulness, which is so necessary especially when the patient is under the care of an unskilled nurse. could not be exercised in her behalf. She had been afflicted for two or three days prior to accouchment, with a severe diarrhœa, making it impossible to preserve even an appearance of asepticism during delivery. Pains had been severe during the passage of the head through the brim and into the cavity of the pelvis. Head presented in the l. o. p. or fifth position. Uterine contractions were very strong, and after making several efforts at rotation by aid of right or posterior blade of long forceps over left parietal bone of child as a fulcrum, with first and second fingers of right hand pressing right aspect of forehead in the opposite direction. I concluded to administer chloroform and try rotation with the short forceps. I withdrew the blade which I had been using as a vectis, and had hardly given the patient half a dozen whiffs when a violent and prolonged pain occurred, accompanied by retching, and suddenly before I could resume my position at the bedside, the head was expelled. On examination I found a complete laceration (involving sphincter ani) extending upwards in the septum about  $\frac{7}{5}$  of an inch. One or two hæmorrhoids were hanging in the rent while. the hæmorrhage and intestinal contents obscured all the parts involved.

I was unprepared for the emergency, and at all events the septic material, butting the wound would probably have prevented union.

After washing vagina and rectum out with a carbolated solution, I introduced two deep and two superficial sutures, tying them on the perineal surface. Nothing but a double cotton thread and ordinary sewing needle were available.

In company with a young surgeon, I visited the patient on the third day, and operated after the manner advised by Tait, turning one pair of flaps made by splitting into the rectum, the other into the vagina. Catgut sutures were used for the

rectal and vaginal co-aptation, silver wire for the perineal surface. I was careful to observe Emmet's procedure in reference to the posterior or circular suture, and here, I may add, that the corresponding cotton thread facilitated correct apposition, as I was thereby enabled to draw the tissues downwards and hold the surfaces exactly, while carrying the wire from left to right. Ι secured the wires by perforated shot and clamping. By way of digression affording an instance of one of the comical sides of our noble profession, I will mention that during the time that was occupied in operating, we were regaled by the "old man" swearing at "Andrew Jeremiah," the husband of the patient, whilst the son was with equal profanity objecting to the presence of the boyish surgeon in a room with his "Mary Jane"; insisting also on leaving his bed, where he was forced to lie owing to a fractured thigh, in order to see that "that kid of a doctor," should not see too much.

In this particular case I locked up the bowels by opium, ordering appropriate diet. On the day appointed for removing the sutures the roads were impassable, and in order to do something a neighbor insisted that the patient should take a dose of that "sarchin" remedy which they are all so fond of prescribing, namely, "castorile."

When I succeeded in visiting the patient I removed all the wires expecting to find a total failure, however, fortunately the posterior wires had procured a partial union. I believe that had I been able to secure a careful evacuation of the rectum by an enema, the result in this desperate case would have been a tolerable success.

The last case was in the person of a primipara who had formerly been under the care of our worthy President for uterine hæmorrhage.

In this lady the ostium vaginæ was preternaturally small and rigid, the ano-vaginal portion little more than three-quarters of an inch in extent.

Although presentation and position were normal, the acuteness of the pubic angle caused delay and called for great caution in delivery.

I exposed the parts to view, and as the application of the forceps had been rendered necessary by the exhaustion of the patient and increasing feebleness of expulsive efforts, I kept the patient's thighs as near as possible in a line with her body; directing the femal@assistant to press the gluteal and coccygeal regions inwards and downwards respectively towards the median line. I consider that by these means a severe laceration was averted, as the tear which took place slowly under my eyes, only required one silk and three wire sutures in order to restore their normal condition. On this occasion, not having any shot, I slipped a piece of rubber tubing over the twisted ends, leaving one longer than the rest to be bent back on the outside of the rubber.

The bowels were kept regular by enemata, pulv. glycyrrh. co. and the avoidance of bulky or constipating food. No trouble has been experienced by patient since operation or removal of sutures, which latter took place on the ninth day.

*Remarks.*—While it may be deemed presumption on my part to draw any conclusions from such a meagre number of cases, still if I may but succeed in eliciting some ideas and suggestions in this matter from this large, influential, intelligent, and representative body (as the stump speaker putteth it), which would prevent even that number of cases occurring in a practice of 20 years, my article will not have been barren of result. I shall close my paper, Mr. President and gentlemen, by referring briefly to some points relative to the cause, prevention, and treatment of this accident.

I do not propose to dilate on the importance of an unbroken pelvic floor, made up as it is of connective muscular, fibrous and vascular tissues; nor do I intend to enlarge on that "disputed territory," the perineal body, which has by some been credited with forming the whole and sole support of the uterus and its adnexa; but at the same time let me impress on my younger confrèers the importance of preserving these intact, if possible; and, moreover, the vital necessity of bringing something more than mere perineal and vaginal surfaces of these lacerations into apposition.

Amongst the most important factors in the production of ruptured perineum at childbirth are: advanced age of primiparæ, acuteness of pubic angle, unusual height of pubic symphisis, occipitoposterior positions, great breadth or fætal shoulders, incompressibility or fætal head, undue haste in delivery, abuse of ergot, over-abduction of thighs with simultaneous flexion, dorsal positions of mother, prolonged pressure from faulty presentations or positions of fætus, and on the other hand, premature interference by accoucheur before the normal relaxation and stretching of maternal parts has been completed.

When an occipito-posterior position is recognized, endeavor as early as possible to convert it into first or second position. The posterior wall of the pelvic canal should be prolonged by having the nurse exercise downward and inward pressure over the sacral and gluteal region.

The patient should have rectum and bladder emptied when time and circumstances permit.

The cutaneous surface of the perineum, and even the vaginal wall and posterior commissure, should be freely anointed. I prefer salicylated lard or lanoline to vaseline in such cases. Patient's thighs should be only slightly flexed and abducted to only such a degree as to allow the physician's hand and arm between them.

Unless the vulvæ are seen to be distended by the shanks of the forceps do not remove them, but carefully restrain, by their aid, the expulsive efforts as the vertex is escaping.

I may say under this head that when I have reason to fear laceration, I invariably give chloroform, if uterine contractions are normally powerful and no contra-indications to the anæsthetic exist.

I prefer the sinistro-lateral posture as to the patient, who should in these cases have the parts exposed to the operator's eye, for I feel certain that by such precaution I have prevented an unavoidable laceration (and the large majority of lacerations are such) from becoming complete.

You will observe that I have varied the mode of operating, and that sutures used have not been confined to one particular class.

I think catgut preferable for vaginal and rectal surfaces, but very much prefer the silver for the perineal sutures. In primary operation, of necessity, "Hobson's choice" prevails. I have been very well satisfied with sterilized silk in such cases. There are instances in which the laceration is slight or superficial when the suture is already at hand in the form of the natural public capillary growth.

In primary operations, should wire be at hand, along with perforated shot, it is advisable to slip three or four upon the extremities of each suture, so that as swelling subsides those shot unclamped, namely, all but the external one may be crowded closer to the retracting edges of the wound, and the outside shot clamped again, while the one originally acting as a retentive can be cut off.

You will also notice that I have varied my practice as to the condition of bowels according to circumstances.

Where circumstances permit the use of the catheter at regular intervals it would be preferable, in my opinion, to the use of the self-retaining catheter. In my limited experience I can not say that I have ever seen any ill effect follow the contact of normal urine with the wound.

I must, in conclusion, say that the operation of flap-splitting is much easier performed than that of paring, as it is very difficult to remove the glazed surface from one border of the wound to the other entire; a proceeding which is very desirable.

## Reports of Societies.

#### GYNÆCOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

#### MARCH MEETING.

The President, Dr. Henry M. Wilson, in the chair.

Dr. Howard A. Kelly read a paper upon "The Technique of the Cæsarean Section," described in a series of steps, from the selection of the case, down to the after-treatment. The relative and absolute indication were described. The Porro operation was rejected, excepting under special peculiar circumstances; for example, when there was good reason to suspect septic infection, as after prolonged efforts at delivery, at turning, or the use of the forceps, also in cases of large tumors occupying the body of the uterus, or in some cases of cancer, or in uncontrollable hæmorrhage from the placental site. Thus limited, the conservative operation and the Porro operation are mutually exclusive, not occupying the same field.

It is a serious surgical error to mutilate a woman by performing the Porro operation where special indications do not exist. The mortality of the Porro operation is fully as great and probably greater than that of the conservative.

In a healthy case, free from sepsis, with unruptured membranes, it is not necessary to deliver the uterus from the abdomen before incising it

'91.]

and delivering the child. It is rarely necessary to use any contricting ligature around the cervical end of the uterus. Excessive hæmorrhage from the placental site or the margin of the wound can very well be temporarily controlled by constricting the cervix with the hands of an assistant.

The uterine suture consists of deep sutures, embracing the peritoneum and muscularis, but not the decidua. About ten such sutures are needed. Between each of these deep sutures, half deep sutures can be passed, securing perfect coaptation of the peritoneal surfaces. The sero-serus sutures are not necessary in cases free from any suspicion of infection. In such clean cases, the uterus is dropped back into the abdomen and covered with the omentum. If there exists a slight suspicion, it is of advantage to draw the omentum down behind the uterus, thus favoring the discharge of any septic material through the lower angle of the wound.

Drainage of the pelvic cavity cannot be efficiently carried out. The abdominal wound must be concealed by a dressing made of snowy cotton dissolved in alcohol and ether, containing one part bichloride to 16,000. A little strip of gauze is laid over the wound saturated with this solution. This adheres until it is time to take the sutures out, concealing the wound, and preventing contamination from the outside much better than many layers of gauze and cotton. The baby should be allowed to nurse as soon as the mother has thoroughly recovered from the anæsthetic.

The vagina should not be douched out as a matter of routine. The vaginal outlet should be secured from the introduction of sepsis from without by separating the labia and throwing into the valvular orifice a drachm of powdered iodoform and boric acid (1 to 7). A cotton pad loosely applied to the vulva should be changed as often as soiled by the discharges. The patient thus passes through a perfectly normal puerperium.

Dr. Chas. P. Noble.—In the technique of the operation laid down by Dr. Kelly, reference has been made to typical cases. In such cases I agree entirely with what he has said. But all cases are not typical. I will report an unique case upon which I did the Cæsarean section recently.

Dr. Kelly had operated in a previous pregnancy. As a result of the first operation there remained a fistula, opening from the uterine cavity through the abdominal walf. Notwithstanding this fistula she became pregnant, and for several weeks the amniotic bag protruded into the opening, so that there was nothing between the foctus and the outer world but the thin amniotic sac.

This sac ruptured at the thirty-third week. The woman had a generally contracted pelvis; besides having a large mass of cicatrical tissue behind the cervix, left from her previous Cæsarean labor. Had spontaneous labor been possible, the fœtus would have escaped through the fistula and not per vaginam. In view of the conditions I thought Cæsarean section preferable to delivering the mutilated fœtus per vias naturales.

The finger was inserted into the uterus through the fistula, and with this as a guide the incision was made through the region of utero-abdominal fistula.

Sufficient room not being afforded for delivery the peritoneal cavity was opened and the uterine incision lengthened. The living fœtus was then delivered. The placenta and membranes were firmly adherent, and were slowly peeled off. To control bleeding during this time it was necessary to insert the uterus through the abdominal incision to enable the assistant to grasp the lower segment. The patient passed through a perfectly normal puerperium and is now quite well and soundly healed. The case is entirely unique in its conditiors, and in the technique of the operation.

Three cases of Cæsarean section have been observed by me, all having made good recoveries. When the operation is done at the proper time, and after the method described by Dr. Kelly, I am sure this result will be quite uniform.

The essentials of success are:

1. Operation at the proper time, before labor, or at the beginning of labor

2. Rapidity in operating.

3. Accurate suturing.

4. Asepsis.

With reference to suturing, I believe that the Lembert suture as ordinarily described, is purely theoretical. The peritoneum will not hold a sutur.e Operators have unconsciously included the deeper tisues in the so-called Lembert sutures. An important point, not generally recognized in this country, is, that the diagnosis should be made in the last weeks of pregnancy, and under ordinary circumstances, the operation to be decided upon and done at the close of pregnancy, before labor sets in, or immediately thereafter. I would not do the modern Cæsarean section in a case which had been tampered with by efforts to deliver with the forceps or by version; but in such cases would prefer the operation. In Philadelphia, in the last four years, twelve Cæsarean sections have been done, and ten mothers have recovered. One that died had pneumonia at the time of the operation. The other case was one in which the surgeon at the same time removed a fibroid tumo r.

Dr. B. B. Browne.-I think all the procedu res

recommended are in the main correct, and are in accordance with the rules and suggestions laid down five or six years ago by Garrigures, Saenger and Leopold ; these should be carried out in ideal cases, but unfortunately, we meet with many, complications which must be dealt with as they occur.

Having recently performed the operation myself, and looked up the literature and technique of the subject, I was surprised to find that we can to-day make but little improvement or change for the better.

In 1886, Saenger had operated four times, saving all the women and children. Dr. Leopold had operated nine times and lost one woman, saving all the children.

Dr. T. A. Ashby.—I wish to congratulate Dr. Kelly on his brilliant success with the Cæsarean section. This success is convincing proof of what can be done when the section is instituted under proper conditions, and at a proper time.

The future of the operation rests upon a proper and judicious selection of the case, and upon an immediate resort to the section before other methods of delivery has been attempted and abandoned. I doubt whether the Cæsarean section under such conditions, will give a higher mortality than the ovariotomy of ten or fifteen years ago.

The technique of the section is simple enough, and certainly its mechanical execution is not as difficult as that necessitated in the removal of many conditions of tubal and ovarian disease.

Hæmorrhage is not large, and it is easily controlled. Septic processes should not follow if strict aseptic precautions are observed.

The progress of the section as a substitute for other methods of delivery, rests upon an early and clear recognition of the pelvic measurements, and a prompt acceptance of the method as the proper procedure in the given case. When this is done the success of the section is not compromised by unfortunate interferences in other directions. When we have obtained the statistics of this class of cases, we are in a position to compare the mortality of the section with other operative methods.

Dr. W. P. Chunn.—I did not hear the first part of the history of the case, but think I would have removed the ovaries or tied the Fallopian tubes to prevent future conception. It is hard to say just what operation should be done.

Dr. Noble.—In doing a Cæsarean section, I would not touch the ovaries and tubes as Dr. Chunn speaks of doing, but would do nothing to prolong the operation. Tying the tubes would probably cause salpingitis. This objection is purely theoretical. So far as I know, this has been done only twice—once in England, and once in America.

Dr. Brinton.—I have been for some years interested in measuring the pelves of women. Very

2

often we go to labor cases without knowing anything about the condition of the pelvis. With the hospital surgeon who has the best facilities, the Cæsarean operation will undoubtedly be the best in cases of extreme pelvic contraction. But with the average practitioner, what is best ? I think that with these physicians craniotomy will hold the place. In speaking of craniotomy "holding its place," I referred to those cases of pelvic contraction where the child could be extracted without harm to the mother, say from  $1\frac{3}{4}$  to 3 inches.

Dr. T. A. Ashby.—I must offer an apology for presenting a series of experiences which are familiar to all who have done much intra-abdominal work. I have brought these charred remnants of tubal and ovarian inflammation before the Society to invite discussion, not to exhibit anything original. They represent nearly every phase of intra-pelvic inflammation and illustrate the various degenerative conditions which are found in the pelvis after an inflammatory fire has passed over these tissues. Of the nine specimens here presented, removed from the same number of cases, no two are alike.

In one case the tube has received the brunt of the attack, in another the ovary is involved in abscess cavities, whilst in a third both tube and ovary are tied up in a knot by adhesive inflammation, and so on through the series.

The clinical histories of these cases would be exceedingly interesting did time admit of a recital. but I shall not tax your patience with details. We have the same old story in all of these cases save two-one the large specimen of a tubal sac of uncertain origin, probably an interrupted tubal pregnancy of long standing, and the other the remnants of a catarrhal salpingitis and ovaritis with intra-pelvic adhesions. Of the other seven specimens the origin of the condition is of chief interest in this connection, since they explain to my mind the essential factor in the production of the specimen here presented. Each of these women have borne one or more children; in each case the history of the intra-pelvic trouble dates from the last lying-in period, which was accompanied with mild or severe symptoms of child-bed In each of these women there was an old fever. lacerated cervix, in some more pronounced than in The histories of these cases, as far as they others. can be made out, and can be interpreted, tell the simple story. During labor a cervical tear occurred, in this wound septic material gained a lodgement, a septic process was established, which extended from the cervix to the cavity, from the cavity to the tubes, and from the tubes to the intra-pelvic peritoneum.

The severity of the symptoms in each case must have borne some relation to the septic process and to the tissues involved, though no way is offered for verifying this statement. We simply find the results in general destruction of the tube, or ovary,

'91.]

or of both, and the inference is that drainage was secured and pus escaped, leaving no remnants of this character behind, except in two of the specimens, in which I found pus cavities in the ovary containing each a drachm or more of pus.

These cases illustrate the fearful havoc which a septic process following parturition may occasion among the pelvic organs. A little fire kindleth a mighty conflagration, is literally true in more respects than one. In an experience with other cases I have observed the septic process in its very beginning when limited to the cervix and cavity, and I have seen the lying in woman's temperature fall from 103° to normal within twelve hours after thorough cleansing and disinfection of the cervix and cavity in these cases, and a complete arrest of the process before the tubes were involved. In another case I have seen tubal and general pelvicperitonitis in active force following immediately the infection in the cervix and cavity. This experience convinces me, despite all other theoretical teachings, that we have in the lying-in state an explanation of those intra-pelvic diseases which render the lives of so many women useless and oftentimes utterly miserable. Now is it necessary that the lying-in period should be surrounded with extra hazard, high temperature, and severe pain? A septic endomitritis following parturition may run a very mild and low grade course, and still result in sub involution, salpingitis, pelvic adhesions, and other intro-pelvic conditions which impair the normal function of these organs.

The lesson clearly taught by such experience is that aseptic conditions should be enforced in every case of labor, that the least suspicion of sepsis should lead to immediate investigation of the uterine cervix and cavity with a view to thorough cleansing and arrest of the septic process. If this be done, as I have done it in a number of cases, even with medical friends in consultation, we can cut short a sepsis and arrest a condition which will surely extend to the tubes and pelvic peritoneum in the absence of prompt attention.

Dr. B. B. Browne.—The fact that laceration of the cervix is so frequently found in married women suffering from tubal disease is, I think, because because the purilent discharge from the uterus passing over the torn surfaces prevents their union, while the septic material also extends to the tubes ; when there is no septic material in the uterus the lacerated surfaces readily unite, and the tubes are not affected.

Dr. J. W. Williams.—The specimens exhibited represent a class of cases, that are very common, and which will become more so as we become more expert in bimanual examination Indeed to a skilful palpator, it almost seems that the majority of women examined have more or less tubal or ovarian diseases. The specimens are particularly interesting to me because I have studied carefully

the pathology of a large number of similar cases. The etiology in many cases is doubtful, but most observers appear to cling to Noegerrath's theory of latent gonorrhea. Examination of the pus in cases of pyosalpingx brings forward most interesting facts. For in most cases it is impossible to discover any species of bacteria either under the microscope or by culture methods, which shows that the bacteria which caused the trouble have long since died, for closed pus cavities are not particularly favorable for the growth of organisms. In two cases we found undoubted gonococci, and in a case following an imperfect abortion, the streptococcus and in another case the staphylococcus aureus.

Clinically, the cases due to the pus organisms are much more acute and virulent than those due to the gonococcus. These results correspond with those of Zweifel of Leipzig, who has just published his observations. He also found the gono- and streptococcus, but not the staphylococcus. In one of his streptococcus cases, the subject was an undoubted virgin, and he accounted for the infection by an abscess following an attack of typhoid fever some years before.

Dr. Ashby speaks of the relation of lacerated cervix to salpingitis, etc. I cannot consider it a factor in the production of the disease, and regard it merely as a coincidence. If it were a potent factor in producing the trouble, we should find salpingitis and pelvic adhesions far more frequently than we do now; for we must remember that in most women there is more or less laceration of the cervix during labor.

Moreover, this cause is certainly inapplicable to the frequent cases occuring in nulliparous women, and especially in virgins.

A close study of the clinical history of a number of cases inclines me to believe that the majority of cases follow infection during labor or after an incomplete abortion; for in many cases it is impossible to obtain even a history of leucorrhœa before the labor, which would apparently exclude gonorrhœal infection.

By infection during childbirth, I do not necessarily mean the cases in which we have wellmarked puerperal fever, but the milder degrees of infection as well; for most of the cases of so-called milk fever are due to infection, and may give rise to serious results.

Zweifel, on the contrary, who has just published a remarkable series of 79 salpingo-oöphorectomies, with only one death, believes in the gonorrhœal origin of most cases. Saenger traces most of the cases in virgins back to a gonorrhœal salpingitis during childhood, which has persisted and ultimately affected the Fallopian tubes. While I do not feel justified in subscribing to this view, I can say that it is quite probable, for lately I have seen a number of cases of undoubted gonorrhœa in little girls, of from two to seven years of age, in which there was no suspicion of criminal action.

In eight cases of vaginitis in little girls which I have examined, I found gonococci in six of them. In several, the mode of infection was quite clear. In one case the husband acknowledged an attack of gonorrhœa with which he infected his wife during pregnancy, and each of the children born after it had opthalmia neonatorum, followed, when they were older, by gonorrhœal vaginitis. In another case an older brother had gonorrhœa, and his two little sisters used his towels for bathing.

These remarks will show that the vaginitis of little children is not of strumous origin, as generally supposed, and that it demands a more active treatment than is generally employed; especially when we consider its possible consequences.

Dr. Brinton.—I can corroborate the views of Dr. Williams in regard to the specific origin of the cases of vaginitis in children, having recently treated first, the father with gonorrhœa, later, the mother, and within a fortnight from the time the father consulted me, was called to see the little daughter, aged four, with a severe "vaginitis," which yielded to the usual treatment in about the usual time. My experience has been that if a child is found with a "vaginitis," close investigation will prove that some older member of the family has either a "urethral" or "vaginal" discharge.

Dr. Noble.—Dr. Ashby has brought up so many points, that it is difficult to know just what to take up.

It is now the fashion to call all unilateral collections of blood extra-uterine pregnancies. But I have recently had a case that proved not to be a pregnancy. With reference to the uterine hæmorrhage coming from the tubes, we do know as a fact that it is possible for blood to come from the tubes. This was common to all in the days when the stump was treated by the extra-peritoneal method in doing ovariotomy. I am quite sure that gonorrhœa has been the cause of most of the cases of pyosalpinx that I have seen, and I think that the cause of salpingitis in young women is often some simple infection. Many cases of dysmenorrhœa in young women are due to salpingitis. In such cases it is unnecessary to question their chastity. I agree with all the speakers in reference to the relation of lacerated cervix to salpingitis. Where there is a laceration there is frequently an endometritis, and there is no reason to think that it may not follow out into the tube. I believe firmly in the great value of drainage tube; and use it in almost every case. When properly cared for it is practically free from objection, while being of most positive advantage in allowing the escape of serum and blood.

Dr. H. P. C. Wilson.—I did an exploratory laparotomy for a fibro-cystic tumor. In manipulation

I found great tendency to bleeding, and as I could not get at the ovaries nor remove the tumor without causing death, I closed the abdomen. She got on well for 14 hours when she became very feeble, heart and respiration very weak. She was put upon digitalis and muriate of quinine; but it did no good. The heart became so weak that the pulse could not be felt; then began with five minins of tincture of strophanthus every three hours, and ether  $\mathfrak{M}$  xx. hypodermically every three hours ; the pulse became stronger, 125 to the minute and she felt better. The next day she became unconscious, pupils dilated, face flushed, pulse 120, temperature normal. The medicine was withdrawn, but she remained in this condition about 24 hours. To-day she is better, consciousness returning, pupils contracting. I have had no experience with the poisonous effects of strophanthus.

#### Correspondence.

# MEDICAL EDUCATION IN ONTARIO.

[The official communication of Trinity Medical College recently sent in to the Government re fers to a subject of great interest to the profession generally. There is a very important principle involved in this document and one with which the educational interests of medicine, and to no small extent those of Arts as well, in Ontario are very closely associated.—ED.]

> HOLYROOD VILLA, 52 Maitland St. May. 13th, 1891.

TO THE HON. O. MOWAT, L.L.D.,

# Attorney-General Ontario, Etc.

DEAR SIR,—My attention has been drawn to the subjoined resolution of the Senate of the University of Toronto, which appeared in the *Globe* of the 11th inst., and in the other newspapers. "On motion of Dr. Caven, seconded by Sir Daniel Wilson, a deputation was appointed, consisting of the Chancellor, Vice-Chancellor, President, Drs. Shearaton, Burwash, Mr. Moss, Father Teefy, Dr. O'Sullivan, Prof. Loudon, Dr. W. T. Aikins, Dr. Wright and the mover, to urge upon the Government the propriety of constituting Anatomy, Pathology, and Sanitary Science, a part of the work of the University, and to assist the University in providing the requisite means."

Trinity Medical College, over which I have the honor to preside, is an Independent Chartered THE CANADA LANCET.

[JUNE,

Medical College, in affiliation with the University of Toronto, and with other Universities, and on behalf of our College, I most respectfully, but in the strongest possible manner, protest against action being taken by the Government, in the direction indicated by the above resolution. Before any such action could be fairly taken, that is, taken with due consideration for the interests, not only of Trinity Medical College, but of all the other Independent Medical Colleges in the province, It is submitted, that the Legislature should be called upon to decide, whether Medical Education in Ontario, in whole or in part, is or is not, to be carried on hereafter, at the public expense. If it be decided by that body, that the supply of good medical men now being educated in our various colleges, and whose attainments are afterwards thor ughly tested by excellent examinations of the Medical Council, is inadequate to meet the requirements of our people, and that public aid is called for, in order to increase the supply, I beg to submit, that this aid should not be given to any one Medical Faculty, out of the six actively engaged in medical education, but that it should be distributed to ALL in absolutely fair proportions, regulated by the attendance of the students at the respective colleges. If on the other hand, the supply of well educated medical men so long furnished entirely free of cost to the public, is found to be quite sufficient, I ask, that the course hitherto pursued be still continued, and that, not only no other chairs in any ONE medical college be subsidized directly or indirectly, but that all existing subsidies which are felt to be as unjust as they are indefensible, in any single Medical Faculty, be entirely done away with, so as in accordance with British practice, and with our own, for many years, we may have every Medical College in the Province, occupy precisely the same position in reference to public aid of any sort or kind. Apart from the manifest injustice, which acceding to the request contained in the foregoing resolution would inflict upon all our other Medical Colleges, it is submitted, that the using of University Public Funds for any other purpose than the promotion of general, as opposed to professional education would, just to the extent of the amount so mis-used, cripple the University in Arts, where she should be strongest, and where all the money she can get, is imperatively required.

I have the honor to be,

Yours most respectfully, WALTER B. GEIKIE, Dean Trinity Medical College.

# Selected Articles.

#### NEURASTHENIA.

The Post-Graduate for January, 1891, contains Dr. Charles L. Dana's recent paper on neurasthenia, which is defined as a morbid condition of the nervous system, presenting excessive irritability and weakness as underlying characteristics. The modifying elements are age, sex, and the neuropathic constitution. Neurasthenics suffer from a peculiar feeling of nervousness, discomfort, unrest, or a sense of tension. Interest in work is lost, there is dread of responsibility, and various morbid fears. Some idea fixes itself upon the mind, and the patient cannot rid himself of it. Sleep is poor, and the neurasthenic awakes unrefreshed. There is difficulty in fixing the mind upon work. About half the cases suffer from headache-diffuse, frontal or occipital. There is always some weakness and irritability of eyesight. The visual field is normal, but sensation in its periphery tires easily, so that after long testing there is apparently a concentric limitation of the field. The color sense is unaffected. Muscular insufficiencies often occur. Visual memories are lessened. Faces and places are not well remembered. Neurasthenics bear visual irritation badly. Hypermetropia or astigmatism may keep up neurasthenia, but will not in themselves cause it. Attention to the eyes alone, as a means of cure, is irrational and disappointing.

Noise creates great distress. This is usually due to the general mental irritability. Sometimes there is distinct hyperacousia, and slight noises or agreeable music drive the patient nearly wild. Alterations in taste occur with digestive complications. There is a general over-sensitiveness to odors. General muscular strength is lessened, the patient tiring, or even collapsing, after slight exertion. There may be fine tremor of the hands after muscular or mental effort. Palpitation of the heart occurs easily. The pulse has frequent and rapid variations in tension. In both sexes there are genital irregularities. The digestive organs, including the metabolic tissues of the liver, are almost always at fault. Gastric symptoms of neurasthenia are those resulting from the action of ordinary or somewhat impaired digestive processes upon overirritable gastric nerves, or upon a generally overirritable and weak nervous system. A neurasthenic liver is one of the most common and fundamental conditions of the neurasthenic state. This produces intestinal dyspepsia, fermentation and constipation. The blood absorbs an excess of ptomaines and imperfectly oxidized products. Hence paræsthesia, somnolence, and head pressure. The urine in the young neuropathic cases is variable in specific gravity, generally low. Phosphates, earthy

and alkiline, are excreted in excess. Nitrogeneous solids are often inadequate in amount. Oxalates are found in older cases, but indicate no more than does excess of urates-i.e., a lithæmic state. The amount of urine passed is variable. Sometimes there is polyuria, but, on the whole, the total amount is variable. Respirations are normal in number, but shallow, and deficient respiratory expansion may be noted. Younger patients and women are generally anæmic, but middle-aged adults are not, the face being full and ruddy, and the mucous membrane of good color.

When neurasthenia begins before the age of twenty-five, there is more distinct evidence of neuropathic constitution and inheritance. Mental symptoms are more marked, approaching those of hypochondriasis, and there is greater depression and greater incrospection. Neurasthenia of the climacteric, in both men and women, is of comparatively short duration and favorable in its course. Neurasthenia in women shows itself by a greater dominance of sensory and irritative symp-There is more pain, headache, neuralgia, toms. and spinal ache, and a greater subjective sensation of "nervousness," more restlessness and irritability. There is greater variability in the rise and fall of symptoms. The neurasthenic women under excitement does all that a healthy woman can, then collapses entirely. Women of strong purpose will be thus alternately sick and helpless, or bright, active, and cheerful. Those of weak will, aided by the mistaken ministrations of sympathetic friends, get in bed and stay there, drifting into permanent invalidism, because overcome by the pain and weariness that active movement excites. Hysteria often complicates these cases. "Crises" of palpitation occur, of vomiting, tympanites, diarrhæa, pulmonary oppression, syncope, and emotional excitement. Nutrition suffers more than in men, the disorder is of a severer form, and the patient emaciates. Symptoms are slightly exaggerated at the time of menstruation. Rarely, if ever, beginning before eighteen or after fifty, neurasthenia occurs in the following order as regards age : First, between eighteen and thirty ; then between thirty and forty; and less frequently between forty and fifty. Exciting causes are excessive mental strain, sudden shocks, injuries, frights, sunstroke, excessive child-bearing, domestic troubles, sexual excesses, especially masturbation, irregularities and excess in eating, drinking, and smoking. Overwork does not cause it, provided there is no great mental worry. Even these can be borne if the patient is regular in eating and sleeping, and does not drink or smoke too much. Reckless indulgence in athletics during youth, particularly if combined with the over use of tobacco, may be a cause. In some cases it follows apparently some single powerful physical exertion. Malarial poisoning, syphilis, the infective fevers, particularly cerebrospinal meningitis, are important agents in causing neurasthenia. Of reflex influences that cause and keep it up, disturbances of the stomach, intestines, and liver are by all odds the most important; next come irritations from the pelvic and generative organs.

Neurasthenia is a condition in which the nutrition of the nerve-cells is primarily at fault. These cells have lost their power of building themselves up into stabler compounds. They break down under slight irritation, and consequently send out but feeble impulses. It is thought by some that this dystrophic condition especially involves those parts which make up the vaso-motor neuro-mechan-If this be so, it is the nervous tissue of the ism. medulla and central parts of the spinal grey matter that are most involved, There is little doubt. however, that the cortical grey matter and higher centres of the brain are also implicated, for mental symptoms are always prominent. Peripheral nerves are not primarily at fault. Cerebral and spinal hyperæmiæ are secondary to nervous disturbance. Neurasthenia is primarily cellular and secondarily vascular.

The duration of the disease is from one to ten years, depending largely upon treatment and habits of life Most patients get well, or practically well. with some reminders that they cannot overtax themselves or do the work of those of strong The late years are the best, owing to nerves. lessened nervous sensibility and early, orderly, and Neurasthenics, if they get temperate living. well, get old. With care, neurasthenia may readily be differentiated from simple nervousness, degenerative forms of insanity, such as folie du aoute, from hypochondriasis, from melancholia, hysteria, and The patient should have his spinal irritation. course of treatment laid out for him. Rest. or lessening of business or domestic duties is fundamental. While travelling is bad, a sojourn at such places as the Azores, West Indies, Bermuda, or some special point in Southern Europe where outdoor life is possible, is of benefit. Diet should be rather nitrogeneous than otherwise. Fats, green vegetables and fruits may be added. Sugars and starches are to be avoided, though malt preparations usually agree. Nutrition must be carefully watched, the patient must be weighed and sometimes fattened, using water, malt, oil and cream for this purpose. In many cases a low diet, but one perfectly digestible, is indicated. Cold spongebaths, the shower, a strong jet of cold water on the back, a cold plunge, or the wet pack, are measures almost invariably indicated. Lukewarm baths, 95° F. to 98° F., for half an hour at night, relieve the paræthesiæ and insomnia. The skin should have a thorough rubbing every day. Interesting respiratory exercises that expand the lungs should be encouraged. Drugs that are most useful are the bromides, nux vomica, mineral acids, quinine, valerian, the hypnotics, and saline and alkaline laxatives. Bromide of sodium or potassium should be given in doses of fifteen or twenty grains, three times daily, for only a week, and then gradually reduced to one-half dose, once daily; quinine should be given carefully, as it may increase the nervousness. In neurasthenic women with painful backs or hysterical complications, too much cannot be said for electricity, which should be given three or four times weekly, and then suspended. General and spinal galvanization and the static sparks are the especially efficient forms.—Med. Rec.

#### ALBUMINURIA.

The question of the significance of albuminuria must still be regarded as, to a certain extent, sub judice. Professor Senator, in the second edition of his work upon albuminuria, has recently reiterated his views that albumen in the urine is, in a certain considerable proportion of cases, physiological in character; while in France the opposite view has been vigorously maintained by Dr. Le-corché and Dr. Telamon. This is one of the cases in which it is particularly desirable to use terms regarding which there can be no ambiguity. If we speak of albuminuria as being "physiological," we should naturally be presumed to mean that the presence of albumen in the urine is a normal occurrence. But we do not apprehend that this is asserted by any competent authority. The most that has been urged on this side of the controversy is that in a considerable proportion of persons, varying from 20 to 25 per 100, apparently in perfect health, albumen may be found in the urine. if sufficiently exact tests be applied. We fail to see how a phenomenon only to be found at the most liberal estimate in one person out of four or five can be correctly designated as "physiological." On the other hand, if we employ the term "functional albuminuria," we merely imply that albumen may be present in the urine without such organic changes in the kidney as can be detected. and this position is now, we conceive, almost universally admitted. The real point at issue-and the controversy, so far from being a verbal one, is really of the most vital pathological interest and importance-is whether the renal epithelium, when structurally sound and functionally efficient, ever allows the transmission of albumen. Two examples will render the real point at issue more readily apprehensible. It is admitted that minute quantities of sugar can be found in the urine without pathological significance. The question is whether "functional" albuminuria is to be placed in the same category as this, or whether it is rather analogous to those changes in the gastric secretions which accompany some forms of dyspepsia,

but which pass off without structural change in the stomach or obvious impairment of health.

Senator believes that the aqueous constituents of the urine are the result of filtration and not of secretion. He attributes to the endothelial cells of the glomeruli a physical rather than a physiological function, and compares their action to that of the endothelium of serous membranes, which, under the influence of the blood pressure, permit the transudation of serum containing a certain proportion of albumen. To this contention Lecorché and Telamon reply that if the urine is a simple transudation we should expect to find it, like the serous effusions, uniformly and obviously albuminous. They share the view of Heidenhain that the glomerular epithelium exercises a selective action and opposes the transudation of albumen. If this be admitted to be its function, it would obviously follow that albuminuria can never be a normal phenomenon. Senator recurs to the analogy of sugar in the urine, and argues that, just as more exact methods of examination have shown the presence of sugar where it was not previously suspected, and in persons in good health, so the same methods show the presence of albumen under similar circumstances; and that, if we regard all albuminuric patients as potential subjects of Bright's disease, so ought we to regard all glycosuric patients as potential diabetics. Argument from analogy is usually hazardous, and rarely convinces an opponent. In order that Senator's position should be maintained it would be necessary to show that the amount of albumen in the urine bears some proportion to the amount of albumen in the blood, just as the amount of sugar in the urine undoubtedly bears some proportion to the amount of sugar in the blood. But this position does not seem to be maintained by anyone, and is, indeed, obviously untenable. It would, further, be necessary to show that it is possible to have abundant albuminuria without structural change in the kidneys, since there is no question that abundant glycosuria may coexist with integrity of those organs; but this is unproved and extremely improbable. On the whole, we are disposed to doubt whether any useful analogies can be drawn between albuminuria and glycosuria. The pathology of the latter affection is extremely obscure, but it is certain that the kidneys are not the organs primarily at fault.

Senator attaches great weight to the admitted fact that a considerable proportion of persons have albumen in the urine without any other sign of impaired health. But to infer from this that the albuminuria is "physiological" is to go beyond the facts. The patient may suffer from excessive secretion from the nostrils, or from too free perspirations, or from slight habitual looseness of the bowels, without obvious impairment of health, but we should not, therefore, be justified in designating such symptoms as "physiological." We should rather say that there was some departure from health, but too slight to derange the general equipoise of the functions.

It is significant that these cases of transient albuminuria are most frequent in persons who are undergoing some severe and unusual strain, whether mental or physical. They are common among young men preparing for examinations and common among soldiers during the period of military service. The most obvious inference from such considerations would be that the albuminuria is a sign that the system is being overtaxed; that it is, in fact, as Professor Gairdner has happily designated it, a "danger signal." Another significant fact is the increasing frequency of albuminuria with advancing years, and with this fact must be correlated the other significant fact that in necropsies upon elderly persons organic changes in the kidneys are the rule rather than the exception.

Senator lays down some points which he regards as characteristic of "physiological albuminuria. 1. The absence of any other morbid sign. 2. The small quantity of the albumen. He fixes 0.4 or 0.5 per 1000 parts as the maximum. 3. The normal composition of the urine regarding its other elements, and especially the absence of casts, and formed elements. 4. The short duration and The transitory character of the albuminuria. difficulty is to see how it is possible to affirm that these characteristics might not be found in cases of slight but genuinely pathological albuminuria. The quantity of the albumen is certainly of itself a sign of no value whatever. Nothing is more common than to find the albumen decrease in amount in cases of Bright's disease until the merest trace is visible. Nor can casts decide the question for us. We may fail to find them in cases of Bright's disease ; while, on the other hand, they are probably sometimes present in otherwise healthy urine.

This whole discussion, however inconclusive for the present, has undoubtedly served a good purpose in emphasizing the fact that albuminuria is in certain cases a trivial and transient affection, and that our prognosis must not be too grave until we have had time to take fully the bearings of a case and to form a sound opinion as to its probable course. It would, however, be a much greater and more disastrous error to imagine that albuminuria is ever to be regarded without apprehension, and without a clear realization of its ultimate dangers. —Lancet.

# FROTHY SALIVA AS A SYMPTOM OF NERVOUS DYSPEPSIA.

The patients are generally about middle age, or rather under, and belong to the educated classes. These patients generally come complaining of having been "out of sorts" for some length of time, and not unfrequently date their illness back to some mental shock, trouble, or special worry. They complain of pain in the epigastrium, worse after food, constipation alternates with diarrhœa, and flatulence is a common symptom; in short, they are dyspeptics. They have headaches, eyeaches, toothaches—all sorts of aches.

The tongue is generally clean, or has only a little thin fur on the dorsum; in the middle and on the sides of the dorsum are two little collections of what, at first sight, may look something like fur, but on closer examination, it is found to be frothy saliva, composed of minute little bubbles. all of the same size, sticking closely together, and showing very little fluidity. Other patches of frothy saliva will be seen about the mouth, and in some cases I have noticed a similar condition of frothy secretion on the back of the pharynx, high up, and above the level to which the saliva can be conveyed. In some cases, the froth is more abunddant, and noticed by the patient; but generally the condition of the mouth is not noticed or complained of, although the throat is often referred to as being dry and painful, and the upper part of the pharynx is then in a dry and glazy condition, or slightly granular. In all cases I consider frothy saliva as pathognomonic of nervous disturbance. and of special importance as indicating the only line of treatment likely to be successful with this class of dyspeptics.

The history of the treatment of such cases is unsatisfactory, and may be somewhat as follows: The patient first goes to a dentist for toothache; the teeth are thoroughly set in order, but the ache very likely continues, or is shifted to some other part of the head. A physician is then consulted, who, finding eyeaches and throataches as well as the dyspepsia, advises consultation with specialists in those branches, but most likely without any return to comfortable health being obtained ; a treatment directed to correct the indigestion, whether by diet or drugs, also generally fails. It is in fact rather a sad lesson, to look back on the notes of one of these cases, and to count up the various forms of treatment that have been applied with such poor This class of case is one in which the success. treatment of symptoms notably fails; yet it is the more excusable, since there appears to be nothing except symptoms to treat, no trace of organic disease being discoverable. Neither can the patients be described as hypochondriacal or hysterical. They are active, intelligent, hard working people, and their symptoms are very real.

Now the reason of failure of treatment is, I believe, failure to appreciate the true cause of the dyspepsia, which is a nervous disturbance, produced by the trouble or worry, and giving rise to perverted secretion and nervous irritability. It is only by treating the central cause that we run any chance of relieving the symptoms. It is, I think, peculiarly interesting to observe how a functional disorder may produce organic disease. Thus, the alteration of secretion and consequent drying of the pharynx is in the first place a purely functional disturbance; but long-continued drying of the pharynx produces changes in its membrane of a permanent kind, which even the restoration of function does not remove. Changes of a similar kind to those which we observe in the pharynx probably take place in the stomach.

Three principal elements of treatment I wish to enforce :--Bromides, Warmth, and Rest. I have mentioned rest last, net because I consider it the least important, but because, although easy to prescribe, it is difficult of attainment. The sorrow, the worry, the annoyance, are beyond our power of removal, and equally uncontrollable by the patient, at least in his present condition. He requires mental rest and physical ease, which are best obtained by change of occupation, not by mental and physical inactivity.

Much the same applies to diet. It should be non-stimulating, and the quantity of tea should be curtailed.

The patient should be warmly clad from head to foot.

Some bromide in gr. xv to xx doses in a car minative mixture is the best medium in these cases. They do not stand a tonic treatment with strychina, arsenic, or iron.

The gas forming the bubles is apparently secreted with the saliva and not intermixed with friction or agitation.—Dr. Batten, in *Med. Press.* 

#### DIPHTHERIA: WITH SPECIAL REFER-ENCE TO ITS TREATMENT WITH HYDROGEN-PEROXIDE.

Dr. Dickey (Annals of Gynæcology and Pædiatry, Dec., 1890,) says: I know of nothing in the whole materia medica that will dissolve the diphtheritic membrane so quickly and thoroughly, and yet leave the healthy mucous membrane intact. When applied to pus or diseased tissue oxygen is set free, which appears in the shape of gas bubbles, and a frothy effervescing mass is to be seen; this is kept up for two or three minutes I am in the habit of diluting it 25 per cent. (although it can be used full strength) and applying it with an atomizer. This can be repeated until effervescence ceases, when the membrane will be found to have practically disappeared, leaving a whitish surface. When the membrane reappears it is again made If the nose is invaded, it can be applied use of. there with equal satisfaction. I am in the habit of having all the watery secretions from the nostrils absorbed with blotting paper rolled into. conical shape and gently inserted into the nose,

or by absorbent cotton wrapped on the end of a small stick, either of which is burned as soon as used. The peroxide is then applied. The keeping of the nostrils as free from secretions and membranes as possible is a matter of the utmost importance, and one too frequently over looked. The poison is more rapidly absorbed from here than from any portion of the mucous tract, being very liberally supplied with lymphatics. In children old enough to use a gargle, I have them use chloral hydrate in glycerine and water soon after using the hydrogen peroxide. This serves a threefold purpose; it is an antiseptic, a local sedative and an anti-spasmodie. In children not old enough to use a gargle it may be applied with the De Vilbiss atomizer. At the same time bichloride of murcury, tincture of the chloride of iron, with or without chlorate of potassium, or such other remedies as may suit the judgment of the individual prescriber, or be applicable to the case in hand, may be used. For my own part, I prefer the bichloride. Coupled with this should be given good, digestible food at regular intervals, of which milk should form the basis, and such stimulants, from time to time, as the individual case may demand. The constitutional treatment is not less important than the local, for such a virulent poison as we have to deal with in this disease saps the vital forces with wonderful rapidity. Consequently this must be attended to from the outset. When the temperature exceeds  $103\frac{1}{2}^{\circ}$  F., 1 have the entire body sponged with tepid water as often as may be necessary to bring it below this point. Pellets of ice internally will allay thirst and relieve very materially the turgid condition of the blood vessels, and should not be omitted. Ice may also be applied to the throat in a rubber bag or a bladder, relieving greatly the inflamed glands. This, briefly outlined, is the treatment in the more malignant forms of diphtheria which has given me the best results, and I attribute them to the use of the peroxide of hydrogen. It is true the other remedies used are excellent auxiliaries, but without the one I am confident the others would have proved insufficient. In milder cases, where the false membrane is not great and the toxæmia of a mild character, a gargle or spray of lime water reinforced with bicarbonate of soda, which increases its alkalinity, makes a very efficacious remedy.

As the secretions of the throat in diphtheria are acid, the addition of the bicarbonate adds greatly to its efficacy as a topical application. This, with the internal administration of suitable doses of chlorate of potassium (remembering that the chlorate in large doses has a very deleterious effect on the kidneys) in dilute hydrochloric acid, will be good treatment. It will be seen that I have avoided all reference to the use of swabs and brushes for the removal of

the false membrane. I think they, and all strong caustics of whatever kind or character should be religiously avoided. They are painful, and be as careful as one may, the surrounding healthy tissue is denuded of its epithelium, thus inviting a further spread of the disease. Much force has to be used in order to make the application, which of itself is a source of danger, as children have been known to suddenly expire in the arms of the nurse while resisting these applications. Only a few days ago a father told me, while his suffused eyes expressed the sorrow he felt, that his little son had died in his arms while being forcibly held to make an application to his throat with a swab. Eucalyptol and turpentine have been used as antiseptics and as solvents of the false membrane, and doubtless possess some virtues. With the latter the blood can be made more nearly aseptic than with any other drug that can be taken internally, but it has to be given in very large doses. Other remedies of greater or less potency have been recommended. Some are good, others indifferent, while some are positively bad. Take it all in all, I think in the peroxide of hydrogen we have a remedy of the greatest value in combating this dangerous malady. None will destroy the false membrane and bacilli more speedily and with greater certainty .- Southern California Pract.

#### MEDICAL EDUCATION.

At the recent Special Convocation of the University of Toronto for the purpose of conferring medical degrees, it was strongly urged by the Dean of the Medical Faculty that, since the people receive much benefit from medicine, they might justly be taxed to support a professorship of Sanitary Science and to establish a School of Pathology. In harmony with that view, and possibly as the outcome of the suggestion, the Senate of the University of Toronto has appointed an influential deputation to urge upon the Government to constitute Anatomy, Pathology and Sanitary Science a part of the work of the University, and to assist in providing the requisite means. As this proposal involves some very serious questions, it is well that it should be carefully considered both by the Government and by the people before it is allowed to prevail. We refer, of course, solely to that feature of it which involves the taxation of the people, or what amounts to the same thing, the diversion of a portion of the funds of the Provincial University The more wealthy private for the purpose. citizens can be induced to devote some portion of their means for the furtherance of such objects the better. But even were the proposal not complicated by the existence of voluntary and selfsustaining colleges, chartered by the Government,

it would be one of doubtful justice and propriety. As we have before had occasion to say, we have not yet seen any good reason to doubt the soundness of the familiar principle of political economy, that the State is not justified in using public funds to produce an article which experience proves that private enterprise is abundantly able to supply. A profession is, as has been well said, the capital of the man who practices it. It is the source of his income, like the stocks or lands of the capitalist, the ships of the merchant, or the goods of the tradesman. The State cannot furnish the capital to all classes. Why select one or two special professions to be thus favored? Are we told to look at the achievements of Medical Science-at what this and that great surgeon or physician has done for humanity ? But in order to make the argument available it must be shown that it was the aid rendered by a State-aided Medical School, rather than their own superior talents and devotion to their profession, that enabled these famous men to accomplish so much. Otherwise the argument goes to prove that the State should stimulate genius by rewarding the individuals who have achieved such results, rather than use the public funds for making doctors of others, a large percentage of whom will never become very useful or very famous. If again, the country were suffering from a dearth of skilled physicians, or if solf-interest and professional enthusiasm were failing to provide an adequate number of well-equipped Medical Colleges, there might be some ground for advocating the endowment of one at the public cost, and for increasing that endowment as now proposed. But when we have already, besides the Government Institution. five independent Medical Colleges in Ontario, all chartered by the Government, and all claiming to teach efficiently the subjects above named, without aid from the public funds, it is not easy to see how the Government could, with any regard either to the public interests or to fair play between the colleges, make the sixth its special beneficiary in the manner proposed, thus giving it a still further advantage over its competitors chartered by the same Government, and sending their students before the same Examining Board. The proposal bristles with objectionable features, but looking to the very highest practical consideration, that of the progress of medical science, we believe it would not be hard to show that, as a rule, independent self-reliance, healthful competition and professional enthusiasm are much more potent factors in all successful scientific work than any pecuniary favors bestowed by the State.-The Week.

It is said that the highest marriage rate for females is found among trained nurses. This agrees with our own experience.

#### ON THE TREATMENT OF CHRONIC ENDOMETRITIS BY THE INTRA-UTER-INE APPLICATION OF BORIC ACID.

Having obtained the most decided benefit in the treatment of cases of vaginal leucorrhea, and erosion of os and cervix uteri (both acute and chronic), by the vaginal application of boric acid, and having also observed the rapidity with which the healing process is effected by the same treatment in cases of division of the cervix for stenosis, I not long since designed a convenient form of insufflator for the purpose. Thinking I could go a step further, and apply the acid to the endometrium itself. I found that by means of a slightly curved vulcanite tube (something larger than a No. 12 catheter), with tightly fitting rod or piston of the same material, I could safely do so. The tube spoken of is charged for about two inches from its point by drawing back the piston, and plunging the tube, point downwards, into powdered boric acid contained in some deep receptacle, such as a wide-mouthed bottle. The point of tube is then inserted into the uterus (the latter having been previously cleansed by my blunt wire curette, which holds the secretion doing removal), the piston is then pushed home, and a stick of compressed boric acid deposited in the uterus. (The patulous condition of the os and cervix existing in these cases facilitating the introduction of tube considerably.) By this simple means I have succeeded in curing quite a number of cases of this troublesome and intractable complaint, some of which had previously (both in my own practice and that of others) resisted the usual routinecaustic treatment. I also thoroughly dust over the vaginal walls with the powder at the same time. Judging by my own experience I should say that if this treatment be adopted (as described) the most chronic cases of endometritis should yield to a dozen such applications at most, at intervals of three or four days; the all-important point being a thorough cleansing of all surfaces with which the powder is intended to come in contact.

It is now some years since Dr. Redmond (Surgeon for the Eye and Ear at St. Vincent's Hospital, Dublin), having found the value of boric acid in cases of suppuration from the ear, was kind enough to suggest to me its suitability as a treatment in these cases; and it was while making trial of his valuable suggestion that I read a paper on the "Value of Boric Acid as a Vaginal Application in cases of Leucorrhœa," by Dr. Schwartz of Halle, which considerably strengthened the ideas I had formed as to its use. The facility with which the powder can be deposited on the cervix, os and vaginal walls by my insufflator, either with or without the speculum (the latter mode I prefer myself), saves a great deal of time and trouble. And this plan of treatment will be found on trial much more popular with both patient and doctor, than glceryine tampons or other moist or greasy applications.

The boric acid, besides acting as an antiseptic, astringent, and deodoriser, has also evidently some affinity for water (though not to so marked a degree as glycerine), so that it will also act as a depletant; and it will be only fair, when it has been freely applied, to notify this peculiarity of the powder to the patient. I have now given the treatment described a considerable trial, and have found it most effective even in three, at least, *inveterate cases* where the discharge had lasted for years, and where the patient had found it necessary to constantly wear a diaper or sanitary towel.

In the latter class of cases (just alluded to) using a *sharp curette* will be advisable before applying the acid.—Alexander Duke, F. R. C. P. I. in *Hosp. Gaz.* 

#### THE TREATMENT OF PNEUMONIA BY LARGE DOSES OF DIGITALIS.

We have on one or two previous occasions called attention to the mode of treatment recommended by Dr. Petresco of combating pneumonia with large doses of digitalis, and in the Therapeutische Monatshefte for February, 1891, this author publishes an additional communication on this subject, in which he offers a number of arguments and reports of a number of cases to support his position as to the value of very large doses of digitalis in this disease. The dose which this author recommends is simply enormous in contrast to that which is ordinarily regarded as the safe dose of digitalis, Professor Petresco stating that he does not hesitate in single doses to give as much as 180 grains of digitalis-leaves in twenty-four hours, although he admits that ordinarily the dose for twenty-four hours does not exceed 25 grains. He prefers the infusion made with 4 parts of digitalis-leaves in 200 of water, and then adding 40 parts of syrup of orange-peel, the dose than being a tablespoonful every halfhour. He states that in general this dose is very well borne, and that he has never met with a single case of poisoning. Dr. Petresco meets the incredulity which has been expressed as to the tolerance of these large doses, with the explanation that he can only have employed inferior quality of digitalis leaves, with a denial, and states that he has employed the leaves obtained from all the best pharmacists in Europe, with, as a rule, the same results. He states that he has obtained the best results in genuine fibrinous or

croupous pneumonia. In infectious pneumonia he has usually combined it with antiseptic methods. He also states that he has obtained satisfactory results in cases of pneumonia complicated with bronchitis and pleurisy, and he claims in the most positive manner to have cut short undoubted cases of croupous pneumonia, so that within twentyfour to forty-eight hours-the time necessary for the effects of the digitalis to be demonstrated-he has succeeded in obtaining sudden and almost absolute reduction of the temperature to the normal, accompanied with reduction of the pulse, while at the same time this disappearance of fever is accompanied by general improvement in the patient's condition, pain and cough being diminished, the temperature becoming normal, while the healing process rapidly goes on to completion. These large doses, with the exception of but rare cases, are without effect on the digestive canal, although sometimes he has met with vomiting as the result of this method of treatment. The most evident symptom detectable as to the effect of this medication is the marked slowing in the pulse, with increased tension. The author publishes a number of sphygmograms, illustrating the effect of digitalis on the pulse in cases of pneumonia, and concludes his paper with the following deductions :

1. Digitalis has an important antiphlogistic action only in its special therapeutic dose.

2. Its specific therapeutic dose of digitalis amounts to from 75 to 150 grains of digitalisleaves administered as an infusion in twenty-four hours.

3. This dose may be administered in from two to four days continuously, according to the severity of the case. In some cases from 300 to 375 grains of digitalis leaves being given in four or five days without symptoms of nausea, or in fact, any toxic effect. Treated with this dose, the temperature in cases of pneumonia falls from 1° to 3° C. after a single dose, and from 5° to 6° C. after three doses, while the pulse is slowed from 40 to 60 beats in the minute after six doses. This reduction in the pulse-frequency and in the temperature lasts from ten to twelve days, by which time the normal condition has been gradually obtained.

4. Simultaneously with this diminution in the rate of circulation and respiration, disappearance of all the local symptoms of pneumonia can be noted.

5. The value of this method of treatment is proved by statistics, the mortality of cases of pneumonia so treated with high doses of digitalis being much less than that observable when any other method is employed.

6. The value and harmlessness of this therapeutic dose of digitalis is established by the author's numerous individual experiments and by the cases reported by his scholars. 7. From studies as to the value of this method of treatment the author concludes that the expectant method of treating pneumonia is not only irrational but even dangerous; that the assumption that there is a definite cycle of progress in pneumonia is not warranted; that pneumonia may be cut short by an energetic rational mode of treatment, especially if the method is inaugurated at the onset of the disease, and that, tinally, the claim is supported that the treatment of pneumonia with large doses of digitalis furnishes better results than that obtainable by any other mode of procedure.—*Therap Gaz.* 

#### TREATMENT OF CHRONIC BRIGHT'S DISEASE.

The danger in Bright's disease comes from insufficiency of the renal secretion This insufficient depuration of the blood by the kidneys leads to uræmia, which is the true danger. It is therefore necessary to make the patient urinate freely, but on condition of not over-exerting the kidneys. It is also necessary to sustain and stimulate the forces of the patient.

The aliment should contain very little albuminoid matter in proportion to fats and hydrocarbons. For the waste from the latter substances is not eliminated by the kidneys. All the substances which in these waste products contain nitrogenous products should be partaken of as little as possible.

Meat should be ingested in very small quantities. Dark meat or high meats, being rich in albuminous waste products, should be strictly prohibited.

Milk, although rich in albuminoids, does not produce much waste material, for all its nitrogen is utilized. It is rich in fat. None of its principles appear to irritate the kidney. Moreover, it is diuretic. It, therefore, not only furnishes no material for the kidneys to eliminate, but by its diuretic power it helps to eliminate toxic principles already existing in the organism. In the meantime most patients restricted to absolute milk diet become disgusted with it, refuse to submit to it, and later on finish by not being able to digest it any longer. Moreover, there is an advantage in not limiting patients to milk alone; one should allow them vegetables, fresh and dried bread, farinaceous articles, all of which augment the proportions of hydro-carbons. Again, individual predisposition must be considered in the What benefits one might choice of aliments. harm another. The products of bad digestion are rich in waste materials, which are liable to irritate the kidneys if they are eliminated completely, and which poison the organism if their elimination is insufficient. The albumen ought to be measured day by day.

307

Eggs, especially the whites of eggs, increase albuminuria, and ought to be excluded from the diet of those suffering from Bright's disease. The same is true of certain salt water fish.

Diuresis is produced by alkaline waters and ptisans. But cardiac lesions, so frequent in Bright's disease, render necessary the use of cardiac remedies. In the first rank of the latter comes crystallized digitalin, in doses of from one to two milligrammes. It is prudent not to use this medicine two days in succession, but to interrupt it for several days, so that its elimination may be complete.

Caffeine is recommended in gramme doses, especially by way of injection. Salicylate of theobromine is less active, even in three gramme doses. Strophanthus and squill are to be rejected on account of their irritating action on the kidneys. In the case of arterio-sclerosis, iodide of potash gives good results.

Revulsives over the lumbar region are very useful, especially in the period of renal congestion. Repose in bed, well covered, is to be recommended in preference to vapor baths, which might prove dangerous. Walking is not to be advised. It is rather harmful, though in a less degree than cold and moisture.

Senator, of Berlin, says: "I recognize the inability of medicine to combat albuminuria. Iodide of potash, though evidently without effect in parenchymatous nephritis, is perhaps very useful in the interstitial form coincident with sclerosis of the arteries, hypertrophy of the heart, etc." Here, evidently, the nephritis is secondary, and the iodide is able to cause the albuminuria to disappear, diminish the polyuria and secure prolonged remission. Semmola, Leyden, and others are of this opinion. Milk is a good remedy in appropriate cases, especially in parenchymatous nephritis, where there is little thirst. It is, how ever, to be avoided in sclerosis with polydipsia.— Lepine in *R. La France Med.* 

# IRRITABLE FISSURE OF THE RECTUM.

I have found this infirmity more frequent than one would suppose. Old physicians have told me they have never seen a case. I have certainly witnessed more than twenty well marked cases, when the simple operation of forcibly stretching the sphincter till all the fibres of the external sphincter were torn through, has given complete and permanent relief. The pain attending this lesion is atrocious, and nothing short of a cutting or divulsion operation has ever in my experience done any good.

The character of this lesion is very easily diagnosed. The patient has a severe aching pain, low down in the rectum, after defæcation ; this pain lasts for hours, sometimes all day, is aggravated by purgatives, and does not readily yield to opiates, whether administered per os or per rectum. Examination by rectal speculum reveals a crack or ulcerous abrasion, easily bleeding on touch, just within the anal orifice; this fissure extends through the mucous membrane into the muscular fibres of the sphincter; it does not readily heal, for the sphincter by its contractions will not let it heal. If there be a few hours quiesence of the pain, this is sure to return the next time the bowels act, and a hard movement, attended with straining, brings with it exquisite agony. I have known patients to suffer for twelve hours after such a movment, and only get relief when repeated doses of opium were administered. Such persons will often avoid having fæcal motions as long as possible from dread of the inevitable suffering.

In the earlier part of my practice, I used to be greatly puzzled by these cases, and first became enlightened as to their real nature and treatment by reading Van Buren's practical treatise "On Diseases of the Rectum."

A patient on whom I performed the operation of forcible dilatation ten days ago, and who is now free from all pain and perfectly well, had been for two years an almost constant snfferer; had become haggard, emaciated, and cachectic. It may seem singular that so apparently trifling an ailment should cause so much and so constant distress.

In the case of this lady, all that was necessary was anæsthesia by ether, and forcible stretching of the sphincter ani till the fibres of this muscle were felt to tear. The patient was placed on her • side, the two thumbs inserted back to back and forced apart till the palmar surfaces were made to touch the tuber ischii on both sides. Then all that remained to be done was to apply a warm carbolic dressing.

I have notes of more than twenty cases similar to the above which I have treated, and in every instance the result has been most gratifying.

Sir Benjamin Brodie, speaks of this disease, under the title of "Ulcer on the Inside of the Rectum." He says it may be found on the posterior part of the rectum, opposite to the point of the os coccyx, and occurs for the most part in persons who have costive bowels and hard stools, the mucous membrane, under these circumstances, being lacerated by the pressure of hard evacuation. When once produced, this ulcor is very difficult to heal, and, in fact, the only rational treatment is setting the sphincter at rest, either by stretching or by free divison with the knife; and surgeons since Brodle's time have been divided in the choice of methods; certainly both incision and dilatation give satisfactory results. To relieve pain is certainly a considerable part of a physician's duty and he should be especially happy when he can relieve the pain by permanently removing the cause. What a noble and humane sentiment is that of Herzen—may it not well be the animating sentiment of every physician ? —Tout étre qui souffre est également prés de mon cœur.

PHAGOCYTOSIS AND IMMUNITY .--- The fact that one attack of a contagious malady, such as smallpox or scarlet fever, renders an individual immune against a second attack has never received adequate explanation. It is even more difficult to explain satisfactorily the immunity conferred on an animal by inoculating it with the attenuated virus of a disease which in its ordinary form is often, and in a few cases invariably, fatal, such, for instance, as protective inoculation for anthrax. chicken cholera, and the older method of vaccination to protect from or modify an attack of smallpox (The British Medical Journal). In a lecture recently delivered by Dr. Metschnikoff at the Pasteur Institute, an attempt is made to prove that the defending powers exercised by the amœboid cells of the organism are in a large measure concerned in conferring this immunity. The aggressive characters of these amœboid cells has earned for them the name of "phagocytes," and Metschnikoff points out that they are of different kinds, and originate in various ways. In connection with the subject of immunity, it is important to remember that these phagocytes can include and destroy micro-organisms; but the more malignant the micro-organism the more rarely is it found within the phagocyte, and this is especially true of such diseases as chicken cholera, hog cholera given to pigeons and rabbits, and anthrax of mice. All these diseases have the character of general acute septicæmia and cause death within twenty or thirty-six hours. According to the views expressed in this lecture, we are to believe that when the micro-organisms are attacked by the phagocytes, an animal may recover from the disease. In the malignant forms, where the phagocytes do not intervene-that is, phagocytosis or amœbic warfare is not established-then the bacteria overrun the organism, and induce death. This partiality of the phagocytes is attributed to their sensitiveness to external influences, and especially to the chemical composition of their environment. These cells are powerfully attracted by many microorganisms, and repelled by others. This attraction and repulsion are expressed by the terms "positive chemiotaxis" and "negative chemiotaxis." Now the basis of the theory appears to be that the chemiotaxis of the phagocytes of a given animal is mutable, and that cells may be gradually attracted to substances in a mild form from which they shrink when presented to them in a concentrated

form. Hence by inoculating an animal with an attenuated virus the chemiotaxis, previously negative, will acquire positive characters, and at last be induced to attack the micro-organism of a malignant disease should occasion arise. Any attempt to explain immunity from infectious diseases on a rational basis will be very welcome. The theory propounded by Metschnikoff is, like all the previous communications made by him on the subject of intra-cellular digestion, the outcome of patient and industrious observation, and must command our attention. His views, formulated for the first time in a consecutive manner in this lecture, promise to revolutionize opinions as to inflammation and fever, and this attempt to explain the power of the cells to confer immunity from infectious diseases is sure to be hotly contested. for every important contribution to this confessedly obscure subject must necessarily be in a large measure hypothetical.-Med. Rec.

TREATMENT OF OBSTRUCTION OF THE BOWRLS BY LARGE DOSES OF OLIVE OIL .- Dr. E. W. Mitchell, of Cincinnati, reports two cases of successful treatment of obstruction by means of olive oil, this method of treatment being the result of a suggestion of Prof. Langdon. One of the patients, a man fifty-three years old, had had an operation for strangulated inguinal hernia on the left side, twenty months previously. When seen for his present trouble he had not been well for a day. there had been severe colicky pains and vomiting after each attempt to take food. Enemata were given on this and the following day with little result. Morphine was given, and large enemata through a rectal tube, introduced as far as rossible, produced no effect. Almost two quarts of dirty fluid was withdrawn through a stomach tube. Two ounces of sweet oil were ordered to be taken every hour. Tympanites during the afternoon and early evening had rapidly increased. There was much prostration, no nourishment having been retained. During the night, half a pint of oil was taken. In the morning there was less prostration ; there had been a small fluid passage. An enema, now administered through a rectal tube (English gum catheter, No. 16) returned slightly discolored. and containing a trace of oil. There was a recurrence of vomiting, but the oil was continued. About noon the bowels began to move, and several fluid stools were passed during the following night. On the next day the stools became formed and contained pus in small quantities. The case was probably one of fæcal impaction-there were no evidences of typhlitis or perityphlitis.

The second was that of a young man twentytwo years old. The bowels had not moved for forty-eight hours, and he had been suffering from tormina and vomiting. Large doses of cathartics had already been taken. Thorough examination

failed to find any evidence as to the point of obstruction ; the hernial openings were clear, there was no point of tenderness, no tumor, the abdomen was quite tympanitic. He was treated by sulphate of magnesia, repeated clysters through a rectal tube introduced as far as possible into the bowel, and sufficient morphine to control extreme pain. This treatment was continued for two days with no benefit the tympanites increasing, vomiting becoming stercoraceous, and the patient much prostrated. The administration of sweet oil was then begun; a pint was taken within a few hours, most of which was retained, although he had before been vomiting everything. Three hours after beginning the oil the bowels began to move, and a good recovery ensued.

Dr. Langdon mentions in the same journal eight cases where relief had been obtained from large doses of olive oil.—*Cincinnati Lancet-Clinic*.

INSOMNIA IN INFANTS. - Dr Jules Simon considers insomnia a symptom of much importance in infants. In many diseases it is a symptom of minor importance, and of no special interest. In others it is one of the chief manifestations of the disease. The influence of dentition has been greatly exaggerated. Unless congestion of the gums or surrounding parts is present, it causes but little disturbances of the sleep. Dyspepsia and indigestion are the most common and universal causes of disturbed sleep, even without the definite symptoms of vomiting, diarrhœa, or marked constipation. A discussion of the treatment would involve a review of the whole subject of dietetics. Causes referable to the nervous system probably occur next in frequency. All young infants may, even in the first year, present evidences of acute cerebral congestion. Extremes of either cold or heat may produce the same result. A child that has been exposed to a strong wind during its daily airing, or one that has had insufficient protection from the sun, may pass a restless and uncomfortable night. This condition must be distinguished from the insomnia of meningitis, which, in some cases, is for many days the only sign. In older children, headache due to overtax. ing of the brain is not uncommon. Anæmia and rapid growth in conjunction with over-study, is a fruitful cause of insomnia. In children, of rheumatic parents this tendency is especially marked. Among the nervous causes in these older children, hysteria, chorea, and epilepsy are the most com-The young hysterical subject is always mon. liable to insomnia, with or without headeache. Some attribute all headaches of this period to hysteria, but the author believes that the distinction should be carefully made between such headaches and those due simply to rapid growth and overstudy. The insomnia of epilpesy is peculiar to itself, and is sometimes the only symptom for a considerable period. The child suddenly wakes from profound sleep, sits up, and begins to cry, but soon lies back as if exhausted, and falls into a deep sleep. These attacks are accompanied by incontinence of urine. Insomnia complicating chorea is an exceedingly grave symptom. Earache is always followed by insomina, and usually by continuous crying. Hernia is a cause of pain and sleeplessness that is frequently over-looked. Intermittent fever is in some cases marked by wakefulness at a definitely recurring period. Insomnia and headache are prominent and early symptoms of albuminuria.—New York Med. Jour.

TREATMENT OF EFFUSION IN THE KNEE-JOINT. —In the London *Practitioner* for February, 1891, Owen describes his treatment for effusion into the knee-joint. He says :

In some instances the aspirator was employed, but in others the distended joint was dealt with by a hydrocele canula of about the gauge of a No. 1 English catheter. In the use of either instrument the surgeon must take care that it is aseptic, and that the skin through which it is to be introduced is not only "cleansed" but clean. Moreover, he must not operate with "unwashen hands." Another point to be attended to when using the canula is that just as the fluid is ceasing to flow the surgeon should block the end of the instrument with his finger, and so withdraw it that he does not introduce air into the joint.

A canula thus used is as safe as an aspirator, and it has this recommendation, that it is sure to be in working order. If an ordinary canula and trocar cannot be used with security, peritoneal cavities, ovarian cysts, and vaginal tunics should have been in the habit of suppurating. This we know is not the case. It is very much the fashion now, however, to drop the simple word "tapping," or its equivalent "paracentesis," and, with a homage to euphemism, to employ the term "aspiration."

To the practitioner it matters not whether the fluid is blood or sero synovia. He has merely to obey the indication. If the joint has begun to swell up directly after the injury, the distending fluid must be blood; but if a day or more have intervened between the hurt and the swelling, the fluid has been poured out by the inflamed synovial membrane. Such fluid is a mixture of synovia with serum; often it is stained with blood.

Dr. Owen has never known any trouble to follow the tapping of a joint; he adopts it as a routine treatment in the case of fracture of the patella as well as in the more simple variety of distention.

As a rule, the puncture is made to one side of the patella. When withdrawing the canula the track is obliterated by firm pressure with the finger. The skin punctured is covered with a scrap of lint dipped in collodion, or by a little pad of dry wool. The knee, together with the upper half of the leg and the lower half of the thigh, is then enclosed in lateral splints of house-flannel and plaster-of-Paris. The limb is fixed in the extended position, the foot being slightly raised. The firm pressure which is made around the joint is comforting, and it effectually prevents further effusion into the synovial membrane.

Having watched the effect of this method of treatment, Dr. Owen can honestly say that, should he have the bad luck to be the subject of acute traumatic hæmarthrosis or sero-synovial effusion of the knee, he would most certainly have the joint treated in the manner described. And he should ask that the site of puncture might be first numbed by the application of a piece of ice and some salt

THE PROPER METHOD OF APPLYING THE OB-STETRIC FORCEPS .- Dr. Henry D. Fry urges, as the only rational method, the application of the forceps to the sides of the head of the child without reference to its position in the pelvis. He refers to a former paper in which it was stated that 51 per cent. of prominent obstetricians followed this rule; while 35 per cent. applied the blades in the transverse diameter of the mother's pelvis without reference to the position of the head, and 11 per. cent observed no rule and followed either method. He admits that had the great body of the profession been consulted, the majority would be found to apply the forceps according to the German method, and also that in some cases it may be and is impossible to do otherwise. Certainly the difficulties of application are increased when the first method is chosen, and it would be better for a beginner to resort to the second, until some facility is acquired. In France it is the practice to apply the forceps to the sides of the head even when transverse at the brim, and the ideal method of extraction is to apply the instruments in such a manner that during traction the foctal head is free to execute all the movements that would occur were the labor normal. To accomplish this it is necessary: (1) To grasp the sides of the head with the blades. (2) To make traction in the axis of the pelvic canal. (3) To secure mobility of the head during its pass-The age, by the use of the Tarnier forceps. Hodge style of forceps should not be used when their application is made without reference to the child's head, and the Simpson style (Elliot's) should not be used when their application is to be made to the sides of the head. Dr. Fry's conclusions are: (1) Anesthetize the patient and place her in proper position-buttocks well over the edge of the bed, and each limb supported by an assistant. (2) Ascertain the position of the head, introducing within the vagina two or three fingers, or, if

necessary, the whole hand. (3) Apply the blades of a Hodge type of forceps to the sides of the head, with the concave edge directed toward the occiput. If, for any reason, this cannot be accomplished, withdraw the instrument and substitute a Simpson [or Elliot], passing the blades to the sides of the pelvis. While making traction with this method, watch for anterior rotation of the occiput, and encourage it in some cases by re-applying the blades to better advantage. (4) Make every effort to secure antiseptic conditions during the operation. The fingers, hands and forearms of the operator, the external genitalia and vagina of the patient, the instruments and the hands of the assistants, should be clean and aseptic.—American Journal of Obstetrics.

TRANSMISSIBILITY OF SYPHILIS — As published in his magnificent Atlas of Venereal and Skin Diseases, Prof. Morrow's conclusions in reference to the hereditary transmissions of syphilis are :

1. A syphilitic man may beget a syphilitic child, the mother remaining exempt from all visible signs of the disease; the transmissive power of the father is, however, comparatively restricted.

2. A syphilitic woman may bring forth a syphilitic child, the father being perfectly healthy; the transmissive power of the mother is much more potent and pronounced, and of longer duration, than that of the father. When both parents are syphilitic, or the mother alone, and the disease recently acquired, the infection of the fœtus is almost inevitable; the more recent the syphilis, the greater the probability of infection, and the graver the manifestation in the offspring.

3. While hereditary transmission is more certain when the parental syphilis is in full activity of manifestation, it may also be effected during a period of latency when no active symptoms are present.

4. Both parents may be healthy at the time of procreation, and the mother may contract syphilis during her pregnancy, and infect her child in utero. Contamination of the foctus during pregnancy is not probable if the maternal infection takes place after the seventh month of pregnancy. —Cincinnati Lancet-Clinic.

MR. EDISON'S EXPLANATION OF THE AMPERE AND THE VOLT.—During a recent examination a lawyer put the following question to Thomas A. Edison:

"Explain what is meant by the number of volts in an electric current?" To which he replied :

"I will have to use the analogy of a waterfall to explain. Say we have a current of water and a turbine wheel. If I have a turbine wheel and allow a thousand gallons per second to fall from a height of one foot on a turbine, I get a certain power, we will say one-horse power. Now the one

foot of fall will represent one volt of pressure in electricity, and the thousand gallons will represent the ampere or the amount of current. We will call that one ampere. Thus we have a thousand gallons of water or one ampere falling one foot or one volt or under one volt of pressure, and the water working the turbine gives one-horse power. If, now, we go a thousand feet high, and take one gallon of water and let it fall on the turbine wheel, we will get the same power as we had before-namely, one horse power. We have got a thousand times less current or less water, and we will have a thousandth of an ampere in place of one ampere, and we will have a thousand volts in place of one volt, and we will have a fall of water a thousand feet as against one foot. Now the fall of water or the height from which it falls is the pressure or volts in electricity, and the amount of water is the amperes. It will be seen that a thousand gallons a minute falling on a man from a height of only one foot would be no danger to the man, and that if we took one gallon and took it up a thousand feet and let it fall down it would crush him. So it is not the quantity or current of water that does the damage, but it is the velocity or the pressure that produces the effect."

It has been calculated that the electromotive force of a bolt of lightening is about 3,500,000volts, the current about 14,000,000 amperes, and the time to be about 1-20000 part of a second. In such a bolt there is an energy of 2,450,000,000watts, or 3,284,182 h. p.—Scientific American.

STRYCHNINE IN ALCOHOLISM.-Dr. Pombrak reports the effect of strychnine in four cases of chronic alcoholism and three of dipsomania. The results were excellent in all but one case; the patients ceased drinking, and in one case the improvement has already lasted nine months. He advises the employment of strychnine in inveterate inebriety as well as in dipsomania. He insists on the prolonged continuance of the treatment; its duration should be proportionate to the duration of the disorder. He considers the dose of one milligramme insufficient; in moderate cases two milligrammes daily are required, while in old and inveterate drinkers, double this amount may be used. He ascribes the failures of some physicians to the insufficiency of the dose employed. He claims that the peripheral neuritis common in alcoholic cases sometimes disappears under the influence of strychnine.-Jour. de Méd. de Paris.

EMMENAGOGUES AND PREGNANCY.—Dr. L. Atthill finds that, in his own experience, some of the so called emmenagogues are practically devoid of special action upor the uterus. For many years he has made a practice of administering ergot to patients threatened with abortion, hemorrhage being present but uterine action not having been excited. He finds that it checks hæmorrhage without exciting undue uterine contraction, and accordingly he does not hesitate to give it to pregnant woment if for any reason it seems to be indicated. He has often administered ergot before labor in cases where there is a predisposition to *post partum* hæmorrhage. In none of these cases has labor set in earlier than was expected, while in two or three cases it has been delayed. From personal experience he believes that iron, quinine and strychnine can be administered to pregnant women in ordinary doses with perfect safety.— Brit. Med. Journal.

PACKING THE VAGINA IN PREGNANCY-VOMITING. —The obstinate vomiting in early pregnancy is in many cases due to displacement, acute flexion generally, writes Dr. MacKinnon in the February Journal of Obstetrics. In two instances he relieved the displacement by packing the vagina with absorbent cotton, and in both the vomiting ceased almost immediately. These patients were in such a critical condition that the induction of abortion was in contemplation.—Pacific Med. Jour.

THE recent announcement that Professor Mosetig, of Vienna, has discovered a cure for cancer, the details of the remedy being kept secret, has induced an Irish poetic genius to write some lines on the secret discoveries of our continental *confrères*, which are published in a Dublin journal. The author in the belief, no doubt, that his sentiments and mine are in unison, has placed the verses at my disposal, but I can only find space for the three following :--

> Our lip we can't help curlin' At the medical prefesh ; Sure, there's Doctor Quack, of Berlin, Always finding something fresh To prevent mankind from croaking, And to load himself with fame. This is not a theme for joking, But-we get there just the same. Here's a man has struck a plan, sirs-So the daily papers say To prevent the growth of cancers, And we only hope he may; All the things they'll soon be healing To which one can put a name-Yet we're haunted by a feeling That we'll get them just the same. O confound all foreign "masters" With a secret to disclose ! We believe in mustard-plasters, And put tallow on our nose. Let the savants of Vienna Spin their narratives so lame-If we stick to salts and senna

We can get there just the same.

-Hosp. Gaz.

# THE CANADA LANCET.

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

62 Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address, Dr. J. L. DAVISON, 12 Charles St., Toronto.

**ET** Advertisements inserted on the most liberal terms. All Letters and Remittances to be addressed to DB. C. SHEARD, 320 Jarvis St., Toronto.

AGENTS.-DAWSON BROS., MOntreal; J. & A. MCMILLAR, St. John, N.B.; GRO. STRNET & Co., 80 Cornhill, London, Eng.; M. H. MAH-LER, 23 Rue Richer, Paris.

#### TORONTO, JUNE, 1891.

The LANCET has the Largest Circulation of any Medical Journal in Canada.

#### THE LITERARY EQUIPMENT OF THE AMERICAN MEDICAL MAN.

A very recent graduate of Old Trinity, in Medicine, has been resting on his oars while waiting for the dust to settle (in spite of this mixed metaphor, he is not Irish), and, inasmuch as rest intellectual, lies not in inactivity of mind, but in change of mental occupation, has been dipping once more with delight into reading, not medical, or at least, not technical. If the overwrought medical student or practitioner, at times when, as is inevitable, disgust rises in his soul and whelms him fathoms deep at the weary round of "shop," practice, late and accumulating professional literature, all with tiring reiteration, conspiring to keep his nose at the eroding grindstone, if at such unquiet moments he would only turn to the vast field of æsthetic and not utilitarian literature, he would find it, even in homeopathic doses, a prompt antidote to his sensation of satiety. Not that it would act as did the doses taken, as Tacitus, I think it is, records, at those Neronian orgies, when repletion was realized by a temporary retirement from the table of Bonlimia. On the contrary, the very joy of retreading the paths, now by press of work forbidden him, and dipping, if only a half hour, into Horace, or Tennyson, or Harper's, or the pages of that most genial of the genial profession, Dr. Oliver Wendell Holmes, by sheer force of contrast would enable him to return with zest re-awakened, to the pages of his medical

journals and to his case-reading in the standard works. Reflections such as these led our newfledged master in Chirurgy to certain animadversions upon the general literary style and tone of English and American professional literature. And his animadversions were unpleasant, or at least, would have been, could the writers he criticized have spent a quarter of an hour within hearing of his thoughts. He concluded that very few medical text-books are passably written, or to be read with pleasure by one who is hypercritical in the matter of his English. Most notable exceptions do exist, especially among English as against American writers-Michael Foster's Physiology, Fagge's Medicine, are examples. The reason of this difference, and the comparison is not meant to be odious or invidious, is plainly that the average literary and primary training of the American student is so low. After entrance upon a course of study so exacting as the medical student's, further advance in general culture is impossible except in so far as the mind is improved by the gymnastics through which it is put by the study of medicine as well as of any other subject. The medical man, on the other hand, who before his medical career began, had been blessed with a fair training in the Greek and Latin and English Classics, Ancient and Modern History, a dip into Moderns and Mathematics, such as an English public school career provides, is not by any means such a rara avis in England as in Canada, and the United States. Now this is not meant as a slur upon American practitioners. It were unkind to upbraid them with their misfortune. The social and economic conditions of the new country call upon the general public to put up with many new, raw, and unpleasant things, among them a medical profession of no high grade of attainment in things outside their own special branches of knowledge, and as time goes on this state of affairs is rapidly curing itself. So far as professional training, zeal, acumen, and ingenuity are concerned, no set of surgeons in the world have proved themselves more capable than the surgeons of America. This side the Atlantic is admittedly the home of elegant pharmacy. Why then are American degrees in medicine so ill thought of in most European centres, that the holders of them can get no more recognition than if they were just beginning their studies ?

The reason is twofold, and the blame lies perhaps evenly at the doors of either party. On the one hand insular and provincial ignorance and prejudice, and dull wholesale indiscriminating refusal to take any trouble to differentiate a really good American degree such as that of Bellevue, New York, from the fraudulent degree, stolen and forged, or given after a year's study by some congeries of criminals styling themselves a University, not a few of whom may be found serving long terms of imprisonment for their fraudulent practices in various parts of the United States. On the other hand it is undoubtedly true that there are humbug and quackery, and deception, and abominably inadequate and irresponsible medical training in the United States more than in any other country. How far this is due to mere supineness, how far to the connivance of politicians under their democratic form of government, and how far to the fact that there is no federal control of educational matters, and that uniformity of standard is thus precluded by their constitution, we cannot here discuss. Each of the three factors, however, must enter into the calculation.

(To be continued.)

# THE INFLUENCE OF STAYS ON THE ABDOMINAL VISCERA.

At a meeting of the Dresden Gynæcological Society in January, 1891, Dr. Meinert read a paper (Brit. Med. Jour.) embodying the results of sixty-three post-mortem examinations of patients in whom the thorax had been compressed by stays. The normal relations were invariably disturbed. The liver and stomach were usually pushed downwards, more rarely upwards, and in the majority of cases enlarged. The stomach mostly lay with its long axis vertical, and often fitted into a corresponding depression on the surface of the liver. Depression of the great intestine was almost constant, the hepatic flexure being mostly involved. The transverse colon was often disturbed in the most remarkable manner, hanging down in some cases so that its middle part almost reached the pelvic cavity. In these displacements the stomach had, as a fixed point its cardiac end, the large intestine its splenic dexure. Equally precise determination of the displacements of the pelvic organs

was not possible, owing to senile changes in many of the bodies. The right kidney was frequently moveable, as many recent authors have already noted. Dr. Meinert believes that in living women, retroflexion is the most frequent displacement of the uterus. A case of nephrorrhaphy for floating kidney was also noted; three-quarters of a year after the operation the kidney again became displaced. Bergmann has observed similar failures; it is certain that women who have undergone nephrorrhaphy should not wear stays. The median displacement of the stomach and the pushing down of the colon was best diagnosed during life, forcing air into those parts of the alimentary canal. The displacement and distension were to be remedied by small meals, taken frequently, and by avoiding fluids in bulk, which injured the stomach. The diet must be substantial and of a nature to stimulate peristalsis; hence a kind of whole-meal bread was recommended. Indeed. Dr. Meinert advocates the swallowing of small quantities of sand for "internal massage" of the stomach.

It may be remembered that at the International Medical Congress, London meeting, 1881, there was some discussion as to whether the long axis of the stomach was not normally vertical. Dr. Leopold stated, in reply to Dr. Meinert, that he had seen the stomach so placed in cases where there was no constriction of the thorax from stays. Some of the changes in the hollow viscera might be due to defective nutrition.

## HOW LAWSON TAIT DOES A SUPRA-PUBIC CYSTOTOMY.

[We have lately received the following letter, which will be of interest, as showing pretty vividly the iconoclastic tendency of the above great operator.]

Since my arrival in Birmingham I have had the pleasure of seeing Mr. Tait perform this operation once. The patient, a man well up in years, was very stout, weighing (I should think) 300 pounds, with very thick abdominal wall, fully five inches over the bladder, in consequence of which the operation was a most difficult one. This difficulty, however, seemed rather to please the fancy of the operator than otherwise.

The patient being ready, all rules laid down by

other surgeons were ignored by Mr. Tait as un-With no rectal necessary and a waste of time. bag placed, no fluid in the bladder to distend it and push up the peritoneum, and with no sound even in the bladder as a guide, he cut rapidly down through the thick abdominal wall in direction of the bladder to the muscle, on reaching which he divided the tendon transversely, closely hugging the pubic arch, and with finger in the wound felt for and found the viscus.

Without waiting to sponge away blood, he caught up its wall with a couple of pairs of long forceps and opened it between the forceps with the point of a scalpel, in the same way as he would open the peritoneum in abdominal section. Then introducing his finger he explored, passed in a pair of placental forceps, caught and dragged out a stone measuring two inches by an inch and Then introducing an abdominal glass a-half. drainage tube into the organ, he sutured the bladder wound above and below the tube, and finally closed the external wound around the tube, the whole operation not lasting more than ten minutes. H. MEEK, M.D.

London. Ont.

#### DR. COULTER'S COMBINED VAPORIZER AND INHALER.

We desire to expressour very satisfactory experience in the use of the above Inhaler. The points which we consider especially worthy of notice in this instrument are, firstly, its extreme simplicity. One draw back often experienced in the use of inhalers when left in sick rooms is their liability toget out of order. This is impossible with so simple an apparatus as this one; a vessel of water, a spirit lamp and a sponge constitute the main parts of the apparatus. Secondly, as a spray producer it cannot be too highly valued, and to those who have never employed it, it might at first seem incredible that such an immense diffusion could be produced from so small a quantity of disinfectant or volatile oil used with one of the smallest instruments. Only a few minutes, are required to permeate an entire house. As a means of disseminating a disinfectant. it would be difficult indeed to surpass it; also as a means of introducing moist air into a chamber, so often required in the bronchial affections of children. It is an admirable contrivance, distributing the moisture evenly and rapidly. For disinfecting

the room and clothing it is equalled only by the super-heated steam chamber, and where such cannot be obtained, the large inhaler of Dr. Coulter's can be substituted with advantage. It can be used in any room large or small, no preparations being requisite; but the least valuable use to which the vaporizer can be put is the perfuming of rooms. We know of an instance where half a drachm of essence of lilac was sufficient to perfume a large house with the sweet smelling aroma by the aid of the vaporizer. Altogether we commend it as one of the best vaporizers for sterilizing rooms and producing hot or cold vapors as required.

PAINLESS CIRCUMCISION .- Dr. G. W. Overall, in the Med. Record, gives the following as his method of circumcision. Apply a rubber band around the penis half an inch back of the corona, in order to limit the effects of the cocaine. Place a pillow on patient's chest to prevent his seeing the operation ; then, with a small blunt-pointed syringe, inject a few drops of a freshly prepared 30 per cent. solution of cocaine into the preputial orifice. Hold the end of the prepuce with the left hand, to prevent escape of the fluid, and with the right hand force the latter to come in contact with the entire mucous membrane. Hold the prepuce in this manner for five or six minutes, when the membrane will be anæsthetized. Now inject the necessary amount of the solution into the tissues of the foreskin, taking care that the needle is passed through the mucous layer instead of through the skin, pain being felt if the latter procedure be adopted. The operation can be carried out in this way without the slightest sensation of pain being felt. Absorbable sutures should be used.

Hydrochlorate of Ammonium by Inhalation IN MEMBRANOUS CROUP.-In the Medical Record (Therap. Gaz.) Dr. Dwight L. Hubbard calls attention to the use of hydrochlorate of ammonium in laryngismus stridulus and laryngo-tracheal diphtheria. Dr. Hubbard believes that this ammonium salt is of value, in the first place, as a heart stimulant, producing better oxidation of the blood, by bringing it in more frequent contact with the inspired air; second, in relieving the spasm and ædema of the glottis; and, third, in softening the false membrane. His method of employing this remedy is to place the patient in a

small closed room, having a temperature of about 80° F., then generating sufficient heat to drive off copious fumes. This is continued for fifteen minutes, and repeated every hour; while after each application the room should be ventilated as much as possible without reducing its temperature. Dr. Hubbard writes, that after the use of this remedy so employed copious perspiration follows, the breathing becomes less stridulous, the mucus softer and more easily expectorated, and sleep generally is produced.

INFLAMMATION IN AND ABOUT THE HEAD OF THE COLON.-Dr. L. S. McMurtry, of Louisville, Ky. (Med. Mirror), thus concludes a paper on this subject :--- 1. Inflammation about the caput coli is, as a rule, inflammation of the appendix. 2. A certain proportion of cases will recover spontaneously by resolution. With these, recurrence of the disease is common. 3. In the larger proportion the disease will endanger life, and may at any moment assume a condition practically hopeless. 4. Early operative interference involves less danger than delay, and should be resorted to in all cases in which a high grade of inflammation is persistent. The essentials of the operative technique are brief anæsthesia, quick and thorough work, removal of the appendix, irrigation and drainage. The lateral incison is preferable to the median.

THE LOCAL USE OF OIL OF WINTERGREEN IN RHEUMATISM.— The Mercredi Médical mentions that Dr. Staples, of England, has, for the past four years, been using oil of wintergreen in the local treatment of rheumatic affections, sub-acute and chronic. He employs a liniment of equal parts of oil of wintergreen and olive oil, afterward keeping the member covered, and says that the pains disappear at the end of from four to six hours. It is, moreover, efficacious in the chronic form. Of over a hundred patients so treated, two only have received no benefit.

PEROXIDE OF HYDROGEN FOR CLEANING THE HANDS.—Noble (Med. and Surg. Rep.) advises the following method for rendering the hands aseptic: The nails are trimmed reasonably short, and the subungual spaces cleared with the knife blade. The hands and forearms are then thoroughly washed in warm water, a good lather being made with soap, and a stiff nail-brush being vigorously applied. The water is renewed three times. The hands are next soaked in a saturated solution of permanganate of potassium, and this removed by soaking them in a saturated solution of oxalic acid. According to circumstances, the finger tips are then soaked in peroxide of hydrogen. For the final bath, corrosive sublimate solution, one to one thousand, is employed. The hands remain in the sublimate solution three minutes.

SUMMER DISTURBANCES OF CHILDREN.—In fermentative disorders of the alimentary canal in the young, middle-aged or old, Listerine has given most satisfactory results. In the summer diarrhœa of children, Dr. I. N. Love, of St. Louis, speaks very highly of it, given in combination with glycerine and simple syrup. A formula that I have time and again used—in fact, it has almost become routine with me of late years—is as follows :

<b>R</b>	-Bismuth subnit	., .		•			3 88.
	Tr. opii,	•					gtt. xx.
	Syr. ipecac.,						0
	Syr. rhei arom.,	•				āā	3 ij.
	Listerine,						3 ss.
	Mist. creta, .		•				3 j.

M. Sig.—Teaspoonful as often as necessary, but not more frequently than every three or four hours. This for children about ten or twelve months old.—D. J. Roberts, M.D., in South. Pract.

CHLORAL VS. IODINE FOR INJECTING CAVITIES.— M. Marc See states that he has found a 10 per cent. solution of chloral hydrate to act equally as well as tincture of iodine as a coagulant for injecting hydroceles and other cavities, and to be devoid of the intense irritation and pain frequently, caused by the latter. In hydroceles M. See injects about 30 gm. at once into the sac, repeating the operation two or three days later. He also uses the chloral solution as an injection in treating varicose veins, the introduction being made in the neighborhood of the varices.

ANTIPYRIN IN INFANTILE ENURESIS. — Dr. J. Bouisson (*Thèses de Lyon*) states that the effect of antipyrin in the treatment of the enuresis nocturna of childhood are "simply marvellous." The remedy is exhibited in doses of 10 grains, repeated to the third time (30 grains in all), at intervals of one hour, commencing four hours before bed-time. Of eight inveterate cases in which the disease had existed for several years, and upon which every other remedy and method of treatment had proved futile, every case was completely cured. Several months have elapsed since the treatment, and in no case has there been a relapse, nor have any symptoms of return been noted.

To STERILIZE INSTRUMENTS WITHOUT DULLING THEM.—Von Bergmann's method.—To render instruments perfectly aseptic, and to preserve the cutting edges from oxidation, (Med. and Surg. Rev.,) they are boiled for five minutes in a 1 per cent. solution of carbonate of soda. They can remain in this solution indefinitely, without rusting or dulling the cutting edge. When required for operation they are taken out, dried with a sterilized piece of gauze, and handed to the operator. Whenever, in course of the operation, they come in contact with anything not aseptic, all that is required to re-sterilize them, is to dip them for a few seconds into the boiling solution of sodium bicarbonate.

SMART SAVINGS OF DUNCES.—A student (says the Med. Rec.) taking the examination before the State Board of Examiners of Virginia for license to practice gave the following startling information: "Symptoms of œdema of the glottis are that the patient feels husky and has sore throat. I would amputate it if necessary. I would do the operation within three or four months if it was a bad case." That is about on a par with the man who said that in post-partum hæmorrhage he would ligate the post-partum artery, or the one who thought that pyelitis was inflammation of the pyloric end of the stomach.

FOR ALCOHOLIC EXCESSES, ETC.—Dr. Hooved (Cincinnati Lancet and Clinic) gives the following:

R-Chloral hydrate,

Potassium bromide,			āā	3 iv.
Extract cannabis ind		•		0 - 10
Extract hyoscyamus,			ãā	gr. xiv.
Chloroform,				3 ij.
Water (boiling), to				0 ij.

Dissolve the cannabis in the chloroform, and add the chloral hydrate. Pour on this the boiling water, and then add potassium and hyoscyamus. When cold, filter. Combined with aromatic spirits of ammonia, we get a safe and efficient remedy for alcoholic excesses and other forms of acute mania in which insomnia, delirium, and like symptoms are manifest.

THE "POTATO CURE."—The potato seems to be taking the place of laparotomy and gastrotomy in removing foreign bodies introduced into the alimentary canal. Several cases have been reported in which screws, nails, pins, etc., have been successfully carried through the alimentary canal of children who had swallowed them accidentally. Potatoes should be fed in large quantities, and as they leave a large residue, the foreign body becomes imbedded in them and passes off on moving the bowels with a mild laxative, on the fifth or sixth day.

PHTHISIS .- Dr. O. P. Bennett, Chicago, reports (Weekly Med. Review) several cases of phthisis treated by subcutaneous injections of solutions of iodine and of chloride of gold and soda, and inhalations of chlorine gas. He commenced by giving hypodermic injections of the solution of iodine, equal to one-twentieth of a grain, which was gradually increased to one-sixth of a grain, daily for a week or two, except when symptoms of iodism. disturbation of the alimentary canal, or loss of strength were manifested, when he changed to the chloride of gold and soda solution, which was gradually increased from one-twenty-fourth to oneeighth of a grain. He believes this treatment to be of great benefit in many cases of phthisis, of no benefit in others, while in others it seems to hasten death.

MORPHINISM.—The following is useful in breaking off the habit, modifying it to suit special cases :—

R.—Morph. sulph. or tr. opii., . q. s.

Fl. ext. viburni prunifol. . 3 ss.

Elixr. ammoniæ valerianæ, . 3 iij.

Elixr. sodii. bromidi, (gr. v. to the 3) qs. 3 vi. Sig.—3i. when required.

The physician must get the confidence of the patient, by assuring him that the substitute employed will absolutely take the place of the drug. W. J. Cottell states in the *Am. Pract. and News*, that he has positively cured over forty cases by this means.

#### THE CANADA LANCET.

EARLY SYMPTOMS OF PREGNANCY .---- Waldo (Poss Graduate) reviews the symptoms of early pregnancy with their diagnostic value. He regards suppression of the menses as only corroborative, and not a symptom of any great value in itself. since suppression may occur from many causes other than pregnancy, and menstruation may persist during some months or the whole of gestation. Digestive disturbances are of little diagnostic value. Changes in the mammæ-as dilatation of the veins on their surface, a sense of weight, darting pains, and an increase in their size are of some diagnostic importance. It has been claimed that milk or colostrum in the breasts of a millipara was positive evidence of pregnancy, but there are a number of cases reported that prove the fallacy of this statement. Montgomery considered that the development of a secondary areola, and of the elevations named after him, were positive evidence of a gravid condition. Still, Montgomery's glands may develop in women who are suffering from some form of inflammatory disease of the uterus or its appendages. Pigmentations and the shape of the abdomen are of very little importance.  $\mathbf{A}$ number of writers have mentioned blueness of the vulva as a very important early sign of pregnancy. It is such if the uterus is in its normal position, if there is no obstruction to the general return circulation, and no inflammatory disease in the uterus or its appendages. The most important of all the early symptoms of pregnancy is the socalled "Hegar's sign." This consists in a loss of the nulliparous pear shape of the uterus. Its contour no longer gradually diminishes as it approaches the uterine neck; the body, on the contrary, bellies out over the cervix in the transverse diameter, in particular antero posteriorly, and the organ, instead of being pear-shaped, resembles very much an old-fashioned, pot-bellied jug. This sign can be obtained as early as the sixth or eighth week of gestation, and is produced by nothing but gestation alone.

JOSEPH P. Ross, A.M., M.D., Prof. Clinical Medicine and Diseases of the Chest, Rush Medical College, Chicago, Ills., says: For the past three years I have prescribed Bromidia very frequently, and have never yet been disappointed in securing the results required. In cases when there is insomnia without pain, in the delirious stages of acute fevers, in delirium tremens, puerpural mania, in short, in all those cases requiring soporifics, I find Bromidia invaluable. I consider Bromidia an excellent combination.

CYSTITIS IN WOMEN.—The Jour. de Méd. de Paris gives the following prescription for cystitis in women :

**B.**—Citrate of potassium,  $\dots$   $\frac{1}{2}$  ounce. Fluid extract of triticum repens Tincture of belladonna, of each 1 "

Fluid extract of buchu,  $\ldots$   $\frac{1}{2}$ 

Water, a sufficient quantity to make 4 ounces. A teaspoonful in a wineglassful of water three times a day.

BALANITIS.—Dr. W. R. Chichester states that he has obtained good results from the employment of the following (*Med. Rec.*):

R—Atropiæ sulphatis,	•				gr. j.
Zinci sulphatis, .	•	•	•	•	gr. ij.
Ac. boracic,		•			gr. v.
Aq. destillat,					
Sig - Apply two or three					

Sig.—Apply two or three times a day with a brush.

DR. DE LALLIS reports (*Therap. Gaz.*), the use of creolin in scabies in the form of a five-per-cent. ointment, rubbing it once daily into the affected parts. Only four such applications are said to be necessary to produce perfect cure. Creolin, in his opinion, is preferable to any other remedy for this purpose, especially possessing the advantage over sulphur of not producing any eczema of the skin, and not staining either the skin or the linen.

FOR RICKETS.—In\_the Jour. de Méd. de Paris the following prescription is given for the treatment of rickets :

<b>R</b> —Phosphorus,			gr. j.
Absolute alcohol,			3 v.
Spirits of peppermint,	•	•	gtt. xxx.
Glycerin,	•		3 ij.—M.

Sig.—Six drops of this mixture in water three times a day, and after one week another drop may be added.

COLD IN THE HEAD.—For cold in the head, while in the acute congestive stage, there is no better remedy than gelsemium (*Med. Compend*). One large dose, say 10 minims of the fluid extract, taken upon going to bed, will effectually dispose of this troublesome and uncomfortable affection.

"

DANGER OF SULPHONAL.-Says The Lancet, although sulphonal is probably one of the safest, as it is one of the most efficacious, among the hypnotics recently introduced, the series of cases published by Bresslauer of Vienna shows clearly that it has certain dangers. The degree of peril is difficult to estimate, as the patients were lunatics, and were also apparently feeble; but the fact is significant that out of seventy-seven patients who were treated with the drug, no less than seven showed serious symptoms, and in five of these there was a fatal termination. It ought to be mentioned that the patients had been taking the drug for a considerable time in good doses, and had borne it well until symptoms of disturbance set in, these being great constipation, dark brown urine, slow, or in some cases rapid but feeble pulse, discolored patches resembling purpura on the limbs, and great prostration. In the cases which ended fatally the cause of death was heart failure, with œdema of the lungs.

CHROMIC ACID IN HYPERIDROSIS PEDUM.-(Jour. de Méd.) In 1889 the Prussian minister of war ordered experiments to be made with pure chromic acid for the cure of sweat-foot. The results were satisfactory. A cure often resulted from a single application made in this manner : The sole of the foot and the space between the toes were bandaged after applying a layer of absorbent cotton soaked in a five per cent. solution of chromic acid. The parts thus treated became hard and dry, and the comfort of marching was much increased thereby. If there are lesions of the foot, it is best not to begin the treatment with chromic acid until these are cured. There are no evil after-effects, and of course no ill effects from the suppression of perspiration.

TREATMENT OF CONDULOMATA may be summed up as follows, Internat. Jour. of Surg. :

1. Many disappear when kept dry by the application of powders, the best being either calomel or boracic acid.

2. In some cases an astringent, such as tannic acid, will effect a cure; but many cases require more radical measures.

3. In the more severe cases, all treatment should have as its object the destruction of the base of the growth. In ordinary cases, electrolysis is the best by means of an atomizer.

treatment. In very severe cases, the galvano-cautery is the very best treatment, as there is no hæmorrhage, and little pain. The Paquelin cautery and escharotics almost invariably leave a painful wound, confining patient to bed.

4. After removing condylomata, the condition that caused them should be treated, otherwise they are apt to re-develop.

TREATMENT OF RHUS POISONING WITH IPECAC. —Dr. W. S. Gilmore, of Sorgho, Ky. (Country Doctor) recommends the following with confidence, having used it for six years without a failure :

<b>R</b>	-Ipecac.	pul	lv.,	•	•	•	•	•		•	3 iij
	Aquæ,	•	•	•	•	•	•		•		0 j.
	~.										•

M. Sig.—Apply freely to the affected part every two hours.

The heat, itching and pain are relieved as if by magic, and in the great majority of cases two or three applications are sufficient to produce a cure. The only difficulty that has been noticed is a slight cooking or blistering of the skin when the solution was too strong. That, however, is easily obviated, as the weaker solutions seem as efficient as the stronger. He thinks it as near a specific as we have in medicine.

SALICYLIC ACID FOR THE PREVENTION OF SCARLET FEVER.—Sticker reports the observations of G. de Rosa (*Centralblatt f. klin. Med.*) who administered salicylic acid, in doses of one to five grains daily, to sixty-six children exposed to infection during an epidemic of scarlet fever. Twenty-seven cases of the disease existed in the building, when administration of the drug was commenced. Only three of the sixty-six contracted the disease, the failure in these being ascribed to a longer exposure to infection.

DIPHTHERITIC MEMBRANE. — Caldwell recommends the following solution for dissolving diphtheritic membranes (*Med. News*):

R-Papain,	•	•	•		3 ijss.
Hydronaphthol,	•	•			gr. ij.
Acid muriatic,	•	•			gtt. xv.
Aq. destillat,	•				3 iij.
Glycerini, .	•	•		•	3 ij.—M.

Sig.—Apply to the affected part every half hour by means of an atomizer.

TREATMENT OF CHRONIC RHEUMATISM.—The following prescription is recommended in the treatment of chronic rheumatism, by Fothergill, *Mid. Prog.*:

B-Arsenious acid,			1.20	grammes.
Powdered guaiac., .			12	
Pulverized capsicum,			2	
Aloes and myrrh, .	•	•	12	

Make 120 pills. A pill to be given three times a day, together with a diet rich in fatty substances.

FOR CHILBLAINS. —Dr. Price A. Morrow says (*Jour. of Am. Med.* [Assoc.) that the following is very useful:

R.—Acidi carbolici,					3 j.
Tincture iodinii,	•				f 3 j.
Acidi tannici,					3 j.
Cerat, simplicis,					3 iv.
Minon home at ft			-	•	3

Misce bene ut ft. ungt.

Sig. :-- Apply two or three times a day.

CHRONIC GONORRHEA.—Dr. Roicki (*Deut. Med.* Woch.) recommends injections of ergotine in chronic gonorrhœa, as a promply acting remedy. They are borne very comfortably by the patient. He prescribes it in the following formula :

ULCER OF STOMACH.—Dr. Kohl (Weekly Med. Review) gives the following method of diagnosing ulceration of the stomach: If ulceration is suspected, direct the patient to eat some finely chopped onion, when, if it exists, a burning sensation will be produced, as if caustic had been applied.

DIABETES. Dr. Kohl, of Belleville, Illinois (Med. Review), has used bromide of arsenic in a number of cases of diabetes, and is fully convinced that it is the most valuable remedy we have for this disease. Used in connection with the dietary treatment of gluten flour he has had good results.

DR. CHARLES W. DULLES has retired from the editorship of the *Medical and Surgical Reporter*. Under his management the journal was most successfully conducted. We are sure that the Dr. has the best wishes of all of those of us who are still in harness. He has been succeeded by Edward T. Reichert, M.D., to whom we wish an equal measure of success.

# Books and Lamphlets.

SURGERY: A Practical Treatise with Special Reference to Treatment. By C. W. Mansell Moullin, M.A., M.D., Oxon.; Fellow of the Royal College of Surgeons; Surgeon and Lecturer on Physiology to the London Hospital; formerly Radcliffe Travelling Fellow of Pembroke College, Oxford, England: assisted by various writers on special subjects, with five hundred illustrations. Philadelphia: P. Blackiston, Son & Co.

The object of the author is evidently to make this, one of the most recent contributions to the literature of surgery, as practically helpful as possible to students and general practitioners. Hence he has largely avoided controversial materials, strictly confining himself to principles of Pathology which are thoroughly established, and has devoted a generous proportion of his book to the question of Treatment.

Part I. is devoted to General Pathology of Surgical Diseases; Part II. to General Pathology of Injuries, and Part III. to Diseases and Injuries of Special Structures.

The chapters on Injuries and Diseases of Bones and Joints, Injuries and Diseases of Lymphatics, and Injuries and Diseases of the Abdomen, are particularly pleasing to the student. A special feature of the work is the unusually large number of wood cuts which adorn its pages.

Altogether, though there is little of novelty introduced, the subject is presented in a terse, yet comprehensive, manner, which will no doubt render this work very acceptable to those for whom it is more particularly written.

Several printer's errors and a few omissions in the Index will no doubt be corrected in a future edition.

ESSENTIALS OF SURGERY, Arranged in the form of Questions and Answers. By Edward Merlin, A.M., M.D., Instructor in Surgery, University of Pennsylvania; Surgeon to the Howard Hospital, etc. Illustrated. Philadelphia: W. B. Saunders. Toronto: Carveth & Co.

This is a double number, and a good one. It contains much useful information, which is with difficulty obtained from the standard works on Surgery, such as descriptions of bandaging, directions and prescriptions for the various materials used in antiseptic surgery, together with a large number of formulæ for the medical treatment of surgical affections. We can recommend it to students.