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# THE CANADA LANCET:

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## Original Communications.

### ADDRESS ON MIDWIFERY.

BY E. H. TRENHOLME, M.D.,

Professor of Midwifery, University of Bishop's College;  
Physician to the Women's Hospital, Montreal; Attending  
Physician to Montreal Dispensary, etc.

Read 5th August, 1874, before the Canada Medical Association.

The subject of the Uterine Decidua that I have ventured to bring before you on the present occasion, is one that has occupied but little attention until within the last two or three years.

I feel some confidence and pleasure in this undertaking, inasmuch as I had the honor of giving to the profession the first paper upon the uterine decidua. I regard to some of the phenomena met with at the bed-side of the lying-in-woman. However, it is not upon the plea of novelty that I ask your favorable consideration, but rather trust to secure your approval by presenting sound theories, and established facts, that will tend towards greater success in the practice of midwifery.

The external envelope of the foetus, the only one applied by the mother, is the altered mucous membrane of the uterine cavity. This membrane is glandular; but without entering upon the details of its physiological anatomy, it is found to contain, according to the late researches of Dr. G. Leopold, a rich supply of lymphatic glands.

It is well to bear in mind that the decidua is composed of the mucous membrane of the cavity of the uterus alone, and that at labor it is cast off, being severed from the mucous membrane of the neck which remains in situ. As to the change occurring previous to detachment, at menstruation and during gestation, Kundrat and Englemann have stated that "if we examine the process of menstruation, we will find that the cellular elements surrounding

the tubular glands undergo rapid proliferation, especially those layers which are nearest to the cavity of the uterus, while the glands themselves participate in this activity, becoming thereby larger, and thrown into wavy folds, in order to accommodate themselves to this increased length. If there is no necessity for further development, a process of fatty degeneration commences in the most superficial layer, where the growth was most rapid, including the interglandular tissue, the epithelium of the glands and the blood vessels—which may possibly be caused by the fact that this extreme activity of growth may have cut off, by the compression of the bloodvessels, the source of nutrition. The walls of the capillaries now rupture, and the menstrual hemorrhage is established, while the superficial layer of the mucous membrane is gradually cast off with the discharge.

But if fecundation has occurred, this retrograde process does not take place. But, on the contrary, excited by the stimulus of the growing ovum, the inner two-thirds of the mucous membrane now participate in the process, many of the cells in the interglandular substance become larger, and send out prolongations, while their nuclei undergo repeated division.

The orifices of the glands are separated from each other, while their calibre is narrowed by the advancing growth. The mucous membrane gradually loses its peculiarities of structure, and finally appears a transparent homogeneous membrane at term. The ovular and uterine decidua coalesce after the fifteenth week. At birth it has been observed that the uterine decidua hangs in shreds upon the ovular decidua. Virchow notes a case where the membranes after birth "were found to contain not only hypertrophied decidua elements, but also muscular fibre cells; and he further remarks, the case, in this respect, remains unique." I have no fault to find with Virchow's facts as to the actual presence of muscular fibre-cells attached to the decidua, inasmuch as I have time and again recognized the same condition under the microscope, and if that illustrious pathologist had deigned to read the paper, (I have already mentioned,) presented to the Obstetrical Society of London, in July, 1872, he would have found that the case related by him is by no means a unique one. The same author would have found that the character of labor that occurred in the case he records is precisely the same as a case noted by my

self, given in illustration of the views then advanced. But to return to the mucous membrane during gestation, it is self-evident that there is a sufficient contact with the muscular surface to preserve its vitality. Also that pathological changes supervene with the progress of gestation and finally detach it about the end of the ninth month, or 275th day. At this period the changes just mentioned cause the decidua, with its contents, to act as a foreign body, inducing reflex action of the organ, and this ends in expulsion of the foetus and after-birth. Thus we have a satisfactory answer to the question, why labor supervenes at the end of the ninth month.

This view, taught to my class four years ago, is now accepted by several writers on the subject, and will be, ere long, acknowledged by all teachers of midwifery. Dr. Karl Shrøder accepts and enunciates the views advanced by myself as just stated, and says, "that as pregnancy advances a fatty degeneration of the decidua takes place (which reaches its climax at the end of the tenth lunar month,) whereby the organic connection between the ovum and the uterus gradually becomes solved, and the ovum acts as a foreign body and irritates the terminal fibres of the motor nerve of the uterus, the sympathetic; when this irritation has reached a certain degree, a corresponding reflex action, in the form of a contraction of the uterine muscular fibres, takes place, which contraction is repeated as soon as the requisite sum of irritation is again obtained; and this rotation continues, each successive contraction being intensified by the separation of the ovum, from the uterine wall, and therefore stronger and more rapid, until the expulsion of the ovum takes place." Abortion, like parturition, must be due to reflex action of the uterus, excited by the pathological condition of its contents. Admitting the correctness of this view we must seek out the causes that endanger the life and development of the embryo, and not unfrequently jeopardize the life of the mother also. These pathological changes are in my opinion chiefly due to a diseased condition of the mucous membrane prior to conception. From this condition of things as a starting point, I think we can trace a large amount of uterine disorders, such as hyperplasia of the body and the neck, abrasions and ulcerations of the os and cervical canal, with their accompanying phenomena. I am aware that on the other hand, it may be argued that many of the conditions of the uterus; as mentioned,

may be regarded as the result rather than the cause of abortion. Both views may be correct, and are alike worthy of careful consideration in dealing with abortions and in treating uterine diseases.

Apart from pathological conditions of either the uterus or the decidua, we may have the detachment or death of that membrane, with its consequent phenomena, as a result of direct violence, mediate or immediate, applied to the part. Such violence may cause rupture of a bloodvessel and effusion of blood; or general damage of the vessels resulting in stagnation of the blood supplied to the part, and consequent fibroid or fatty degeneration. Whatever the cause, when once the union is destroyed, we have inevitable reflex action induced, which ends in the extrusion of the uterine contents. This result is what we naturally expect in the early stages of gestation, as up to the tenth or twelfth week the chorion and decidua are more or less intimately united and therefore generally expelled together,

At a later period the villi of the chorion atrophy except at the part involved in the formation of the placenta. The connection between the decidua and chorion is feeble, and we may expect the amnios (in some cases at least) to escape with its contents, without necessarily carrying the decidua with it. So far as I know there is no reason why the amnios should not separate from the decidua, as well as the decidua itself from the muscular surface of the uterus. A case of this kind is recorded in the *British Journal of Obstetrics*, (American supplement, 1874, as having occurred in Philadelphia, where "the decidua and placenta were left behind after the escape of the ovum and its clear membrane." Whether such an event is common or not is a point to be settled by further observation and research. It may be that the uterine and epichorial decidua in some cases are separated by fluid, the latter escapes with the ovum, while the former remains in situ. In practice the danger arises from the retention of the after-birth in those cases where strong vascular connection exists, the patent crifices of parts that have been detached permitting alarming hemorrhage. In some cases of retained decidua and placenta, their union with the uterus is so perfect that they are preserved from decomposition and retained for weeks and months. These exceptional cases, however, are not to be a guide in treating them, our duty is to entirely

enate the uterine contents, as anything short of attaining this result leaves our patient exposed to danger. *With regard to premature delivery*, it is clear that the ordinary pathological changes that result in setting up uterine contraction at the end of the ninth month, are in these cases precipitated by some peculiarity of constitution, or diseased condition of the uterus or decidua. One prominent feature of these cases strongly favors this view, viz., that the safety of the mother and child also, is greater, just in proportion to the length of time that intervenes between its occurrence and the normal period of gestation. This lessened danger is due to the comparatively advanced changes (already mentioned) having taken place, whereby lesser violence, than in the early stages, is exerted upon the decidua to effect its separation and expulsion. In both classes of cases, however, the difficulty of detaching the after-birth should lead us to delay as much as possible, the dilatation of the os, in order that the work of separation may be more perfectly accomplished by the uterine contractions. This view of such cases would also teach us, to aid by manipulation over the uterus, the final uterine spasm which completes the expulsion of the fœtus or ovum. In ordinary labor, which will be referred to hereafter, this course will also be of much service in bringing it to a satisfactory close.

*With regard to prolonged gestation* we have a simple and satisfactory explanation, when we once recognize the separation of the decidua as *the exciting cause* of labor. In these cases there is simply a delayed maturation or fatty degeneration of the decidua. Among the lower mammalia the period of gestation varies very much within the bounds of perfect health, and there is no difficulty in accounting for such cases upon the hypothesis just advanced.

The same theory that accounts for prolonged gestation, also accounts for its occurrence within a normal period. Perhaps temperament has something to do in hastening or retarding the ordinary pathological changes.

Important and practical as the views expressed are, in both abortion and premature labor, yet it is chiefly as relating to labor at term that they are most interesting. Not only do we perceive the operations of nature in originating uterine contractions with their consequent results, but we have

also placed before us a sufficient cause for many of the distressing and dangerous phenomena met with in the lying in chamber.

In the decidual adhesions, we see the cause of those imperfect muscular contractions which I have spoken of at some length, in the paper already referred to, which recently Dr. Athill similarly describes as "strong and quick; they do not gradually culminate in a strong pain and subside again, but they are sharp, quick, and cease almost suddenly; and the intervals between the pains are long in proportion to the length of the pains." Again, "the short inert pains which prognosticate hemorrhage." call for the treatment urged by myself two years ago, viz., rupture of the membranes. This is usually enough, without recourse to other aids, medicinal or mechanical, as it suffices to induce regular muscular effort by allowing the ovum to become elongated and the organ space for contraction. When adhesions are present they inflict lacerations of the muscular tissue at the points of union, and thus cause nerve irritation with rapid reflex action; and this quickened action expends its force to a greater or lesser degree locally, ere the whole organ has time to participate in one common effort. Hence, there is a lack of expulsive power, and painful and retarded labor. Time forbids going into the consideration of much that suggests itself in connection with this subject; but there is one point I wish to bring before you. When the adhesions exist—as they most generally do—at the lower third of the cavity or around the internal os, we have a condition of things that is an effectual bar to powerful uterine effort, as well as to any progress towards expulsion. Even if the spasms are regular and strong, they must fail, inasmuch as the adhesions act in a mechanical way and effectually prevent dilatation of the os; while at the same time, the pains are expended without effect on account of the mutual antagonism of the contractile forces. Failure must follow, inasmuch as there is the absence of the one essential condition of success, viz., a concentration of the expulsive powers of the organ toward the outlet. Such cases are always troublesome to the accoucheur, and tedious and distressing to the patient. There can be but little doubt many hours and days of sorrow could be averted by a knowledge of the conditions present and, a timely proffer of the required aid. Fortunately the difficulty in most instances, is

within reach, and the finger of the attendant is able to effect the desired detachment of the membrane from the uterine surface. When once this is done the liquor amnii rushes downward and the bag of waters after filling the os, is driven forward like a wedge by the concentrated, and now powerfully expulsive, uterine effort, because such effort is directed toward the outlet.

The rapidity with which labor is accomplished after the correction of such irregularities is truly marvelous, and most satisfactory to both accoucheur and patient.

I am aware that in some cases the attachment of the decidua is beyond the reach of the finger. When this is the case, two methods of treatment are open to us. First, we can use the uterine sound—as a digital prolongation—and separate the adherent surfaces to almost any extent; or second, we can resort to rupture of the membranes, and allow the fœtus to glide over the decidua, inasmuch as the latter fails to glide over the uterine surface as it does in normal labor.

Much more might be said, but I will draw your attention to but one point more, viz., the great advantage, with regard to both safety and time, that follows the rapid and complete delivery of the after-birth. These results, so much to be desiderated, can generally be accomplished by aiding the last labor-pain, that expels the child, by pressing quite firmly over the uterus with the left hand at the precise moment that the organ is contracting. By this means our object is thoroughly accomplished. If it fails us for the moment, we should wait a little, and then repeat our effort with the next uterine contraction, which, when gently, and skillfully applied, seldom fails to be crowned with success. When it is desired to aid the uterus in expelling the after-birth, be careful not to twist or make strong traction upon the membranes; if you do, the result will be their laceration and partial removal. Besides this, frequently a sac of blood is left behind, which must be a source of great danger. I have no doubt that many cases of puerperal peritonitis and metritis are induced by such means; also the presence of such a foreign body will favor hemorrhage by dilating the organ. Even the retention of the adherent membranes alone are not free from danger, as all will readily admit.

In conclusion, I would urge upon my fellow

practitioners to cultivate an acquaintance with the diseases of women. No subject presents more inviting interest, nor offers a fairer and fresher field for exploration and scientific enjoyment.

### THE BEEF TEA FALLACY.

BY A. MACKINNON, M.D., STRATFORD, ONT.

Many years ago, that greatest of chemists, Baron Liebig proposed extract of meat as an agent of value, in certain cases of extreme nervous and physical exhaustion. This proposition at once sent the medical world agog, and ever since it has been the custom, with practitioners generally, to prescribe extract of beef in all cases requiring a supporting treatment, and in not a few requiring no such treatment, in the full belief that the article in question was the most concentrated, and at the same time the most easily appropriated and life-giving aliment that the patient could have administered to him. The belief is general that extract of beef is the very quintessence of beef, and as a matter of course, infinitely more nutritious than beef itself. Such being the opinions entertained, we need feel no surprise at the wide-spread custom of feeding the sick with beef tea or extract of beef, to the exclusion, to a large extent, of other articles of diet, including beef itself. That this practice is almost universal I need not stop here to show, since the fact must be known to the most casual observer. Physicians generally are in the constant habit of ordering extract of beef as food, in all conditions, from enfeebled health to the most acute disease. If the patient is weak he is at once ordered beef tea; and if he is still sinking he is ordered a still larger portion of beef tea. Such is the practice as we daily witness it, and such is the practice as seen in all civilized countries, and such shall be the practice until many thousand lives more are added to those already sacrificed at the shrine of this stupendous delusion.

What would be thought of the physician who, when called to the bedside, ordered coffee for diet, and more coffee as the patient's strength failed. Of course he would be declared mad; but, as I shall endeavor to show, he is only a trifle more so, than the man whose reliance is on extract of beef.

To the intelligent comprehension of the question it will be necessary to briefly inquire into three points:—

1st. What tissue or tissues of the human fabric more immediately concern the performance of the functions and the continuance of life?

2nd. What kind of food is best adapted to the production and support of such tissue?

3rd. Does extract of beef contain such food in due, or any proportion?

As to the first question, all science teaches us that fibrous tissue largely predominates in the higher order of animals more especially in man. It is contained in bones, tendons and ligaments; nerves and blood vessels are mainly composed of it; the connecting and various lining membranes are almost purely fibrous; and lastly, the great muscular system is made up of bundles of fibres, including the heart itself, which is to the animal what the main-spring is to the watch. To enlarge here would sound too much like demonstrating a self-evident proposition. It is only necessary to add, that every one must be impressed with the important part which fibrous tissue plays in the animal economy, and the paramount necessity of promoting its development and supplying its waste.

The second question is equally easy of solution, since science happily confirms what the experience of ages points out as the most nutritious kind of aliment. In this department of investigation, chemistry has opened up a wide field, the importance of which, to the intelligent physician, is daily becoming more and more apparent. No argument need here be advanced to show that it is from *nitrogenous* substances that muscle and the other fibrous tissues are developed, and the strength of the body maintained, since both observation and science have long ago placed these facts beyond the domain of dispute. *Non-nitrogenous* substances, therefore, do not directly impart strength, or vitality to the system, although useful enough as auxiliaries. It is also admitted on all hands that next to milk and raw eggs, or eggs heated to a point short of coagulation of the albumen, the flesh of animals is the most easily assimilated of all food, being already elaborated and requiring but little change before entering upon its final destination. If to this we add concentration of nutritive power, we can readily see why meat of all kinds, and beef in particular, should be esteemed invaluable as an

article of food. It is on these theories that the extensive use of beef tea and extract of beef is based.

I now come to the consideration of the question, whether extract of beef contains the *azotized* or *nitrogenous* elements of beef. According to the foregoing conclusions—and I have taken nothing for granted, unless it can be shown to be nitrogenous in its ultimate elements, it cannot nourish the system nor impart direct strength to it. By this test, extract of meat must stand or fall. There is not one law for extract of meat, and another law for all other substances. The law is the same in all cases and scrupulously impartial. At the beginning I stated that Baron Liebig was the first to recommend the use of extract of beef. It would appear, however, that he never recommended its *abuse*, for we find that a short time before his death he publicly repudiated ever having stated, that extract of beef was food capable of sustaining life. A synopsis of the paper in which the veteran chemist vindicated his opinions, is given by the *London Medical Record* of April 16th, 1873, and affords highly important evidence on a question on which he was, perhaps, better qualified to speak than any one else.

He wishes it to be distinctly understood that "he never asserted that beef tea and extract of meat contained substances necessary for the formation of albumen in the blood or muscular tissue;" and "that by the addition of extract of meat to our food, we neither economize carbon for the maintenance of the temperature, nor nitrogen for the sustenance of the organs of our body; and that therefore it cannot be called 'food in the ordinary sense,' but we thereby increase the working capabilities of the body and its capacity to resist exterior injurious influences, *i. e.* to maintain health under unfavorable circumstances." The editor of the *Revue* summarises the remaining contents of the paper as follows:—"Those constituents of meat which are *soluble* in boiling water take no part in the formation and renovation of the muscular tissues, but by their effect on the nerves they exercise a most decided influence on the muscular work, wherein meat differs from all other animal and vegetable food. He (Liebig) therefore places extract of meat, (essence) and with it tea and coffee, under the head of 'nervous food,' in contradistinction to articles of 'common food,' which serve for the preservation of the temperature and the restoration of the machine. Beef tea and ex-

tract of meat are of themselves incapable of supporting nutrition or maintaining life. Liebig, however, with justice, condemns the conclusions of those who, from comparative experiments on the nutritive value of fresh meat and meat-extract, taken *per se*, argue that the latter is not only useless for purposes of nutrition, but positively injurious. It should be clearly understood that beef tea and extract of meat are only to be regarded in the light of auxiliaries to food, rather than independent articles of nutriment."

From this it appears "that by the addition of extract of meat to our food we neither economize carbon for the maintenance of the temperature nor nitrogen for the sustenance of the organs of our body," that it cannot be called "food in the ordinary sense," and hence is placed side by side with "tea and coffee," under the general name of "nervous food." This is pretty hard on those who believe that extract of beef is, beef "simmered down" or the quintessence of beef, and who place the utmost confidence in its nutritive and life-sustaining properties.

Science and common sense are here in perfect accord. No one ever dreams that the juices contain all, or any considerable part of the nutriment of fruit. No one imagines that the brown liquid poured off his dinner potatoes carries with it the nutritious elements of that valuable vegetable, or that he would derive any benefit from using potato tea. No one seems to think that his apple dumpling has deteriorated in the boiling, or that apple dumpling tea contains all the nutriment that apple dumpling is capable of imparting. "Those constituents of meat" which are soluble in boiling water take no part in the renovation and formation of muscular tissue." This quotation from Liebig's paper, contains a lesson worth remembering, since it is as applicable to most other articles of food as it is to meat.

From this it is evident the less artificial our food the better, whether in health or disease. Of late years it has been too much the fashion to run after artificial preparations such as extract of meat, concentrated milk, infant's food, chemical food and the like. I have no hesitation in saying that such preparations are not only wholly unnecessary, but absolutely injurious under the ordinary circumstances of life. I grant some of them may be of use for purposes of travel, or under other conditions

placing the simpler and more natural articles of food beyond reach. To this I would make exception in favor of extract of meat, for although it is not food in the ordinary sense, yet it may be given with advantage in cases of extreme nervous and physical exhaustion.

A few years ago every invalid was recommended to transform himself into a carnivorous animal. Copious instructions were given for the preparation of the meat, and confident promises of restoration to health were freely made. Civilized people, however, have always had an aversion to raw meat, and the practice, I believe, has not become very general. Raw meat is prepared for use by first beating it into a pulp. Lately I have been in the habit of directing this pulp to be cooked, simply by adding boiling water to it and agitating the whole briskly. It may be made of any consistency to suit the individual taste, and savored according to the same rule. It may be allowed to infuse a few minutes, as thereby it is rendered more palatable to most persons. In cases of very feeble digestive power, a few drops of muriatic acid well diluted, taken immediately after each meal, will greatly aid its digestion. This preparation is well suited to all cases where no hunger is experienced and mastication is irksome, or where food is loathed and the digestive powers are feeble—in fact in all such cases, as it has been the custom of late years to administer the imaginary food called beef tea or extract of meat. I find that patients prefer the beef pulp, prepared as I direct, to the extract, while in point of nutrition no comparison can be drawn between them. I would only add, that it is quite possible to place too much reliance on beef and brandy in cases of extreme nervous and physical exhaustion. New milk and fresh raw eggs are equally important, and there can be no reasonable doubt, that a due admixture of these and other articles, judiciously administered, is the surest and speediest method of restoring to nature her exhausted strength.

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*The Medical Times*, Philadelphia, says:—Dr. Buchanan, of bogus-diploma notoriety, was arrested, Wednesday, September 16, whilst on his way to the Eclectic College, on the charge of having caused the death of a Mrs. Isaac W. Vandegriff by an improper surgical operation.

## PARALYSIS FROM LEAD POISONING.

BY G. A. WILLIAMS, M.D., BAY CITY, MICH.

A man æt. 35, painter by trade, suffered from lead colic several times, and after one of these attacks was left with paralysis of the anterior part of the thigh. He applied for treatment to a surgical institution in Indianapolis, where he was put under the care of juniors, who used cold water as an application, and other remedies, the nature of which I did not learn. The patient gradually grew worse, and in a short time rebelled against the treatment and left the institution. When I saw him there was inability to stand upon the leg, extend it, or flex the thigh upon the abdomen, and the thigh was very much atrophied, being about one-half the size of the other. There was loss of motion in all the muscles supplied by the anterior crural nerve. In attempting to raise the leg it turned outwards by the action of the biceps, and in crossing the leg over the other, the patient required to lift it with his hands. He had dyspepsia, seminal weakness, &c., and was generally anæmic. I was rather indifferent about taking the case, being of about four months' standing, and as some of our best authorities give an unfavourable prognosis in such cases, I thought there was very little chance for reaping laurels. Nevertheless, I concluded to take charge of the patient, and after explaining to him the great necessity of patience and perseverance, he gave me "a consideration," and I commenced the treatment. I treated him on general principles for the seminal weakness, &c., and gave him iodide of potassium until I supposed the system was free from lead. The iodide of lead could be detected in the urine by boiling. On cooling the yellow spangles of iodide of lead could be seen deposited on the bottom of the vessel. I afterwards gave him nux vomica, and applied electricity; ordered friction from below upwards, and a sponge bath every day. I was also on the "qui vive" for malaria, and as he frequently had symptoms of it, the taking of quinine was laid down as part of his "religion."

This treatment was continued for about two months without any perceptible improvement, when the hitherto torpid muscles began to respond to the action of electricity, the thigh began to increase in size, and instead of raising his leg with his hands he was able to cross it over the other in the natural

way. The treatment was continued for about two months longer, when the patient was discharged cured, with the exception of a slight weakness of the knee.

In the use of electricity I have found a little care necessary in order to derive the full benefit of the treatment. Some physicians recommend changing the current from the direct to the inverse, but I think I have succeeded best by using the direct current, that is, passing the impression in the natural course of the nerve. In the nervous system we know that ordinary impressions pass in two different ways only in the different sets of nerves, but in using electricity the impression passes in both directions in both sets of nerves, for in taking hold of the poles and changing them from one hand to the other we feel the same impression in both hands. In acting upon the anterior crural we place the foot upon the positive pole in a basin of water, and apply the negative to the periphery of the nerve; in this way the impression passes up both sets of nerves, and down the anterior crural to the negative pole. If we apply the poles *vice versa*, the impression traverses the anterior crural in the inverse direction, and thus it escapes the impression we wish to make upon it. The principal feature in this case is the evidence of the importance of patience and perseverance.

I have discovered a new mixture since I came here, which, I believe, is "indigenous" to the Saginaw alley. It is called the Mist. Infantum. It consists of 3 grs. of tannic acid to every ten grs. of quinine, mixed with syrup of orange. This mode of preparation almost covers the bitter taste of the quinine. It is always retained, and is particularly useful in the treatment of infants with irritability of the stomach.

## FRACTURE OF THE SKULL—RECOVERY.

BY N. O. WALKER, M.A., M.D., M.R.C.S., ENG.; PORT DOVER.

The perusal of your article on "Moral Prophylaxy" has brought to my mind the case of a patient whom I have recently discharged. The ratiocination by which this case was revived in memory it would be tedious to unravel; suffice it to say that the "union of mind and matter," and the old anatomist's location of the exact seat in the base of the brain, whereon the "anima" or "psyche"



bestrode the saddle, to which the reins were attached, to guide the complex vehicle of the human organization,—all floated dimly across my mind, “reminiscences of my student investigations.” The brain was always, by early physiologists, and is by present old women, clothed in a panoply of the “immaterial presence.”

What others may have from experience learned, I am convinced that the *anima*, *psychic*, or immaterial portion of our “complex organization” is equally present in the case of the minutest capillary as in any portion of brain. The brain is only a “*receptaculum omnium virum naturæ immaterialis*.” But I am not about to theorize, (Professor Tyndall does enough of that,) as a country practitioner has little time to toss polemical balls. We take patients as we find them, learn from their locations, habits, business occupation, *et omnibus rebus*, the particular drain on their economy, “material and immaterial,” to which they are subject, and from our professional repertory of taught and intuitive (if you like) knowledge, apply in a common sense way, assistance to “violated nature,” *i. e.* vital force diverted from its even channel by disease or injury.

Without further peroration I will curtly give the details of a serious injury to the brain of one Matthews. This patient, a boy, *æt.* 12, while viewing the gambols of some fiery steeds on a field, himself perched on the fence, was precipitated by the breaking of the top rail, which he bestrode, amid the “stud.” He remembers nothing more, than a concourse of horses around him. Some time after (the interval unknown) he was found lying insensible in the field, covered with blood. He was brought home and I was sent for. Accompanied by my student, R. Tyrrell, I entered the place, and found the patient recovered from insensibility, and vomiting had ceased. After having the head shaved I explored the wound of the scalp with my finger, and found only ONE of many lacerated wounds, through the scalp on the right side of the cranium, which extended into the plates of the skull. This one  $\frac{3}{4}$  inch by  $\frac{1}{4}$  inch, extended through both plates of the skull. I directed my student after me to explore the wound, and observed, after the withdrawing of his fingers, a quantity of brain matter follow, perhaps 3j. This wound was located in the parietal bone,  $\frac{1}{3}$  from the occiput and  $\frac{1}{3}$  from the top of the cranium. All

other wounds were closed by adhesive plaster, and this kept open. Ordered cold to the head, and prescribed *veratrum viride* in small doses. Expecting serious results either from primary or secondary effusions, I saw the patient daily for several days. *Not one bad symptom manifested itself.* Brain matter mixed with blood was poured out for four days; then brain matter mixed with sero-purulent matter. There must have discharged under poultices two ounces or more of brain matter. The pulsations of the brain were visible in the contents of the wound for the first seven days; then for a few days visible in the bottom of the wound, and ultimately ceased. The recovery was speedy and complete, not a single bad symptom through the whole process. The local treatment was cold to the scalp and poultices to the wound through the skull; the constitutional was, a few grains of calomel and colocynth, followed by small doses of salts each morning for several days. This with *veratrum viride* constituted the whole treatment except dressing. After the first ten days all medicines were withdrawn. The boy had been subject to periodical headaches, and these pursued the even tenor of their way during the healing of the brain. Pupils natural, and little or no pyrexia after the third day. Since the wound has healed, the outer plate of the skull for 2 by 1 inches is depressed around the seat of penetration. The lad is quite well, and suffers (as yet) no effect whatever from the accident. I expect none. Should any future developments occur (such as epilepsy or irritability of mind) I will try to resuscitate the above, and will then become physiological.

### Correspondence.

To the Editor of the LANCET.

SIR,—I wish, through your columns, to express my opinion in reference to our Tariffs of fees. How it may be in other sections I do not know, but in this district I hear continually the cry, “Your charges are too exorbitant.” As a rule I make up my accounts strictly in accordance with the Tariff adopted by the Association, and in cases where the persons are only in moderate circumstances, (the majority, for none or few are rich here), I throw off from one-fourth to a half, but yet, I am said to be extortioning.

This, I assure you, is very unsatisfactory to me indeed, therefore, if the Council or some one would devise a scale of fees, which would be generally satisfactory, or as I think, if our charges were made uniform throughout the Province, and thoroughly published, it would, to a great extent, do away with so much complaining among the people.

It is frequently said to me that Dr. so-and-so only charged me so much (generally about half my charge, after deducting from the Tariff) for perhaps double the quantity of medicine, or for going double the distance. If all were to be guided by the Tariff, it would do a great deal to remedy the fault. For my part, I am heartily tired of hearing such complaints, especially when I have put my charges down to the lowest rate: if it was only occasionally, I would not mind it, but it is the general complaint. Hoping you can devise a remedy, I am, Sir,

Yours respectfully,

J. ADAMS.

Gravenhurst, Sept. 11th, 1874.

To the Editor of the CANADA LANCET.

SIR,—In the October number of your journal (page 50) we notice a form for Tully's Powder which is not in accordance with the original. It may be a good one, but ought not to bear the name. We were very much favored by having an intimate acquaintance with Dr. Tully, and were much aided in our pharmacy by personal conversation with him, and by preparing his prescriptions. The following is an exact copy of his form for this beautiful powder:—

R—Morphiæ Sulph. gr. j.

Camphoræ

Creteæ.

Glycyrrh. rad. aa ʒ j.—M.

Each item is to be very fine and all intimately mixed. In this vicinity "Tully's Powder" has largely taken the place of Dover's Powder. By some it is incorrectly called camphorated Dover's Powder.

If you think it worthy or of importance enough to print the true form, the above will be useful to whoever may wish to follow the author strictly.

The form given in Tully's *Materia Medica* vol 1, part 2, page 1260, was given to his publisher and is like the above.

Respectfully,

H. & J. BREWER.

Springfield, Mass, Oct. 14. 1874.

## Selected Articles.

### CLINIC ON CALCULUS OF THE BLADDER

BY PROF. D. HAYES AGNEW, M.D., PHILADELPHIA.

(Reported by D. F. Willard, M.D.)

Gentlemen,—I bring before you a patient who has been complaining for many years of symptoms which are briefly as follows: frequent desire of micturition, straining in performing the act, sudden arrest of the flow, followed after some minutes of expulsive efforts, by a renewal of the stream, pain in the bladder, perineum and end of the penis.

These, as you all know, are distinctively the features presented by a case of stone in the bladder, and yet no one is justified in establishing a diagnosis without a thorough physical exploration of the parts, since stricture, cystitis, enlargement of the prostate, and several other diseases may give rise to a very similar train of symptoms. The steel sound is therefore always to be employed in every case of vesical disease in which the symptoms have been of long continuance. By means of this instrument the presence of a foreign body can be easily detected, unless it is hidden away in some cyst or pouch, formed either by a sacculation of the viscus, or by inflammatory lymph.

The existence of such disguised cases should always be remembered, and a single examination is not sufficient to decide the question as to the non-existence of a concretion. By varying positions of the patient, however, and by different degrees of distension of the bladder, you may usually detect one if present. I would earnestly warn those of you who may be consulted by patients living at a distance, that you do not send them upon their return journey on the same day of the exploration, since cases of "urethral fever," accompanied by chill, flashes of heat, pain, etc., are not uncommon. The best preventive of this unpleasant occurrence will be a full dose of morphia, together with rest in a warm bed.

I introduce a large sound into this man's bladder, and as I now attach a sounding-board of deal wood, the click of a hard body will be heard in every portion of the room. We are satisfied that he has a calculus, and in order to discover its size, I withdraw the instrument, introduce a lithotrite, and by grasping the stone in several positions am satisfied that it is not large. Again, to ascertain if there are multiple concretions, I secure this one in the grasp of the lithotrite and then use it in sounding for others. I discover none. From the click which the stone gives to my instrument, and from its surface, I should judge that it was largely composed of uric acid, a fact which can be further established by testing his urine, which in such a case should be acid, and throw down a deposit of urates.

Were the urine alkaline, with large phosphatic deposits, we should infer that at least the covering of the concretion consisted of phosphates.

Again, oxalate of lime may be discovered in the urine, but a mulberry calculus is not often difficult of diagnosis upon contact with a sound. Stones, however are frequently mixed in their composition, the nucleus differing from the covering, or the several salts being deposited in alternating layers. An educated touch will soon detect the differences in the various forms, almost as soon as struck.

I have so frequently spoken to you of the cause and method of formation of these bodies, as well as their various composition, that I need not again dilate upon these points. The most important question is as to the method of relief. The two operative modes of treatment are lithotomy, and lithotripsy. The former you have seen me frequently perform in this amphitheatre, and know that is my favorite procedure; but the latter is certainly a valuable operation in a certain number of cases, and it is the plan which I shall pursue in this instance.

In giving lithotomy the preference in the present case I am influenced by the age of the patient (73), by the large and healthy condition of his urethra, by his freedom from renal disease, and by the probable soft nature of the calculus. These are the chief determining points in deciding this question. His age is such as to render any operative procedure somewhat hazardous, but lithotomy at this time of life is quite liable to be followed by a fatal result, and lithotripsy is certainly preferable if at all possible. Of course, it may be followed by a low form of cystitis, and is frequently complicated by enlargement of the prostate, but these are conditions the risks of which must be undertaken, since this stone, if left to itself, will certainly produce serious consequences.

In young children the two operations admit of no comparison, lithotomy being almost uniformly successful, while lithotripsy is difficult and dangerous, from the small size of the outlet for fragments, and from the irritable condition of the parts. From puberty to the age of sixty, the advocates of lithotripsy advise that nearly all stones less than one inch in diameter, or falling below one ounce in weight, be crushed, while larger ones be removed by the knife. I am still, however, inclined to believe that lithotomy would yield as large a percentage of cures in the same class of cases, as is now reported from lithotripsy. It must be remembered that the latter is ordinarily performed under the most favorable circumstances. The stones, small in size, are consequently of more recent date, and are correspondingly less liable to be associated with serious disease of bladder or kidneys, one of the most important of all complications, since most likely to cause a fatal result. Lithotomy is performed upon all classes of cases, after the most favorable ones have been

selected for lithotripsy; with old and large calculi, and with numerous coexisting maladies. Is it any wonder, then, that it yields a higher mortality? When we have statistics based upon the comparative merits of the two operations, in precisely similar cases and conditions, then and only then can we arrive at a truthful conclusion. Do not understand me that I am opposed to the operation, for I am decidedly favorable to it. I am only defending lithotomy from unjust comparisons.

An oxalate calculus does not necessarily preclude the crushing operation, provided it is not larger than a bean, but one of large size will break an instrument. It is liable, also to present very sharp fractured angles. The soft phosphatic form is certainly the most desirable one, although the minute fragments into which it is reduced may form nuclei for secondary formations.

When several stones exist the cutting operation is preferable. I have spoken of the state of the urinary apparatus as determining the choice of operation. With an irritable or strictured urethra, I should decide against lithotripsy, unless the former condition could be relieved by the passage of instruments, or the latter dilated to the full extent of the normal tube.

With cystitis, or an irritable bladder, the presence of the sharp-edged fragments is frequently productive of fresh inflammatory conditions which seldom arise after lithotomy. With diseased kidneys, the urine containing albumen and casts, the last mentioned operation yields but one exciting cause of new inflammatory changes, while lithotripsy offers several. With sacculated and atonic bladders, the crushing operation is seldom advisable. With enlarged prostate the difficulty of clearing the bladder of the debris following crushing was formerly considered as unfavorable to the method, but with the recent advances in the means of completely emptying the viscus, I do not see that it offers any obstacle.

In the present case I am led to lithotripsy, for the reasons which I have above named, and from the fact that the urine only contains a little mucus. The condition of the urine should always receive careful examination before any attempt at operative procedure.

Having decided upon the operation, preparatory means should be taken to obtund the sensibility and irritability of the urethra and bladder, by the occasional passage of sounds, and by rest, alkaline drinks, etc.

In regard to anaesthetics, I avoid them in all cases where the effect of the shock would not more than counterbalance the benefit to be derived from the intelligent sensations of the patient.

I do not inject the bladder as a rule, merely directing the patient to avoid passing his urine an hour preceding the operation. With the exception of Fergusson lithotrite this was a matter of necessity, lest the mucous membrane of the bladder be caused

between the blades, but with Thompson's instrument, in which the female blade is made wider than its fellow, I see but little danger if due care is used. This Thompson's lithotrite, which you here see, is a most excellent instrument; the male blade is easily slid upon its fellow, and the other mechanical arrangements are nearly perfect. The blade is made from a solid piece of steel, and not by being bent into position from a straight bar. Any instrument, however should be thoroughly tested by being made to crush large fragments of stones previous to its use, since the breakage of the arm would be an unpleasant occurrence in the middle of an operation. Such an accident would render lithotomy at once unnecessary.

The best lithotritry position is at the foot of a hard bed or low table, in such manner that the operator can stand between the knees of the patient. In cases of enlarged prostate the hips should be considerably elevated, in order that gravity may cause the stone to escape from its hiding place at the base of the bladder.

If you will watch the introduction of this well oiled instrument you will see that it is easily accomplished in the normal urethra, but if the canal was narrowed at the membranous portion it might be quite difficult. Any hindrance at the prostate could be relieved by a finger in the rectum. Once entered, the work of seizing the stone is commenced, a procedure which is sometimes easy, but frequently quite difficult. For myself I prefer only a very moderate distention of the bladder. When the lithotrite comes in contact with the calculus, the blades are opened, and the body is made to fall between them, when it is grasped and fastened. Thompson lays down certain rules to be observed in this search, which may be of service when the body cannot be easily found, but as a rule you can be best guided by the point at which the instrument is impinged upon. These groping positions he names "vertical," "right and left inclined," "right and left horizontal," "right and left reversed inclined," and "reversed vertical." A finger in the rectum will sometimes lift a stone from its bed and bring it within the grasp of an instrument, but the difficulties of seizure are not ordinarily very great.

I now rotate the instrument to assure myself that it is free from the mucous membrane, and then slowly turn the screw until the stone yields. Some advise the rapid movement, in order to percuss the stone and split it, but I prefer the slower crushing process. The blades being run down together, one of the fragments is seized in the same manner as at first, and the breaking process repeated, the length of the sitting being regulated by the amount of pain and irritation developed. This old man, as you see suffers from the pressure of the instrument and from the manipulations, and we will not, therefore, prolong the process beyond breaking the stone and one or two of the fragments. preferring to leave the

remaining necessary operations to a subsequent time, rather than to light up an inflammation which might prove most disastrous. The stone crumbles easily, and as I now close and withdraw the blades some minute fragments of a soft uric acid stone are removed, with but little blood.

The patient will be at once placed in a warm bed, and suppositories containing two grains of opium and one quarter of a grain of ext. belladonna introduced into his rectum. He may drink liquid in full amount, but must not be allowed to rise while passing water, for the first forty-eight hours, lest some fragment fall forward and become lodged at the neck of the bladder, or in the urethra, and add to the irritation. In the event of such an accident the attempt may be made to return the fragment to the bladder, by means of a catheter, or by full injections, or it may be coaxed forward by urethral forceps, or a short-bladed lithotome. These failing, and the suffering great, the knife must be used to cut directly down upon the body.

In this case I have broken the stone so finely that the debris will probably soon begin to pass away, although we shall not permit the man to strain at all, preferring that the fragments become a little "water-worn." In order to pulverize the remaining pieces a second operation may be performed in from three to six days, according to the amount of irritation produced, but I prefer to wait a longer time, unless the patient is in haste for a cure. In some cases vesical tenesmus may occur, either from the excitement of a slight hemorrhage, or on account of an excessive irritability. Should this occur the morphia must be increased until all pain is relieved. The diet should consist of milk, eggs, and beef tea.

Should the bladder prove unable to expel the fragments, either from previous atony or resulting partial paralysis, or from enlarged prostate, it may be thoroughly washed once a day, through a catheter having a large eye upon its concave surface, or by Clover's or Dittel's apparatus. The fragments may also be extracted by suction, a bottle from which the air has been exhausted being attached to a catheter fitted with a stop-cock.

As a rule, however, I prefer that the bladder be left to itself as much as possible.

The number of sittings required to completely crush a stone will depend upon its size and composition. If the concretion is hard the first operation will only divide it, perhaps, into two or three pieces, too large to pass the urethra, but in calculi composed of urates, or phosphates, or both, the debris, and sometimes fragments of considerable size, will speedily begin to appear. In some cases, where the several portions seem to form nuclei for new formations, a dozen operations may scarcely complete a cure. This chance of secondary formations is so formidable a one that the surgeon should never dismiss his patient until he is satisfied that

every portion of the detritus has escaped, a condition which must not be inferred by the mere absence of symptoms, but determined absolutely by soundings, washings of the bladder, or by violent exercise. Behind the danger of the retention of a small fragment, moreover lies the constitutional predisposition to the formation of stone, and patients should always be warned of the possibility of return.

In some cases the symptoms of vesical irritation will be greatly increased by the presence of the many sharp-edged pieces, but in others almost immediate amelioration of the symptoms occurs.

In regard to the fatality of lithotomy the best statistics make the mortality between six and seven per cent., but Sir Henry Thompson asserts that he has never lost a case where the stone was not larger than a small nut, the size at which it should be discovered. In larger stones his results are far more encouraging than those of lithotomy, but, as I have already said, we must remember the different conditions under which the two operations are performed.

(The patient six hours after the operation, was seized with a most intense vesical tenesmus, due to the contraction of an exceedingly irritable bladder upon the fragments, and accompanied by almost total suppression of urine for twenty-four hours. A catheter carefully introduced secured no urine, and but little blood. The violent pains were only arrested by large and repeated doses of morphia administered hydermically. The supra-pubic region was only moderately tender, and stupes and hot fomentations so alleviated the symptoms, that under the use of diuretics, he was greatly improved in thirty six hours, and in a few days the previous vesical irritation had almost entirely subsided, and he was able to retain his urine for six or eight hours at a time. The fragments continued to pass for several weeks, and at the end of that time the lithotrite was again used, and this time with no subsequent unpleasant symptoms. Since that time all the debris has come away, the pain and difficulty in micturition entirely disappeared, and several careful soundings reveal the fact that no fragments remain behind. He now considers himself cured. The weight of fragments passed was nearly one ounce.—DE F. W.) *Med. & Surg. Reporter Philad.*

According to the latest returns there are now in Paris 1726 medical men, 179 *officiers de sante*, 734 apothecaries, 453 dentists, 561 midwives, and 528 herbalists.

A high rate of infantile mortality—chiefly of children under one year of age—still prevails in Leeds.

## PATHOLOGY AND TREATMENT OF OVARIAN DISEASES.

ABSTRACT FROM THE HASTINGS PRIZE ESSAY BY  
LAWSON TAIT, F.R.C.S.

The remaining affections of the ovary are those which are the result of increased growth, usually taking the form of cystic degeneration. More rarely the growth is solid, and may be either fibromyxomatous, or, more commonly, cancer. There are no diseases in the province of surgery where more care is needed in weighing every point in the history, every symptom and sign, for the purpose of establishing an accurate diagnosis, than in those classed under the head of ovarian tumors. It is best to make first of all, a mental list of all the conditions that might exist, and exclude one after another until the alternative is left.

From the history alone, no ovarian tumor can be diagnosticated. The rate of increase gives no guide. The details given by the patient as to the region in which the growth was first observed are often very misleading. Tumors of one ovary are often stated by the bearers to have originated in the side opposite to that from which they are found to grow. The menstrual histories are to be almost disregarded in making the diagnosis. With some, menorrhagia, with others amenorrhoea, may occur. It is especially important to eliminate pregnancy, particularly the condition of hydramnios, which the author has known to be treated with fatal results, on two occasions, by tapping. The uterus, in the early months of normal pregnancy, is not unfrequently displaced to one or other side, and has often been mistaken for an ovarian cyst.

For the diagnosis of ovarian tumors, there are various and almost numberless symptoms, the great majority being of little or no consequence for accuracy, and none of them are trustworthy. In the early growth of a simple cyst, symptoms of any kind are seldom met with until the tumor is sufficiently large to be impacted within the pelvis. The growth of dermoid cysts, on the contrary, is often accompanied by intense pain. As a rule, pain is not met with until cystic tumors are large enough, if out of the pelvis, to press on important viscera, or unless the surface undergoes inflammatory change. As it enlarges, the symptoms become more varied and numerous. In the pelvis, its pressure gives rise to dysuria or incontinence, constipation or diarrhoea, and to various neuralgias; in the abdominal cavity, by pressure on the stomach, liver and diaphragm, it often produces nausea and vomiting, distaste for food, &c. Coincidentally, there appear indications of great systemic alterations.

Ordinarily, the presence of an ovarian tumor is not brought to the surgeon's notice till it has reached a sufficient size to rise out of the pelvis.

and appear as an abdominal enlargement. Sometimes, however, it is necessary to determine the nature of a small pelvic tumor. An ovarian tumor, in this case, will be found to be almost invariably behind the uterus. Usually, this organ can be fixed between the two hands; behind it is, the tumor, and, if the uterus can be moved independently of it, and if the tumor can also be raised out of the pelvis, no doubt need be felt that it is a tumor of the ovary or of the broad ligament; how to determine between these two it is hard to say, nor is it of much consequence.

As the tumor increases in size and rises out of the pelvis, it becomes more difficult to determine that it is not intimately associated with the uterus. It is often necessary to introduce the sound to determine this point; but, as a rule, this ought never to be done at the first examination. It not unfrequently happens that menstruation goes on for a few months after conception, and to assert the diagnosis between early pregnancy and an ovarian tumor just rising out of the pelvis, at a first examination, is a task which only the rash or the greatly experienced will undertake. Only when it has been ascertained, by manipulation, that the uterus is not enlarged, may the sound be introduced. If then it be ascertained that the tumor is not uterine, that it is rounded, elastic and capable, to some extent, of being raised out of the pelvis, it is almost certainly ovarian. It may be ovarian if fixed, though it is rarely adherent at so early a stage of growth. If fixed, it may be a hæmatocele, an abscess, or a soft tumor growing from bone; previous history, symptoms, and, above all, exploration by the aspirator, will determine these points.

When an ovarian tumor has risen out of the pelvis, and has met with none of the accidents to which it is liable, its diagnosis is easy. Palpation and percussion will eliminate phantom tumors. Fluctuation will assist in determining whether it be uni- or multi-locular. Two conditions must be carefully excluded—cystic disease of the uterus and hydramnios. In the former, the tumor will be found associated with the uterus, the latter moving along with it when moved, and being dragged upwards by it to an extent that ought always to make us cautious.

Solid uterine tumors, besides the absence of fluctuation, have in addition two vascular signs not met with in ovarian growths: namely, an aortic impulse, which may be seen and felt, and an enlargement of the uterine arteries, to be felt in the vagina.

Hydramnios generally occurs in twins. Ballotement will assist in determining the different diagnosis between a unilocular ovarian cyst and distended uterus.

If the tumor be found to be not uterine and solid, yet attached to the uterus, and moving it so as to lead to the belief that it is ovarian, we have a

choice between a dermoid cyst, a fibrous tumor of the ovary, cancer of the ovary, or a pedunculated fibrous tumor of the uterus. Fluctuation in some part, and its peculiar nodulated character, will betray the dermoid cyst, while fibrous tumors of the ovary and cancer are very rare.

The main difficulties in the diagnosis of an ovarian tumor are met with in the subsequent stages of its growth, between the time when it has risen above the brim of the pelvis, as far as the umbilicus, until it has reached its extremest size. Fluctuation, of so much use at an earlier stage, comes to have a decreasing value. Percussion will generally show, in an ovarian tumor, the characteristic distribution of dulness, though accidental complications may vitiate the value of this sign.

The *tactus eruditus* of a practiced ovariotomist can recognize—when both an ovarian tumor and ascites are present at the same time—that there is a double wave of fluctuation; one superficial and rapid, due to the ascitic fluid, and another deeper and perceptibly less rapid, due to the fluid in the cyst.

The enlargement of veins often seen in the skin of the abdomen in cases of ovarian tumor is of no great assistance as a diagnostic sign. Auscultation gives chiefly negative signs. Tapping, either for the removal of ascitic fluid or the contents of a cyst, is often a great help towards an accurate diagnosis. By the removal of peritoneal dropsy, we may discover the actual relations of an ovarian tumor, or we may find that the supposed tumor has no existence, and by removing the contents of a unilocular tumor, or of one or more of the major cysts of a multilocular growth, we may determine the existence of pelvic adhesions, of pregnancy, or of some other condition that may alter our views as to treatment.

Formerly, great stress was laid on the diagnosis of adhesions, but modern experience has led to a disregard almost wholly of adhesions that are not visceral or pelvic.

A final means for purposes of diagnosis, a *dernier resort* in cases of doubt, is the exploratory incision. The experience gained by the operator from one such case ought to assist him in avoiding its necessity in similar doubtful cases.

Mr. Spencer Wells has characterized the condition of the medical treatment of ovarian tumors as one of hopeless impotence.

The surgical treatment of ovarian tumors has now been simplified into two operations: the minor operation of tapping, which is palliative, and rarely curative, and the major operation of ovariotomy, which is either curative or fatal. Tapping by the vagina is not usually attended with good results.

The proper selection of cases for the performance of ovariotomy is one of difficulty, and can be based on experience alone. In the author's opinion,

there can be only two reasons for refusing to do ovariectomy—either that the case is not far enough advanced, or that the tumor, in all probability, could not be removed. The most unfavourable case for ovariectomy is to be found in a young, healthy woman, with a medium-sized tumor. The rule ought to be to delay an ovariectomy as long as is consistent with the patient's chances of recovery, bearing in mind that it is not the healthiest that recover best.

Presupposing that a proper case has been selected, experience shows that the more nearly the patient's surroundings resemble those of a healthy private house the better. She requires some preparations for the change that is about to be made in her alvine actions. The time of the operation should be about midway between two menstrual periods. As to the anæsthetic to be employed, the author objects to chloroform, on account of the vomiting which follows its use, and he thinks sulphuric ether is not much better. He recommends the bichloride of methylene and the methylene ether. (The writer then goes on to state his method of operating.)

If there be no adhesions, and no large secondary cysts, ovariectomy, thus far, is a very simple operation. The complications and unsuspected difficulties are endless, and tax the presence of mind and ingenuity of the operator. Thus a second dermoid cyst may be found packed down in the pelvis, and it may be very difficult to remove it. For securing the pedicle, Mr. Wells's calliper-clamp is preferred.

Any tumor of the uterus had better be left alone, unless it be markedly pedunculated. If the uterus be enlarged by pregnancy, it must not be interfered with; but if unfortunately punctured in mistake for a cyst it is best to lay it open and empty it.

The after-course of a case of ovariectomy is subject to many mishaps. Of their approach, the temperature curve is the most trustworthy indication. Immediately after the operation the temperature almost invariably falls considerably. To obviate the shock, it is well to place hot water bottles to the sides and feet, and administer a diffusible stimulant. Advantage has resulted from the practice of giving a subcutaneous injection of morphia immediately after the operation.

For the first twenty-four hours after ovariectomy, the patient is allowed no other sustenance than ice or iced water, and, perhaps, in case of sickness, a little soda-water and brandy, or champagne. Nutriment may be given cautiously on the second day, in the form of chicken-broth or beef-tea, in small quantities, frequently, so as to obviate vomiting. No solid food to be taken till after the fourth day.

In the event of the occurrence of symptoms of peritonitis, special interference may be necessary, such as opening the recto-uterine *cul-de-sac* from

the vagina for drainage. Septic poisoning is no more a peculiarity of ovariectomy than it is of amputations.

Vomiting, a frequent and troublesome symptom, must be stopped, if possible. The most useful remedy in Mr. Tait's experience is Morson's peppine wine, given in drachm-doses every ten minutes with a little ice-water.

Flatulence is often a distressing symptom, and, if accompanied by a high temperature, is pathognomonic of peritonitis. Milk and lime-water often mitigate it, and the passage of a Burns's tube, as far as possible, up the rectum, will give much relief. Failing that, the author has frequently punctured the distended bowels with a fine exploring trocar, and kept it in for some hours, with great relief. Inflammatory attacks of the chest and diarrhoea sometimes occur. For three or four days after the operation, the catheter should be used every six or seven hours. The bowels should be kept closed by opium for seven or eight days. After the wound has healed, the patient should wear a tight-fitting abdominal belt instead of stays; for, in spite of all care in inserting stitches, there is a proneness to the formation of ventral hernia in the cicatrix for many months after the newness of the union has passed off.

The pathology of ovarian cysts involves a number of questions that have been raised and discussed by observers of the greatest eminence, but thus far there are no very satisfactory explanations of the growths. As to the causes of ovarian dropsy, we must confess that we know nothing about them. The most common form, the adenoid or proliferous, and also the rare multiple tumors, occur during the period of life when ovarian cell-growth is mature; the more rare unilocular cystic growths, besides being met with during this period, occur at the extremes of life.

The author has not yet met an ovarian tumor that was unilocular, and he believes that all unilocular tumors in the neighborhood of the ovary are not ovarian, but of parovarian origin. The parovarian consists of a few closed linear sacs, the remains of the tubules of the Wolffian body in foetal life, which may readily be seen on holding the broad ligament with the ovary and Fallopian tube *in situ*, up to the light. These tubules frequently contain a perceptible amount of fluid, and are frequently accidentally found in *post-mortem* examinations, distended to the size of beans or filbert-nuts. In every truly unilocular tumor, Mr. Tait has found the ovary unaffected, though, on several occasions, he has seen it stretched over the cyst wall.

Mr. Tait has met with an example of a rare variety of ovarian tumors, the origin of which has been traced by Rokitansky and Ritchie. In the case recorded by the author, both ovaries were affected in their entirety. The tumors were multiple.

Iocular, and had one or two major, with innumerable minor cysts, graduating down to the most minute size. The tumors had the appearance of huge white raspberries. An examination of the contents of a large number of the cysts discovered in every one more or less distinct remains of an ovum. The condition seemed to be an hypertrophy of the ovaries, with arrested development of their contents.—*Boston Medical and Surgical Journal*.

### APPLICATION OF THE FORCEPS.

[Dr. E. H. M. Sell, in *The Physician and Pharmacist*, gives the following rules as obtaining at Vienna in the use of the forceps in obstetrical practice:—]

In the application of the forceps, the following three conditions are noticed as essential in the operation :

1. The cervix must be fully dilated and the head through the os and at the floor of the pelvis.
2. The forceps may be applied when the head is found in the vagina, not enveloped by the os uteri, whether it is rotated or not.

In the latter condition the blades should often be opened a little, so as to allow the head to rotate, though it frequently does so with the forceps.

3. In all cases of application of the forceps, the bladder of the woman should first be emptied. Should this be rendered difficult, from the pressure of the head upon the bladder, dividing it into two sacs, we will generally succeed by pushing the head a little up from the pubes.

4. In cases of danger to the child, the forceps should be applied, provided the conditions permit.

There is always danger : (a) when meconium appears ; (b) when the mother is exhausted ; or eclampsia threatens. When the cervix, however, is not dilated, we must allow the child to die, and then perform craniotomy, rather than run the risk of rupturing the uterus.

We would say dilate the cervix by artificial means rather than do either.

5. When the head remains a long time in the vagina and does not advance without any apparent cause.

In the latter part of a delivery the forceps are no traction-instrument, but simply a controller of the birth, allowing the head to come out gradually ; should it advance too fast, we must lower the handles, or a rupture of the perineum will be the consequence. Should a rupture be eminent, episiotomy is performed in preference.

A rupture of the perineum is treated by the immediate application of serre-fines, which are usually removed in about thirty-six hours. In case of the rupture extending through the sphincter-ani, a few simple sutures are applied.

In abnormal rotation of the head, we apply the forceps as usual, with this difference, that we do not sink the handles quite as much, and continue our first traction in a horizontal direction till the chin comes under the pubes ; when we commence extraction, we raise the handles at an early period to bring the occiput over the perineum, and then by depressing them, the face is born under the pubes.

When there is a caput succedaneum we must push the hand as well as the forceps high up, for the tumor may be large.

### APPLICATION OF THE FORCEPS TO A HIGH STANDING HEAD.

In this condition the os uteri is not yet fully dilated, nor the cervix drawn back over the head of the child, which is freely moveable, as it is not yet firmly fixed in the entrance of the pelvis.

In this application of the forceps, which is done only in cases of very urgent necessity, it is very easy for the head to move from side to side, causing the forceps readily to glide off, and may thus do great injury to the mother.

The woman should be thoroughly anaesthetized, and the forceps always applied laterally, guarding the blade with the hand instead of the two fingers, thus avoiding doing injury to the os.

In face presentation at the upper strait, the forceps are especially dangerous, for one blade rests on the calvaria and the other on the chin and trachea. This presentation is often the forerunner of craniotomy.

In forehead presentation at the upper strait, the face usually presents to one or the other acetabulum. In this presentation the forceps are only applied to satisfy the feelings of friends who may be standing by ; while we appear to make considerable traction on them, we proceed to perform craniotomy.

We would recommend strong traction to be made, and would expect to be successful in some cases.—*Medical and Surgical Reporter, Phil.*

OXIDE OF ZINC FOR NIGHT SWEATS.—The *Pacific Medical and Surgical Journal* remarks that the most ancient and venerable remedy for night sweats is aromatic sulphuric acid, in infusion of cinchona, serpentaria, or sage. The best of all remedies, however, is this : Oxidi zinci, gr. xxx. ; ext. hyoscyami, gr. xv. M. f. pil. x. Sig. Take one at bed-time.



THE ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

There are differences of opinion about the merits of the meeting of the British Medical Association in as far as concerns the purposes of the scientific investigator who wishes to publish a first report of fresh work or of newly acquired facts, and to raise upon such a basis a careful and patient discussion. And every year the misgiving as to the fitness of the meeting for this purpose is likely to increase. When some hundreds of medical men break away from practice to enjoy a few short August days in a presumably interesting and hospitable town, the centre of an equally interesting neighborhood, they are not in a mood to hear papers of more than a few minutes' length. If they were ever so patient, and there were no excursions and festivals to compete with the scientific business, the crowded programme seems to render *thoroughness* of discussion impracticable. The exigency of the occasion requires that scientific communications be abridged, and that the discussion of them be curtailed so as to make way for other papers, which in their turn have to be pared down to suit the inexorable conditions of time. But this weakness of the gathering, as far as scientific purposes are concerned, does not amount to a proof that it is not of great value to the profession and highly interesting to those who compose it. Whatever the fragmentary and hurried character of the work in the sections, the lucky and for the most part eminent individuals who are called upon to deliver the principal addresses in Medicine and Surgery have a perfect opportunity of emitting any light that is in them, and of stimulating at once the scientific and the practical spirit in the members of the medical profession. And to do the promoters justice, we may say that so long as they can organize arrangements for such Addresses as those we reported last week, and such excursions as were in the programme, they will not fail to command, or deserve to command, large gatherings. He must be a faulty individual who could listen to these addresses, and be in the company of their authors for a few days, without being raised in character, and without having a new belief and pride in the art and science of Medicine.

The Address in Medicine by Dr. RUSSEL REYNOLDS was an eloquent exposition of what we may call the metaphysics of Physic. Those who went expecting the distinguished Professor of Medicine to post them up in the latest truth concerning new remedies, or to give preciser definition to old forms of disease, would be somewhat disappointed with the Address in Medicine. Frankly we may confess to some feeling of this sort, and some regret that a physician of much large and withal special experience did not give a more therapeutic and practical turn to his paper. But the more deeply

Dr. REYNOLDS's address is studied, the more practical its bearings will be found. And we shall not only come out of the study with deeper and larger views of the nature of life and of man, but we shall come out of it better physicians and better practitioners. It is significant to find a physician of Dr. REYNOLDS's special knowledge expressing his belief that we are no nearer than our forefathers to an understanding of the mystery of life, and that we are never likely to get much nearer to such an understanding. Most practical, both in physiological and medical sense, are the remarks of Dr. REYNOLDS on the peculiarity of man and the importance of those higher qualities of intellect and feeling which differentiate him from even the highest animal—qualities which have been intensified by modern civilization to a degree which renders them more and more necessary to be considered by the physician. A clear note of this kind was much needed, and Dr. REYNOLDS was well entitled to sound it. Comparative anatomy and comparative pathology are all very well, but they do not much help us to understand the complex life of man, and the special and subtle influences by which it is constantly in danger of being injured or cut short. Statistics are all very well, but they do not help us much to understand the complex case of the individual men and women and children who come to us daily for relief. A deep reverence for man as such, and a keener interest in individual cases, are the great points which Dr. REYNOLDS impresses on us.

As if by a happy understanding, there was a sharp contrast between Dr. REYNOLDS's address and that on Surgery by Mr. CAGE. Mr. CAGE's address had reference to one definite disease of the most concrete character—that of stone—and its wonderful prevalence in Norfolk. It was altogether admirable. In one respect, indeed, it was deficient and disappointing. Mr. CAGE told us nothing about his mode of operating. Like other operators of the largest experience, he has the least to say. It transpired incidentally that he had performed nearly 200 operations for stone. But with that strange modesty which comes of large experience and great expertness, we hear nothing of his method. An operator who could count his cases on his fingers would have told us exactly where and how and how much to cut. But Mr. CAGE repressed all this wisdom, and showed that he was more bent on elucidating the origin of the stone than displaying his own skill. Like a good physician, he was concerned with the diathesis as well as the disease. He showed how many things have to be considered in forming theories of lithiasis and stone. He raised the dietary of the Norfolk peasantry into a question of the highest scientific interest. He invested milk with a new importance—as an antilithic food; and attributed the striking absence of stone in the children of the well-to-do

classes to the fact that they drank milk. On the contrary, he attributed much blame to the strong, sweet, new beer of which the Norfolk peasant drinks too liberally. He is disposed to believe in the power of the hard water of Norfolk to produce stone. Finally, he thinks there is as much inherent probability in favor of the hereditary transmission of stone as of gout, cancer or scrofula. Let us hope for a statesmanship that will make milk cheaper, and water, not as hard as Norfolk water, the plentiful possession of every poor man. And as Mr. CADGE has indicated to Norfolk and the Eastern Countries how to prevent stone, let us hope that he will soon indicate to the profession how to get rid of it.

We have left no space to notice Sir JAMES PAGER's exquisite address in the Surgical section. But, fortunately, everybody reads what Sir JAMES says, and his words speak for themselves. If Sir JAMES is proud of Norfolk, Norfolk may well be proud of Sir JAMES. We shall not be so ungracious as to disturb this kindly setting in which Sir JAMES ingeniously and suggestively placed the good old customs of bleeding and mercury-giving. We are still not convinced that it was good practice to turn every case of acute pain into one of acute anæmia, or to administer mercury in nearly every case of chronic disease. We cannot think so ill of these "good old times" as to suppose that syphilis formed a part of the diseases nearly as often as calomel formed part of the medicine. But we thank Sir JAMES most heartily for his fine human portraits of Norfolk worthies, and for detecting, with an instinct as kindly as it is acute, the scientific element that lurked in their heroic practice. Happy the county whose worthies have a pupil so able to do them justice and to perpetuate and extend the fame of Norfolk surgery.—*The Lancet*.

#### CLINIC ON PROGRESSIVE LOCOMOTOR ATAXY, WITH ANOMALOUS JOINT AFFECTION.

BY T. BUZZARD, M.D., F.R.C.P., NATIONAL HOSPITAL, ENGLAND.

Let me draw your attention to the man who now enters the room walking with the help of a stick. There is a marked peculiarity in his gait, and when you look at his legs for an explanation of it, you observe at once that the greater part of the right lower extremity is enormously enlarged. Examining him, however, more closely, you see that this enlargement fails to account for his peculiar walk, for the left leg, which is not notably altered in size, presents an abnormality in movement which corresponds to that in the right. If we analyse his march, we find the following peculiarities equally well marked in the two legs:—In

the first stage of progression the foot, which normally should be carried forwards nearly parallel to and at a distance of an inch or so from the ground, is raised some inches higher than this, and in a strongly dorsal-flexed position. When it has reached the measure of the step, the heel is put down noisily, and with a sort of jerk, the toes being then gradually brought down from their upward flexed posture, and laying hold of the ground preparatory to a repetition of the process. All this time the patient's feet are turned out like those of the dancing masters of our youth, and his eyes are fixed upon the ground in front of him. When he wishes to turn, he stops short for a second or two, steadies himself, and brings himself round with great caution. He is not able to move in a small circle. He walks best on an even surface, and goes down stairs easier than up, taking care to plant the entire sole of the foot upon the step. If his feet be placed close together when his eyes are shut, he sways to and fro, and would fall but for help, and he cannot take more than two steps without the aid of his sight. His toilette is embarrassed by this difficulty, for he tells us that when he is soaping his face, and consequently shutting his eyes, he is obliged to lean against the wall, or he would fall. With all this, if we try to bend his legs at the knee against his will, or to resist their voluntary extension, we find little or no failure of muscular power.

His condition, then, it is scarcely necessary to say, is one of ataxy, and not of paraplegia. Moreover, the difficulty of co-ordination is not confined to the lower extremities. The patient is a carpenter, and he finds it impossible to use a hammer, for in striking at a nail he constantly misses his aim, and goes to one side or other of the object; and he cannot saw a piece of wood in a straight line.

So much for the disorders of motility. As regards those of sensibility, they are of two kinds—diminution of various kinds of sensibility, and pain. He complains of a feeling of numbness in both feet, extending some inches above the ankles, and also in his hands, principally in the left. The touch of a finger is not felt at all on either sole; in the same situation, however, the contact of ice is immediately recognised, and its coldness appreciated; heat, on the other hand, is more slowly, but still correctly recognised. Electro-cutaneous sensibility is much diminished in the hands, still more so in the legs, and is quite absent in the soles of the feet. The muscular sense is manifestly impaired, for not only can he not tell when in bed in which direction his legs are lying, but he cannot feel the contraction of the muscles of his thighs when they respond to an induced current. This response is normal in the right thigh, somewhat deficient in the left, and very imperfect (probably for a reason which I will mention presently) in both legs below the knees.

The other disorder of sensibility consists in the liability to "flying pains," and these he has had since 1869, the longest interval of exemption having lasted about three months. His last attack of pains visited him on Sunday, Monday, and part of Tuesday. A pain would last perhaps five seconds, and resemble some sharp instrument suddenly pushed into the lower part of the shin-bone. It would recur every five minutes or so during the daytime, and almost entirely deprive him of sleep during the nights. And this has been the general character of his pains, which, however, were worse formerly than they have been of late. Since the commencement of his illness he has always had a feeling as of a tight band arough his waist, and of distension in his stomach.

Although the symptoms described are those common to progressive locomotor ataxy, they do not of themselves suffice to mark the case positively as one of that class, as pictured by Duchenne. To complete the catalogue, there should be some evidence of functional disorder of one or other of the cranial nerves. As is well known, diplopia from paralysis of one or other of the nerves supplied to the external muscles of the eyeball, and amblyopia from progressive atrophy of the optic disc, are the most common forms which these disorders assume. Now, this man has a well-marked squint; and if we had not inquired particularly about this feature of his case, we might easily have jumped to the conclusion that the symptom, as it appears in him, is just that which is wanting to complete the *ensemble* of the requisite conditions. But it seems on inquiry that his strabismus dates from very early childhood, and there is little doubt that it is one of those ordinary squints arising from hypermetropia which are so often ascribed (as he, indeed, ascribes it) to a kind of retribution for imitating a school-fellow with the like affliction. We must, therefore, exclude the strabismus from our calculation. Examination with the ophthalmoscope discloses no change in the optic discs; and the man himself complains of no material weakening of his sight. We do find, however, one cranial nerve which shows symptoms of disorder. For the last few months our patient has been growing deaf in the left ear, and now he cannot on that side hear the ticking of a watch however closely it is applied. Duchenne, Renak, and Topinard have each recorded instances in which the auditory nerve was affected; the latter mentioning seven cases in which he has noted this condition. The feature is a slight one, and not common; but in this case so characteristic are the disturbances of motility and sensibility, that it suffices to complete the picture. I ought to add, too, that his pupils are minutely contracted. For the rest, we note that at various times he has had great delay in emptying his bladder, and occasional incontinence of urine; and that for a long

time past he has been impotent. In the earlier part of his illness he suffered from gastric disturbance of a peculiar kind. He would require to relieve his bowels five or six times in the twenty-four hours, the motions being small in quantity and solid, and he would besides go more than once daily to stool without result. This irritability of the bowels, although not usually included amongst the phenomena of progressive locomotor ataxy, is a symptom which I have occasionally observed in other cases, but never, I think, occurring so early in the history as it did in this man.

It seems that our patient first began to stagger in his gait about June, 1868. The "flying pains" commenced early in 1869, and in March of that year he began his attendance at this hospital. Under treatment with arsenic he rapidly improved so much that he was able to return to his occupation, which he had been obliged to quit, and he continued to work more or less for his living until December last. Since that time he has not been able to follow his employment, but has attended here regularly.

It was in June, 1873, that he called our attention to his right leg, which he said was enlarged. On examining it, we found the leg swollen and oedematous below the knee. The circumstance after this escaped our attention until the following December, when he again complained very much of this limb. On stripping him, the knee-joint and the thigh for some distance above it were now found to be enormously enlarged, evidently with fluid, and this condition has persisted ever since with but very slight variations of size.

At the present time (July, 1874) the following is the condition of the limb:—The right thigh begins to swell a short distance below the groin, so that at a point eleven inches above the upper border of the patella it measures 17 inches in circumference, as against 16 inches in the left thigh. Descending, the enlargement is more and more marked until the knee-joint is reached, and here the measuring tape applied over the patella gives a circumference of 19 inches on the right side and only 13½ inches on the left. About two inches below the lower margin of the patella the enlargement almost suddenly ceases. The swelling is hard and elastic, the skin of almost polished smoothness, and traversed by large veins. Extension of the leg is perfectly performed, but flexion is somewhat limited. Since the photograph was taken in March last, although the size of the limb has continued the same, you will notice that a curious alteration in its appearance has taken place. The leg now forms an angle of about 45 deg. with the thigh, the apex being inwards—a deformity which is due to subluxation of the joint from the strained and weakened internal lateral ligament gradually refusing its office. That the swelling is not oedematous is evident for two reasons:—1st,

There is no pitting on pressure. 2nd. When the rheophores carrying an induced current of electricity are placed upon the quadriceps extensor muscle just above the patella, where the enlargement is very great, there is immediate and powerful muscular contraction. The electric excitability at this spot is, indeed, much more marked than in the corresponding part of the left thigh. The fluid therefore lies under and not superficial to the muscle, as would be the case in œdema. Lower down, the leg is certainly somewhat œdematous; and there, as you see, the conduction of the current is interrupted by the presence of fluid in the subcutaneous connective tissue, and the muscles consequently fail to act to the electric stimulus. The increased excitability of the quadriceps extensor in the affected limb is doubtless owing to the thinning and tension of the strained skin, favoring conduction to the muscular tissue immediately beneath it. When the leg is rapidly extended, the hand laid upon the knee-joint is conscious of a peculiar scranching thrill. Now it is important to remark that all this accumulation of fluid has taken place without any of the symptoms of ordinary joint inflammation. During the process of enlargement the patient had no pain or heat in the joint; he was conscious only of a gradual increase in its size. At the present time, if he kneels or walks much, he gets a little aching pain extending down the leg, but so long as he does not bend the knee much he has no pain whatever, and the only inconvenience which he suffers is from the weight of the swollen limb causing him to be readily fatigued. There is no swelling of the ankles or feet. As I pointed out before, the action of the right leg in walking is precisely similar to that of the left, but the movement of the joint is limited in the direction of flexion.

Such is the very anomalous joint affection which this patient presents. It is, you will remark, a condition which asserts itself so very prominently that, were this man to present himself for the first time for medical advice, it is more than probable that the whole attention of the examiner would be fixed upon the state of the right limb, and the much more serious general disorder with which the patient is affected would be passed over unnoticed.

It so often happens in clinical medicine that we fail to see what we do not specially look for, that I am constrained to believe that such a condition as this has probably existed (though not, perhaps, to so marked an extent) in others of the somewhat numerous instances of progressive locomotor ataxy which have come under my observation; but it is a fact that I have never before noticed this affection, and my colleague, Dr. Hughlings Jackson, to whom I showed this patient, tells me that it is likewise the first case of the kind which he has seen. This experience, or lack of experience, contrasts remarkably with that of Dr. Charcot, who

describes no less than five examples of the kind out of fifty cases of tabes in the Saltpêtrière. It is to Dr. Charcot,\* I think, that we owe in the first instance the recognition of this peculiar arthropathy, which has been well described also by Dr. Ball. In this country, so far as I am aware, the only recorded case is one described by Dr. Clifford Allbut.†

Dr. Charcot looks upon the affection as one of the multiple forms of spinal arthropathy, by which term he would designate a group of disorders which appear to be directly dependent upon certain lesions of the spinal cord. In his experience the arthropathy in question is always an early phenomenon, occurring between the prodromous period and that of inco-ordination. If it should, however, be late in appearing, it is then always, he says, in connexion with one of the superior extremities, and he attributes this to the circumstance of the sclerosis, which is the cause of progressive locomotor ataxy, frequently invading the upper part of the cord only after the lower part has been for a long time affected. The present case, however, is an exception to this rule, for the symptom in question did not appear until marked inco-ordination of the lower extremities had existed for many years; and it is in the knee-joint—not a joint of the upper extremities—that it has shown itself. Dr. Charcot describes the condition as an extreme tumefaction of the entire limb, composed of (1) a considerable hydrarthrosis; (2) a diffused swelling, for the most part of hard consistence, and in which the ordinary symptoms of œdema are not usually apparent. He remarks that this arthropathy is unaccompanied generally by fever or pain. This description precisely applies to the case before us. You will note besides, that although the knee-joint is enormously distended with fluid, it does not present the appearance of ordinary chronic synovitis, in which the distended capsule of joint projects with marked distinctness in three places—viz., above the patella and on each side of the ligamentum patellæ. There is no such mapping out of the knee-joint in this case; and this is evidently because, in addition to the fluid in the articular cavity itself, there is effusion in its neighborhood. This effusion, as it does not occasion the appearances of subcutaneous œdema to present themselves, is probably beneath the muscles. The affection, then, is a peculiar one, and its pathology is by no means clear. Experience of these cases shows that, with a striking similarity in their onset, their progress varies. In some, at the end of a few weeks or months, the swelling disappears, and the joint apparently returns to its former condition. This is styled by Dr. Ball the *forme benigne*. In

\* Leçons sur les Maladies du Système Nerveux. Paris, 1873. 2<sup>me</sup> Série.

† St. George's Hospital Reports, vol. iv.

others, on the contrary, grave disorders remain—erosions of the osseous surfaces, creaking movements, various luxations, or even total destruction of the joint (*forme maligne*). As regards frequency, it is first the knee, then the shoulder, the elbow, hip, and wrist which are apt to be affected; but the small articulations may also suffer. Several joints may be coincidentally involved.

The affection, which in certain respects is suggestive of dry chronic arthritis, differs from that disease, as Dr. Charcot points out, in several particulars: in the large quantity of fluid by which it is characterised, and the fact of the effusion extending beyond the limits of the joint; in the luxation which is common in the ataxic class; in the fact that the knee is most commonly affected, not the hip, and that the joint affection of the tabetic patient may retrograde or even recover, which is never the case in dry chronic arthritis; in the suddenness of the appearance, and rapidity of progress of the disease. On the other hand, it is true that in cases of old standing, when the articular surfaces, deprived of cartilage, have continued to rub against each other, the characters of dry arthritis are observed; eburnation and deformity of the articular surfaces, with osseous growths on the extremities of the bones.

The existence of articular affections dependent upon preceding lesion of the nervous system is now generally recognised. Such affections have been observed in connexion with lesions of the peripheral nerves, as well as in limbs which are the subject of hemiplegia from hæmorrhage or softening of the brain, in Pott's disease, in acute myelitis, in certain cases of tumors occupying the grey substance of the cord. The fact that the joint affection is exceptional in progressive locomotor ataxy suffices to show that it is not due to the sclerosis of the posterior columns which constitutes the important pathological change in that disease, but to lesion of what part of the substance of the cord its causation must be referred there is at present no evidence to show.

I think it very likely that, as we shall in future specially examine the joints of our ataxic patients, we shall meet with cases of the same character as that which I have described.—*The Lancet*.

### HOT WATER INJECTIONS IN UTERINE DISEASES.

Dr. T. A. Emmet (N. Y. *Medical Journal*, July, 1874), in an interesting and valuable article upon the Philosophy of Uterine Diseases, makes the following practical remarks upon hot water as a means of controlling pelvic circulation and imparting tone to the pelvic vessels:

The prolonged use of hot water is followed by a tonic contraction of the arterioles, and thus an

approach to healthy action. The immediate effect of heat is dilation, the secondary effect contraction. The best method of using hot water to obtain its contracile effect the Doctor describes as follows:

The woman is placed on her back, with the hips elevated by a properly shaped bed pan under her, and a gallon or more of hot water at 98° or a higher temperature, is slowly injected into the vagina by means of Davidson's syringe. This operation blanches the mucous membrane and diminishes the size of the canal, as if strong astringent had been used. While the hips are elevated the vagina will retain during the injection a large quantity of water, which, by its weight, will listend every portion of the canal, so that it will come in direct contact with the mucous membrane, under which the capillaries lie. The vessels of the neck and body of the uterus pass along the sulcus on each side of the vagina, and their branches encircle the canal in a most complex network. The vessels of the fundus, through the veins of which the blood passes by the liver back into the general circulation, communicate with those below by anastomosis.

We can thus, through the vagina, influence, directly or indirectly, the whole pelvic circulation. We can so diminish the supply as not only to check congestion, but we can literally starve out an inflammation. I know from my own personal observation that several of these injections a day at 100° to 105° will abort an attack of cellulitis if resorted to early enough, and their use persevered in, with the aid of rest and anodynes. These injections exercise a most beneficial effect on the reflex system, by allaying local irritation. I know no better means for removing the nervousness and sleeplessness of an hysterical woman than a prolonged hot water vaginal injection when administered by an experienced hand. The injections will frequently soothe a patient in less time than could be done by any drug in the pharmacopœia. To receive permanent benefit from their use, they must be continued until the patient is restored to health. They should be given once a day, preferably at bed time. The only position in which the patient can receive any benefit from them is on the back, with the hips elevated as described. She cannot administer them properly herself—and I know of no arrangement which can take the place of an intelligent nurse. As the patient improves in health the quantity of water can be diminished and the temperature lowered, until the injections are discontinued from daily use, but for some time they should be employed for a few days after each period.—*Detroit Med. Review*.

It is said that the oxyuris vermicularis, or thread worm, may be readily dislodged from its favorite habitat in the rectum by the injection of from two to three ounces of ol. morrhue, repeated once or twice.

ACUTE RHEUMATISM; PERICARDITIS;  
SUDDEN AND RAPID EFFUSION INTO  
PERICARDIUM; PARACENTESIS PERI-  
CARDII; RECOVERY.

(Under the care of Dr. SHINGLETON SMITH.)

W. L.—aged twenty-five, married; a plasterer. Has had four attacks of "rheumatic fever" during the last three years, but does not know that his heart was affected in any way. Has not complained of shortness of breath, and has had no difficulty in getting about. He has been ailing for the last nine months, but did not lie up till three weeks ago, when pain in his hips came on, and he has been obliged to remain in bed since.

Admitted March 13th, 1874. Complains of feeling sore all over. He is unable to move without pain, but no articular swelling is visible. Perspires freely. Has a depressed expression, and lies on his back. Temperature 102.6°; pulse 108; respiration 32. Complains of pain in the cardiac region on drawing a deep breath. A friction sound is audible over the base of the heart, and a prolonged blowing sound at the apex. There is no increase of cardiac dulness. The urine has a specific gravity of 1025; it is slightly acid, but free from albumen. Ordered six leeches to be applied to the cardiac region, and to take an alkaline mixture every four hours.

14th.—Friction sound at the base less distinct. Temperature 101.2° F.; pulse 92; respiration 28. There is slight effusion into both knee-joints, and tenderness about the ankles. The precordial pain relieved.

23rd.—The friction sound still audible. Ordered some blistering fluid to be applied over the base of the heart.

24th.—A loud double friction audible over the whole cardiac area, but no increase of cardiac dulness.

25th.—Was taken suddenly in the night with acute precordial pain and dyspnoea. At midday the pain was unrelieved, and dyspnoea considerable. Pulse small and weak, 130; respiration 44; temperature 100° F. Cardiac dulness extends to second interspace; no cardiac impulse to be felt; heart sounds scarcely audible; no friction sound. Lips, fingers, and toes looking blue; no impairment of consciousness, but dyspnoea very urgent. Paracentesis pericardii was considered necessary, as nothing short of the removal of the fluid from the pericardium seemed likely to restore the rapidly weakening power of the heart. Accordingly Mr. Charles Steele was called in consultation, and immediately proceeded to perform the operation. One of the larger sized tubes of Dieulafoy's aspirator was plunged through the skin and chest-wall at a spot between the fourth and fifth ribs and half way between the middle line and the nipples on

the left side. Several ounces of perfectly clear serous fluid were then drawn off by suction, but the fluid gradually became more and more coloured till it appeared to be mere blood. After ten ounces of fluid had been withdrawn, the tube was removed, and the aperture closed with strapping. The area of cardiac dulness had considerably diminished, and the dyspnoea was much relieved for a few minutes, but the dulness increased again in about ten minutes, though not to the same extent as before the operation, and he still had considerable difficulty in breathing, but the pulse was stronger than before. It was presumed that some hæmorrhage into the pericardium had taken place, as the last few ounces of fluid looked like undiluted blood, and the whole quantity of fluid became a coherent mass of coagulum after standing. In the evening he breathed more easily. The pulse was 124, fuller than before the operation; respiration 44; temperature 103° F.

26th.—Pulse 124; respiration 36; temperature 101°, morning.

27th.—Pulse 116; respiration 32; temperature 100°. The left wrist was painful and swollen; he perspired very copiously; pericardial dulness less; respiration easy.

On April 2nd he was free from pain, and slept well. On the 7th he was not so well. Pulse 112; temperature 99.6°. Did not complain of pain; could draw a deep breath without difficulty; cardiac dulness normal; a slight systolic friction sound audible at the base of the heart.

On May 19th he was discharged, the heart's sounds being normal, the area of cardiac dulness not enlarged. He was still weak, and the pulse was rather small, soft, and quick.

On July 6th he was doing his regular work without much difficulty.—*The Lancet.*

A HANDY METHOD OF EXAMINING MORBID TISSUES MICROSCOPICALLY (*The British Medical Journal*, September 5, 1874).—Take a portion of nerve-tissue, about the size of a large pin's head, from a thoroughly defined locality, press it out gently under a covering-glass on a slide, remove the covering-glass, and apply to the mass left on the slide a drop of "Judson's simple (aniline) magenta dye," diluted with eight drops of water; with a needle, mix the dye and the nerve-matter carefully, and cover the preparation with a clean covering-glass, again gently pressing it out to such an extent that light can pass through it. On submitting a specimen thus prepared to the microscope, it will be found that the cells, the nuclei of the neuroglia, and the blood-vessels, are beautifully tinted a deep crimson color, leaving the other tissues almost unaffected. Morbid products are also well brought into view, either by their ready absorption of the dye,

as in the case of amyloid bodies, or by their refusal to take on the tint, as in the case of colloid bodies. Hæmatoidin accepts the color all too readily, but the practised eye soon recognizes its appearance. Pigmentary degeneration of cells is well shown, nucleus and nucleolus being thoroughly demonstrated; the poles can also be traced for long distances.—*Med. Times. Philad.*

### CASES OF FRACTURE OF THE SKULL.

(Under the care of Mr. SIDNEY JONES, St. Thomas's Hospital.)

The two following interesting cases of fracture of the skull—for the notes of which we are indebted to Mr. S. Osborne, surgical registrar—have recently been treated at this hospital.

G. M.—, a child, fourteen months old, was admitted into Victoria ward on July 6th, having been run over by a spring cart, which passed over his right leg and then over the right side of the head, causing contusion of the leg and a large effusion of blood beneath the scalp extending from the nape of the head to the vertex. The patient was insensible; the pupils contracted; there was bleeding from the nose, but none from either ear; surface of body cold; breathing rapid; temperature 99°6'. The child vomited on admission, and again at intervals up to 12 o'clock at night. Ice-bag was applied to the head.

July 7th.—Morning; Temperature 100°2°; pupils still contracted; no strabismus; vomiting has ceased; skin warm.—Evening; Temperature 100°; patient quite conscious.

8th.—Morning; Temperature 100°2°; quite conscious; has again vomited several times; no twitchings.—Evening; Temperature 100°

10th.—Child sitting up in bed and doing well. A fracture of the skull can now be distinctly felt, in a line with the sagittal suture, extending from the posterior fontanelle to the right side of the occipital bone, a portion of the bone on the right side being depressed. Pulsation of brain-substance discernible. Temperature normal.

28th.—Child shows no bad symptoms. The fracture is gradually closing up.

S. H.—, a child aged three years, was admitted into Elizabeth ward on the 30th of June, having received a blow upon the vertex of his head from the pointed end of a pickaxe. On admission the patient was partially sensible, surface of body pale and cold, pupils slightly contracted, breathing short. Temperature 97°6'. Much hæmorrhage of venous character from a small wound over the sagittal suture, communicating with a fracture of the skull in that situation; longitudinal sinus laid open; probe passed within the skull for about a

couple of inches, probably through the longitudinal fissure down to the corpus callosum; slight puffiness of forehead. Ice-bag ordered to his head; pad of lint placed over wound.

July 1st.—Morning temperature 99°6°; child quite conscious, and without any bad symptom; slept well during the night. Evening temperature 98°2°

Still going on well. Morning temperature 90.8° puffiness of forehead has somewhat decreased.

19th.—Out of bed and running about.

20th.—Very restless during the night, calling out and being very fretful. Temperature, 9 A.M., 105°F.; quite conscious, but restless and drowsy; no paralysis or twitching; no sickness. Evening temperature 103°2°

21st.—Morning temperature 103°4°; child still restless; no sickness or shivering; wound looks healthy, no hæmorrhage; slight purulent discharge; complains of pain, which is accompanied by swelling behind and below the ears; glands enlarged and tender along the border of ramus of jaw. Evening temperature 102°8'.

22nd.—Morning temperature 98°8°; passed a good night and is apparently well.

25th.—Puffiness still remains about forehead; swelling in neck has decreased; child sitting up in bed. Temperature normal.

26th.—Morning temperature 93°4°. After having been visited by his friends, and in all probability stuffed with sweatmeats, the patient became very restless toward evening, and had a temperature of 103°8°.

27.—Morning temperature 97°; child is again quite well and bright.—4 P.M.; Temperature 98°.

The patient has since made satisfactory progress.—*The Lancet.*

### MEDICAL NEWS AND ITEMS.

FIBROUS ANCHYLOSIS (*Medical Record*, September 1, 1874).—Dr. Louis A. Sayre believes that in those cases of fibrous ankylosis which most closely simulate bony ankylosis, a distinguishing feature is that if movements are made at the joint, and any motion whatever is secured during the manipulation necessary to a thorough examination of the case, it will be followed by more or less of pain within twenty-four hours. For when bony ankylosis is present no movements at the joints can be made, consequently pain will not be produced at the point of ankylosis. This rule will be found to be reliable. The subsequent occurrence of pain in and about the joint, even if there be no apparent motion, will justify measures calculated to give it gradual restoration of motion.—*Med. Times. Philad.*

**EFFECT OF SUBMERSION IN WARM AND HOT WATER.**—Dr. F. H. Hamilton (*N. Y. Medical Record*, May 15, 1874) sums up an interesting contribution to the treatment of surgical injuries as follows: The use of hot water is limited to injuries below the knee or below the middle third of the arm. It is especially valuable in laceration or contusions, inflammations, etc. No treatment observed by Dr. Hamilton has been followed by equally favorable results. The area of acute inflammation is limited, erysipelatous inflammation has been almost uniformly arrested or restrained when it has actually commenced, and it has never originated after submersion, gangrene has in no instance extended beyond the parts originally injured, and, when progressing, it has in most cases been speedily arrested. Septicæmia and pyæmia have not ensued in any case in which submersion has been practiced from the first day of the accident. Purulent infiltrations and consecutive abscesses have been infrequent, and always limited to the neighborhood of the parts injured and of small extent. Traumatic fever, usually present after grave accident, when other plans of treatment have been pursued as early as the third or fourth day, has seldom been present when this plan has been adopted, and in no case has the fever been intense or alarming. The phenomena usually observed in cases of recent lacerated or incised wounds when submerged are, a sense of comfort, yet not absolute relief from pain; on the second or third day the adjacent parts are swollen, but not so much reddened. The integument usually assumes a white, sodden appearance, and only slight tenderness. On the fifth, sixth or seventh day, the swelling is greater than usually accompanies other plans of treatment, but it is not attended with increased tenderness, and is chiefly in a condition of œdemna. At the same time, the granulations are generally covered with lymph, or some exudate of a whitish color. At the end of fourteen days, the period at which fomentations are substitutes of submersion, the limb is still œdematous, the granulations abundant; sometimes red, and sometimes covered with the white exudate.—*Med. Review, Detroit*.

**TREATMENT OF FRACTURE OF THE FEMUR BY IMMOVABLE APPARATUS.**—Dr. F. H. Hamilton (*N. Y. Medical Journal*, Aug, 1874) makes a valuable and scientific contribution to this disputed subject. The reported cases were treated in Bellevue and other New York hospitals, by himself and friends. The measurements were made both by the doctor and one other physician. The figures given are those obtained by these measurements. Further, the cases are taken without any selection, but in regular order, as they were treated in the hospitals. Thirty-seven cases are reported. Of these, ten are under eighteen, and twenty-seven over eighteen years of age. Of those under eighteen there were

three perfect, the others ranging from one-quarter of an inch to one inch and a half shortening of femur. Of those over eighteen one was perfect, the others ranging from three-eighths of an inch to two inches short. One case was attended by gangrene and death; one died from ether, and another was saved from death with difficulty.

Thus, of thirty-seven cases, including ten under eighteen years, there were only four perfect results. The case attended by gangrene, the death from ether, and other minor accidents, fill out anything but an inviting picture for immovable dressings. Certainly immovable dressings must make a better showing, before a sane surgeon can undertake a case of fractured femur in an adult, and expect a perfect result.—*Med. Review, Detroit*.

**TREATMENT OF HÆMORRHOIDS.**—Dr. William Colles (*Dublin Jour. Med. Sci.*, June, 1874), having under his care a severe case of "bleeding piles" where all former treatment, including applications of fuming nitric acid, had been of no avail, concluded to try injection of perchloride of iron. For this purpose twenty minims of the ordinary tincture were injected into each mass by means of a hypodermic syringe. The injection caused less pain than the nitric acid, and one administration sufficed to remove the hæmorrhoids completely.

**DIFFERENCE BETWEEN THE INDUCED AND GALVANIC CURRENTS.**—These differences are great, and vitally important in any rational use of electricity. They are well stated by Dr. G. V. Poore, *London Lancet*, May 9, 1874.

Respecting the *galvanic current* it is to be remembered: (1) *It is continuously evolved, and always flows in one definite direction*—from positive to negative pole. (2) *It has well marked chemical and thermal effects.* This action is most marked at the negative pole. (3) *It has electrolytic effects*—passed through a compound liquid decomposition frequently results.

Respecting the induced current it is to be remembered: (1) *It is momentary in duration.* (2) *Its direction is constantly changing*—many times in a second, so that in using it no attention need be given to the different poles. (3) *The chemical, thermal, and electrolytic effects are almost nil*, so slight as to be entirely disregarded.

(4) *The intensity and tension of the current are very great*, so that it overcomes, without difficulty, any resistance which the human body may oppose to it. (5) *It causes the contraction of healthy muscles far more effectually than the galvanic current.* This is due to the constant interruptions and greater tension and intensity of the induced current.—*Detroit Med. Review*.

Sir James Paget says the best wash for hardening the skin, to prevent bedsores, is one part of sweet spirits of nitre to three parts of water.



At the recent medical congress held at Marseilles, the majority of the doctors present agreed that the best possible diet for children was oatmeal porridge and sweet milk.

**OAT MEAL FARINA AS A FOOD FOR INFANTS.**—M.M. Beaumetz and Hardy recommend very highly the use of oat-meal farina for the feeding of young children. According to these gentlemen, this farina resembles human milk most closely in its plastic and respiratory elements, and contains, in addition, iron and phosphates. It has, besides, the property of preventing or arresting diarrhoea, which so frequently occurs in young children. Some infants of four to eleven months, who were fed upon this farina, were found to grow equally well with those who were nourished by the milk of a good nurse.

**THE OBSTETRIC SWING.**—The best contrivance is one which I shall venture to call my own, though it may, very likely, have been suggested before. It acts on the principle of directing muscular action, and consists of a sheet twisted loosely in the form of a rope, and tied together at the ends. Put the feet into the loop at the lower end, and push; grasp the other end with the hand and pull; the power exerted in this way is indefinite; it is the gymnastic paradox of trying to lift oneself, and may be practiced, till the sheet or back gives way. Its effect in labor is surprising, and is immensely appreciated by patients. It brings the body muscles into play. It relieves that distressing sense of helplessness, which all women feel, by enabling them to help themselves. It shortens labor. It saves the use of instruments. Allow me to recommend it to your readers.—*Boston Med. and Surg. Journal.*

**INTRAVASCULAR MURMURS** are sometimes heard in the arteries and sometimes in the veins. They are systolic, but sometimes diastolic, in rhythm. In the arteries these murmurs may be strictly localised, or may be audible over every part of the arterial system. In the veins, as a rule, they are audible everywhere, provided certain conditions are complied with, though they are permanently present in certain parts of the body where these conditions naturally exist. Such intravascular murmurs are of the most various significance, and can only be most briefly referred to now. Sometimes they signify serious lesion of the vessels themselves; at others, nothing worse than some slight deformity of the chest, the result of rickets; and at still other times, only an alteration in the condition of the blood itself, which may arise from the most various causes.—“*On the Diagnosis of Disease of the Heart,*” by George W. Balfour, M.D., F.R.C.P.E. (*Edinburgh Medical Journal, June, 1874.*)

**ETHER AS AN ANTHELMINTIC.**—Prof. Vogel

announces a new application of this anæsthetic, namely, the destruction of tape-worms. The ether is enclosed in a gelatine capsule and swallowed. It soon becomes vaporized in the stomach, (?) and the worm, then becoming stupefied, is easily removed by any of the usual remedies, against which, when awake, it offers strong resistance.—*Journal of Applied Chemistry, August, 1874.*

**BELLADONNA, ETC., IN INCONTINENCE OF URINE IN CHILDREN.**—In a paper read before the Obstetrical Society of Dublin, by Dr. Kennedy, he advocated the following measures for the cure of this complaint:—

1. Training patients to retain their water in the daytime as long as possible
2. The use of the cold douche.
3. A moderate use of fluids towards night, and a total abstinence from tea.
4. The internal use of belladonna in gradually increasing doses, till its specific effects are produced. In referring to the action of this drug he mentioned one feature about it as regards children, namely, their small susceptibility to its action, and that they bear it very much better than adults.—(*New Remedies.*)

**SAUSAGES COLORED BY ANILINE.**—Aniline red is used to impart to sausages a fresh and healthy appearance. It can easily be detected by the use of alcohol or ether, either which substances dissolves aniline, but not blood. The use of aniline red is severely reprehensible, not only from the fact that it is known to have caused the illness of entire families who have eaten meat colored with it, but also because, from its mode of preparation, it frequently contains arsenic, and must, therefore, act as a poison.—*Amer. Chemist.*

**CHORAL AS AN ANÆSTHETIC DURING LABOR.**—(*The Lancet, February 21, 1874.*)—Dr. W. Playfair has found that chloral has the immense advantage over chloroform, when administered during labor, of not lessening the strength or intensity of the pains, while at the same time remarkably diminishing the suffering resulting from them. It is chiefly applicable at a period when we would not think of administering chloroform,—towards the termination of the first stage of labor, before the complete dilatation of the os, and when the sharp grinding pains perhaps produce more suffering and are less easily borne than the more forcing pains of a later stage.

He gives the drug at first in fifteen-grain doses, and then in smaller quantity, increasing the intervals between its administration, and this usually keeps up a full and sufficient effect for hours. It need not at all interfere with the exhibition of chloroform.—*Med. Times, Phila.*

# THE CANADA LANCET :

A Monthly Journal of Medical and Surgical Science

Issued Promptly on the First of each Month.

*Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada LANCET," Toronto.*

AGENTS.—DAWSON BROS., Montreal, J. & A. McMILLAN, St. John, N.B.; J. M. BALDWIN, 805 Broadway, New York, and BALLANTINE, TRIBALL & COY, 20 King William street, Strand, London, England.

TORONTO, NOVEMBER 1, 1874.

## LOCAL MEDICAL ASSOCIATIONS.

We again feel impelled to urge upon our readers, the desirability of giving effect to the medical legislation of last session by the formation of Medical Associations. Wherever these associations do not already exist, the members of our profession owe it to themselves to immediately set about the formation of a society. Local Medical Associations are needed for several objects—all intimately connected with the advancement and best interests of the profession. For the cultivation and diffusion of science, for the purpose of friendly intercourse, and for facilitating the fixing of uniform or suitable charges, the Local Medical Association has become a necessity, and can now be made to have a legal existence. Knowing as we do, that many important towns and districts are yet without any association of the medical fraternity, we are compelled to declare that the real value of the medical legislation we have recently obtained in this Province has not been properly estimated, or else it would have been more speedily and generally acted upon. And naturally enough where the advantages of the Medical Act have been passed over, there we find the status of practitioners on the lowest level. A degrading competition takes the place of that true professional self respect which exacts a proper honorarium for the services of science and skill; and we find conduct only to be expected of hucksters and pedlars, taking the place of that gentlemanly deportment and consideration, which the members of a liberal profession owe to one another. As an instance, we state it on the information of a letter from one of the smaller towns of Ontario, where as yet there is no associa-

tion of the medical practitioners, that there the effort seems to be to get practice by reducing fees, and cutting under a rival's charges instead of the legitimate method of giving all possible study and attention to the cases in hand in the aim of doing one's duty. Such conduct is very reprehensible. Overcrowded as the profession may accidentally be in some of the towns of this country, there is no reason why the low arts of competing tradesmen should be adopted by professional men. There will be work enough for all to do, at properly remunerative prices, if those who overcrowd our cities and towns will only take the proper steps—say, either by removing to a locality where actual openings exist, or by patiently waiting their time in making a reputation in the place where they commence their career. Nothing can be more generally true than that the public estimate medical men pretty much as they estimate themselves, and that the cheap man will come to be looked upon as an inferiorly qualified man, and therefore only to be employed in the most trivial cases. The tendency of a lowering competition in medical life, is to defeat the object of those who follow it.

The cultivation of a proper professional spirit, would seem to be greatly needed as a remedy for such a state of things. The true professional spirit can best of all be cultivated, we think, by the influence of medical associations, such as those contemplated and established in a few places under the Medical Act. Hence, we persistently advise their formation, and once more suggest that preliminary meetings should be held in the towns, counties and townships where such associations do not already exist.

## MEDICAL EVIDENCE IN CRIMINAL CASES.

We have recently had prominently brought before our notice the gross injustice inflicted on members of our profession, by the absence of any provision for compensating them for their medical evidence, expenses of travel and maintenance, as also for the loss of practice for the time they are kept waiting on the court, in many instances extending to a week. When the subject is brought before the Judges their remarks on the unfairness of the present condition of things is all that we

would expect from the liberal and enlightened men who grace our Canadian Bench, but amounts only to a barren sympathy, unless the unfortunate medico is so necessitous as to be compelled to make the application for out-of-pocket expenses in *forma pauperis*; the Judges can then give an order on the County Treasurer. It is hardly necessary to say that the expenses are never sought by so humiliating a procedure. In criminal cases, attendance is compelled either by the process of subpoena, or the witness is bound over when first examined either by the Magistrate or Coroner, and he is liable for disobedience, to an attachment, or a committal for contempt. In the cases of Medical men, no expenses are allowed, the witness is bound to appear unconditionally. There can be no doubt of the propriety of enforcing the attendance of medical witnesses; there can be as little doubt of the justice of adequately remunerating them. Having briefly pointed out the injustice of the present condition of affairs, let us examine the circumstances essential for affording complete and accurate testimony. The first requisites are veracity and attention; the former is essential for every species of testimony, the latter is particularly so for that of a medical witness, who must not only state truly what he has seen, but his statement should rest on an examination of the facts, without precipitation, and with a knowledge sufficient to prevent him from forming false opinions. The next requisite is memory, but as this may prove fallacious, either from the weakness of the art of perception, independent of inattention, or from the lapse of time, every circumstance in the occupation of a medical man likely to involve legal inquiry, should be committed to writing, which, besides preserving an unvarying record of the fact, enables him to refresh his memory on collateral incidents in proof of the fact in question, by associations which are almost inseparable from it. Besides, written records prevent the possibility of imagination playing the part of memory, a circumstance which is apt to occur when no records of facts are preserved. The last requisite essential in a medical witness is a condition which implies, that strength is added to his evidence by education, and a sense of greater responsibility and more sensibility to honor, than are usually attributed to witnesses with the ordinary level of moral and intellectual qualities. Such being the requisites necessary for obtaining cor-

rect and satisfactory testimony from medical witnesses, the attainment of which has involved years of study and a large expenditure of means, is it not a disgrace to the Legislature, that while properly enough compelling the attendance, they neglect to provide adequate remuneration for such skilled testimony? We have six members of our profession in the Ontario Legislature; they can surely have no difficulty, on a proper and temperate representation of this crying grievance, in obtaining the redress we are so fairly entitled to.

#### THE INJECTION OF PULMONARY CAVITIES.

Professor Pepper of Philadelphia, who contributed a paper to the Philadelphia *Medical Times* in March last, on the local treatment of pulmonary cavities by injections through the chest-wall, has given the results of further experience of this method of treatment in an article in the October number of the *American Journal* of the Medical Sciences. We pass over historical references as to the early suggestions of, and priority in the resort to this method of treatment, to state in abstract, that he uses a very delicate steel canulated needle, like the finest hypodermic needles, but about three inches in length, and an hypodermic syringe capable of holding twenty-five minims. He at first used an aspirator, but now prefers the instrument mentioned. Selecting a point at which the signs of a cavity are most intense, he punctures the chest-wall, previously affecting anæsthesia, by freezing. There is little or no pain except when the filaments of a nerve are pricked, when tingling radiating pains are felt. The time occupied in an injection does not exceed thirty seconds. The depth to which it has been necessary to penetrate has varied in different cases from one and a half to two inches. Prof. Pepper has only used dilute solutions of iodine in iodide of potassium (Lugol's Solution,) and says that the results of injections of iodine have been so satisfactory that he has felt indisposed to use any other substance, though he considers it probable that other substances may be found preferable in some cases. Twelve minims of the liquor iodini comp. are diluted in a drachm of warm water, and of this solution twenty-five minims are injected about once a week. He re-

ports six cases treated in the Philadelphia Hospital, three of which were not benefitted, the other three being considerably improved. He claims that the continuous treatment of lung cavities by repeated injections by means of delicate canulae may be conducted without hemorrhage, traumatic irritation, or interference with internal medication and hygienic measures. The cases which are best adapted for this local treatment are those where a single, superficial and circumscribed non-tuberculous cavity exists; but even where there is implication of the rest of the lung, or incipient disease of the opposite lung, some benefit may be expected. The mode in which such local treatment does good is chiefly by altering the character of the morbid action in the walls of the cavity, diminishing the amount of purulent formation, as well as the degree of hectic irritation and the danger of constitutional infection. A certain amount of rest is secured for the walls of the cavity by the marked relief afforded to the cough. Further, the treatment favors the cicatrization and contraction of cavities. He finally maintains that this mode of treatment possesses a certain degree of positive clinical value, since, during its use, uniform improvement to an exceptional extent, has taken place in both the general and local conditions of the patient.

In a matter of such immense importance as this question of the curability of lung cavities, the interest of Prof. Pepper's paper will not be underrated. Without being over-sanguine concerning the results as yet incomplete though promising, the experimental tests recorded, warrant a further and extended trial, which the practice will undoubtedly receive.

PRESENTATION.—Dr. Arch. McLay, of Bryanston, Middlesex, was the recipient of a very handsome present of a gold watch, valued at \$175, by the good people of the village and surrounding country. On the eve of his departure for Iona, Elgin, a large concourse of friends assembled at the Drs. residence, where a beautiful spread was prepared by his lady. Altogether it was an agreeable affair, and is a token of the high esteem in which the Dr. is held by the people in this vicinity. He carries their best wishes with him to his new home.

MUTUAL BENEFIT ASSOCIATION.—A meeting of the Medical Profession of Toronto was held on the 30th of September, for the formation of a Mutual Benefit Association. Dr. Winstanley was chairman, and Dr. Bridgman acted as secretary. It was moved by Dr. Canniff, seconded by Dr. Pyne, and carried, that this meeting deems it expedient to form a Mutual Benefit Association, and that a committee be appointed to prepare a prospectus to be submitted to the profession for their approval at an early date. Drs. Winstanley, Agnew, and Bridgman were appointed a committee. Moved by Dr. Pyne, seconded by Dr. Rosebrugh, that Dr. Bridgman be authorized to advertize the intention of such an organization in the *Ontario Gazette*, and elsewhere, as required by law. A vote of thanks was passed to the chairman, and the meeting adjourned till the 9th October, at eight o'clock, p.m.

EFFECTS OF CHLOROFORM ON THE BRAIN.—At the late meeting of the British Medical Association, the subject of chloroform-narcosis, was under discussion, and the remarks of Dr. Marion Simms and others were given in support of the view that this condition is due to anæmia of the brain. In reference to this Dr. Bedford Brown in the *Med. Times* (Phil.) for October publishes a letter in which he claims to have demonstrated this fact so long ago as 1860, in a case of fracture of the skull published in the *American Journal of Medical Sciences*. In this case, owing to the severity of the fracture, the anterior lobes of the brain were fully exposed, and the action of the chloroform could be readily seen, and was in his opinion sufficient to establish the fact that cerebral anæmia is the invariable result of the action of chloroform. In view of this fact, it is advised in apparent death from chloroform to place the head downwards while efforts are being made to establish respiration.

PRESERVATIVE FOR HYPODERMIC INJECTIONS.—Dr. McPherson (*Phil. Med. Times*) recommends the following as a preservative for hypodermic injection solutions: chloral hydrate, two grains; acetic acid two drops; distilled water half an ounce. In this menstruum any alkaloid may be dissolved or suspended in the usual proportions, and with a certainty of its keeping for several weeks without change.

**ARSENIC IN ASTHMA.**—Dr. C. Paul (*American Four. Med. Sciences*, Jan. 1874,) reports several cases of spasmodic asthma which were greatly benefitted by the administration of arsenic. He says the remedy must be persevered in, until constitutional effects are produced before any benefit can be expected; it should be thoroughly tried. It has succeeded after all other drugs failed. He gives Fowler's solution in from ten to fifteen minim doses, after meals, and in some cases he uses it hypodermically.

**RATIONALE OF TRANSFUSION.**—It has often been wondered at, that when patients had lost large quantities of blood, the injection of a few ounces should be sufficient to save life. Dr. Dalton, in discussing this subject recently, said he did not think it at all strange. He compared the human system to a machine in which there is a balance-wheel, the object of which is to carry the piston over the "dead point." Without this, if there were much resistance, the engine would stop; so the injection of even a very small quantity of blood, after hemorrhage, when the human machinery was about to stop, might keep it in motion and life.

**PARTNERSHIP.**—By reference to our advertising columns, it will be seen that Drs. Lizars and Hillary of this city have entered into partnership as operative and consulting surgeons. They have opened an office on King street west, No. 105. These gentlemen have been long in practice, and have had considerable experience in surgery. Dr. Lizars has for many years devoted himself almost exclusively to surgery, and Dr. Hillary was for a long time in the army service.

**BOOKS, INSTRUMENTS, &c.**—Being anxious to further the interest and convenience of our many subscribers in every possible way, we would take pleasure in making selections of books, instruments and the like, and forwarding them by express. Parties will thus be enabled to save the ten per cent. discount on all cash purchases. Our friends need not feel at all backward in asking any favor that we can bestow in this way.

Olive oil, if administered promptly, is said to be an antidote for strychnia.

**PLEASE REMIT.** We enclose bills to all of our subscribers who are in arrears, and earnestly hope they will respond promptly. If any should neglect to remit we will draw upon them through the agency of the Express Office after the 15th inst.

**CHLOROFORM DURING SLEEP.**—Dr. W. R. Cluness reports in the *Pacific Medical and Surgical Journal* two cases in which chloroform was administered and anæsthesia produced during sleep. One case was that of a girl of eight years, and the other a girl two and a half years of age. In each case a surgical operation was performed. Neither of the patients offered the least resistance or showed any signs of consciousness in passing under the influence of the chloroform.

**HEADACHE AFTER DRUNKENNESS.**—Byron recommends "sermons and soda water." The *Revue de Therapeutique* says: Take of solution of acetate of ammonia, tincture of bitter orange-peel, syrup of bitter orange-peel, each 20 parts; water 500 parts. To be given in repeated tablespoonful doses.

**EPILEPSY.**—Dr. Crichton Browne's success with the nitrate of amyl in arresting the further progress of this distressing malady when the aura has once declared itself, justifies the more frequent employment of the remedy in question, as well as this further recurrence to the subject. If it should turn out generally efficient, it would in many cases prove a most desirable resort.

**COMPLIMENTARY.**—A reception was given to Prof. Erichsen, the eminent surgeon and author, by the Medical Department of the University of New York, last month on the occasion of his visit to that city.

He also visited Philadelphia and was the recipient of a complimentary dinner from a number of medical gentlemen, including most of the prominent medical teachers and authors.

#### DIED.

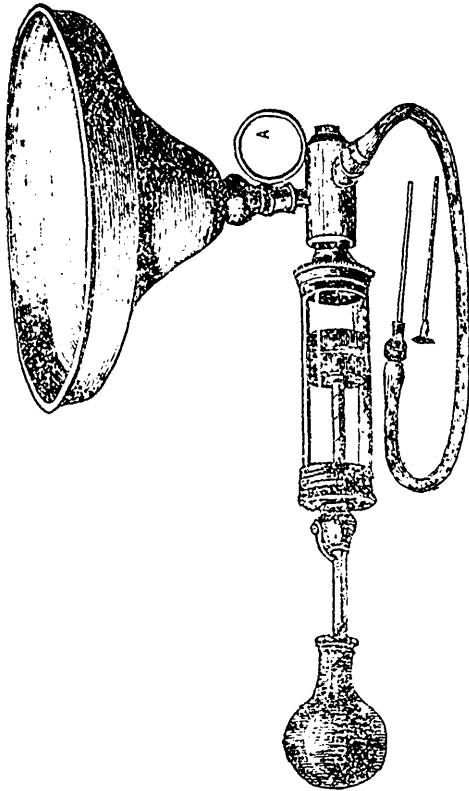
At St. Hyacinthe, Que., on the 17th of Sept. Dr. Duvert, in the 54th year of his age.

At the Toronto General Hospital, on the 8th ult., in his 33rd year, Henry Strange, M.D., formerly Registrar of the Medical Council.

New Instruments.

APPARATUS FOR TRANSFUSION

The following wood-cut engraving, shows a new form of apparatus for the transfusion of blood, by M Collier (Paris.)



By a very simple and ingenious contrivance the valves which generally form part of these instruments, and which are so objectionable, are dispensed with. The extremity or nozzle of the syringe fits closely in a short cylinder, which communicates on the one hand with a funnel-shaped cup or reservoir, into which the blood is received, and on the other, with the injection tube. There is a lateral opening in the nozzle of the syringe, which corresponds with the opening, at the bottom of the reservoir. When the syringe is filled with blood, drawn from the reservoir, it is rotated one-fourth of a circle so that the lateral opening in the nozzle, shall correspond with the orifice of the injection tube, and the blood is forced on. The syringe is then rotated back again towards the reservoir, and

refilled and so on, the movements being effected with the greatest precision. The syringe holds about 10 grammes (154.3 grs) so that the operator can tell exactly, how much blood he has injected. This instrument may also be used with facility for injecting medicinal substances into the veins as in cases of tetanus, and the like, where the difficulty of swallowing fluids is very great. It is exceedingly simple in its construction, and is likely to come into general use.

Toronto Hospital Reports.

*Detailed Analysis of the Diseases or Ailments for which patients received treatment, for the year ending Sept. 30th, 1874.*

DISEASE.	Male.	Female.
Acne .....	1	
Anasarca .....	4	2
Amputations .....	16	12
Aneurism .....		1
Amblyopia Potatorum.....	1	
Anæmia.....		2
Alcoholism .....	4	1
Abortion .....		1
Asthma .....	1	1
Anchylosis.....	3	
Amenorrhœa .....		2
Abscess .....	12	5
Albuminuria .....	7	2
Apoplexy .....	1	
Abscision of Staphyloma .....	1	
Bubo .....	2	
Bronchitis .....	8	5
Contusion .....	6	1
Choroiditis, Serosa.....	1	
Chlorosis .....		2
Cancer, os Uteri .....		4
Cut Throat .....	1	1
Cataract .....	2	1
Canthoplasty .....	3	
Constipation .....	2	3
Cancer .....	8	6
Cerebritis .....	1	
Choræa .....		1
Catarrh .....	2	1
Concussion .....	2	
Cystitis .....	1	
Colica Pictonum .....	1	
Condylo-nata .....		1
Delirium Tremens .....	46	3
Dysentery .....	3	1
Diarrhœa .....	7	5
Debility .....	35	14
Distichiasis .....	1	
Dyspepsia .....	2	2

DISEASE.	Male.	Female.	DISEASE.	Male.	Female.
Eczema	3	1	Marasmus	2	0
Epilepsy	5	2	Neuralgia	3	2
Emphysema	2		Necrosis	7	4
Epistaxis	4	1	Occlusion of Vagina	1	1
Empyema	2		Orchitis	5	0
Enlarged Spleen	4		Œdema	1	0
Epithelioma	4	3	Pneumonia	8	7
Encephaloid	1		Polypus	2	3
Erysipelas	6	1	Puerperal Fever	0	2
Exostosis	2		“ Mania	0	1
Excision of Eye	5	2	Phymosis	4	0
Excision of Hip Joint	1		Paraplegia	7	1
Fracture	40	13	Psoriasis	2	0
“ Comp.	3	2	Phthisis	30	14
“ Comp. Com.	4	2	Pleurisy	4	2
Frost Bite	10	2	Periostitis	2	0
Fever, Typhoid	70	19	Procidencia Uteri		4
“ Scarlet	15	12	Peritonitis	2	0
Febricula	6	3	Pediculi	4	3
Fungus Hæmatodes	1		Remittent Fever	3	2
Gonorrhœa	9	3	Rubeola	4	3
Gleet	4		Rectal Stricture	2	1
Goitre	0	1	Rheumatism	20	15
Gun Shot Wounds	2	0	Scabies	4	2
Gastritis	1	0	Syphilis	29	12
Hæmaturia	2	2	Sycosis	2	0
Hæmorrhoids	3	2	Sciatica	2	2
Hemorrhage	6	3	Scalds	2	1
Heart disease	5	3	Synovitis	2	
Hepatitis	1	1	Subinvolution		2
Hypochondriasis	2	1	Scrofula	1	1
Hysteria	0	3	Spinal Curvature	2	
Hernia	6	1	Sprained Ankle	3	
Hemiplegia	7	6	Spasm of the Glottis	1	
Hæmoptysis	2	1	Tumor	9	7
Hydrocele	1	0	Typhoid Pneumonia	4	1
Hypertrophy of Liver	1	2	Tetanus	2	
Hydro-peritoneum	1	1	Tracheitis	1	
Influenza	1	0	Tonsillotomy	3	1
Iridectomy	7	6	Ulcers	30	21
Iritis	4	2	Urethral Stricture	5	
Icterus	3	2	Urticaria	2	
Ichthyosis	1	0	Vulnus	19	11
Impetigo	1	0	Vaginitis		1
Insolation	1	0	Vesico-vaginal fistula		2
Keratitis	6	2	Varicella	1	1
Keratomyxis	2	0	Variola	3	
Knee joint disease	2	1	Varicose Veins	7	6
Herpes Circinatus	4	1			
Luxation	3	1			
Leucorrhœa	0	3			
Locomotor Ataxia	2	0	Patients remaining in Hospital October		
Leucocythemia	1	0	1st, 1873—Males		46
Lupus	1	0	Do. do. Females		21
Mania	1	2			67
Metritis	1	1	Admitted from the 1st Oct. to the		
Morbus Coxarius	4	2	30th Sept., 1874—Males		626
Menorrhagia	0	2	Do. do. Females		248
Masturbation	6	3			874

Total number under treatment at same time—Males.....	672
Do. Females.....	266
	914
Discharged during the year—Males....	521
Do. do. Females.....	213
	734
Died during the year—Males.....	61
Do. do. Females.....	19
	80
Remaining in Hospital on the 30th Sept. 1874—Males.....	90
Do. do. Females.....	37
	127
Externs who received medicine and advice gratuitously.....	5613

P. S.—Patients (not incurables) are admitted on payment of 40 cents per diem, to the general wards; to private wards at \$1.00 per day. This applies to patients from any part of the country.

**Book Notices.**

**MATERIA MEDICA FOR THE USE OF STUDENTS.** By John B. BIDDLE, M.D., Jefferson College, Philadelphia. Sixth edition, revised and enlarged. Philadelphia: Lindsay & Blakiston. Toronto: Hart & Rawlinson.

It is only about a year since the 5th edition of this work was issued from the press. The present edition has been carefully revised; some parts rewritten, and much new matter added. The text has been illustrated wherever it appeared necessary or desirable to do so, representing some of the most important plants, apparatus for transfusion, aspiration and atomization. It contains in a condensed form all that is valuable in materia medica, and furnishes the medical student with a complete manual on this subject.

**CLINICAL USES OF ELECTRICITY.** By J. Russell REYNOLDS, M.D., F.R.S.; University College, London, Eng. Second edition. Philadelphia: Lindsay & Blakiston. Toronto: Hart & Rawlinson.

This work consists of a series of lectures, delivered by the author during the summer of 1870 in University College, London. They first appeared in the *Lancet*; and they have since undergone revision at the hands of the author. The book contains about 100 pages, and is chiefly devoted to ascertained facts relating to the clinical uses,

application and effects of electricity in the diagnosis and treatment of disease. It is thoroughly reliable as a guide, very concise, and will be found exceedingly useful to the general practitioner.

**GALVANO-THERAPEUTICS.**—A revised reprint of a Report made to the Illinois State Medical Society by Dr. Prince. Philadelphia: Lindsay & Blakiston. Toronto: Hart & Rawlinson.

This work is somewhat similar in size and substance to the preceding, except that it deals more with the mechanism of the battery, and the practical uses of electricity in the treatment of disease, electrolysis, &c., &c. It has been very favourably reviewed by the American medical press. It is an excellent résumé of the present state of the science and its application to disease.

**WYTHES POCKET DOSE BOOK.** Eleventh edition, revised and improved by Joseph H. WYTHES, A. M., M.D. Philadelphia: Lindsay & Blakiston. Toronto: Hart & Rawlinson.

**LIGATION OF ARTERIES.** By Dr. L. H. FARABEUF. Paris. Translated by John D. Jackson, M.D., Danville, Ky. Philadelphia: J. B. Lippincott, & Co. Toronto: Willing & Williamson.

We cannot commend this little volume too highly. Everything seems complete about it. The descriptions of the various operations, and the minutest details necessary, are given in the most clear and concise manner. The woodcuts are well executed, and the whole work does credit alike to the author and publisher. Nothing is omitted that can be of any service to the surgeon. Torsion of arteries is also treated of, and a forceps for this especial purpose delineated. The author strongly recommends students to make themselves thoroughly familiar in searching for and tying arteries in the dead subject, if they ever expect to succeed well on the *living* body.

**A PRACTICAL TREATISE ON THE DISEASES OF WOMEN.** By T. GAILLARD THOMAS, M.D., College of Physicians and Surgeons, New York. Fourth edition. Thoroughly revised, with 191 illustrations on wood. Philadelphia: H. C. Lea. Toronto: Hart & Rawlinson.

This work is so well and favorably known to the profession that any lengthened notice is unnecessary. It has gone through four editions within a short space of time, and has been translated into French, German, and Italian. The present volume has been carefully revised, but only a small amount



of new matter has been added. The work still holds a first place as a reliable guide to the diagnosis and treatment of diseases of women. We cannot commend it too highly.

**ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE: A Handbook for Students and Practitioners.** By HENRY HARRISHORNE, M.D., Professor of Hygiene in the University of Pennsylvania, &c. Fourth Edition, thoroughly revised. In one handsome volume, royal 12mo. Philadelphia: H. C. Lea. Toronto: Willing & Williamson.

This interesting little compendium has now reached the fourth edition. Many parts of the work have been revised and rewritten, and illustrations added where they can be of service. The work has been much improved, and now forms one of the most complete manuals on the practice of medicine in the English language.

**THE PHYSICIAN'S VISITING LIST FOR 1875.** Philadelphia: Lindsay & Blakiston. Toronto: Willing & Williamson.

THE PHYSICIAN'S VISITING LIST for 1875 has just been received. This visiting list has been published by Messrs. Lindsay & Blakiston for upwards of twenty years, and has met with universal approval by the profession. It is exceedingly convenient, can be carried in the breast pocket, and will save the price of itself 100 times over in a year. We would not be without it under any consideration..

Price for 25 patient's weekly . . . . . \$1.00  
Price for 50 patient's weekly . . . . . 1.50  
Interleaved Edition \$1.50 and \$1.75.

**ATMOSPHERIC ELECTRICITY AND OZONE; their relation to health and disease.** By GEORGE M. BEARD, M.D. New York: D. Appleton & Co.

**NEW METHOD OF TREATING MALIGNANT TUMORS by electrolyzing the base.** By the same.

**TINNITUS AURIUM, OR NOISES IN THE EARS.** By LAURENCE TURNBULL, M.D., Howard Hospital. Philadelphia: J. B. Lippincott.

**DEAF-MUTISM, AND THE METHOD OF EDUCATING THE DEAF AND DUMB.** By the same.

**THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES for Oct., 1874.** Edited by ISAAC HAYS, M.D. Philadelphia: H. C. Lea.

**THERAPEUTICS AND MATERIA MEDICA.** By ALFRED STILLÉ, M.D., Professor of Practice of Medicine, University of Pennsylvania. Fourth Edition, thoroughly revised and enlarged, in two volumes. Philadelphia: H. C. Lea: Toronto: Hart & Rawlinson.

**CLINICAL LECTURES ON VARIOUS IMPORTANT DISEASES.** By N. S. DAVIS, M.A., M.D., Prof. of Practice of Medicine, Chicago Medical College. Second Edition. Philadelphia: H. C. Lea. Toronto: Hart & Rawlinson.

#### MISCELLANEOUS ITEMS.

**OZONE.** Dr. Lender ozonises chambers very successfully by means of a mixture of the protoxide of manganese, or of the permanganate of potash and oxalic acid. Two spoonfuls of this powder moistened with twice the amount of water, and a trifle more of water every two hours, emits ozone freely. Gold and silver, however, excepted, it oxidises metals rapidly. *Archivio di Medicina Chirurgia ed Igiene.*

**ON THE PROPERTIES OF MUSCARINE.**—M. Prevost directed the notice of the *Société de Biologie* 18th April, to some physiological properties of muscarine, the alkaloid or glucoside of *Ammanium muscaria*. It is a very violent poison. It arrests the heart in diastole, unlike digitaline, which arrests it in systole. Schmiedeberg indicated its antagonism with atropine. Muscarine increases the flow of saliva, *directly* exciting the salivary glands. It excites the lachrymal glands, also promoting the flow of tears. Atropine will check the salivation induced by muscarine.

**TREATMENT OF TYPHOID FEVER.**—Dr. Compagnon finding it difficult to reconcile patients and their friends with the practice of cold immersion in fever had recourse to the pardonable artifice of adding a few drops of phenic acid to the water before hand. This premised, he practised aspersion over the entire surface with the utmost advantage, thus lowering the fever, and inducing such relief that the sufferer himself was anxious for its repetition in a few hours. The patient and his friends ascribed the relief to the phenic acid, and the practitioner had the satisfaction of securing the great advantages of cold aspersion without running counter to their prejudices.—*L'Union Médicale.*

**ACQUITTED.**—Dr. Nash, of Pictou, who was charged with being implicated in an abortion case, has been honorably acquitted.