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ELECTRICITY IN GYNECOLOGY.

BY A. LAPHORN SMITH, B.A., M.D., M.R.C.S., ENG.,
F. O. S., LOND.; LECTURER ON GYNECOLOGY,
BISHOP'S UNIVERSITY, MONTREAL.

As the treatment of diseases peculiar to women, by electricity, has in the last few years attained a high point of perfection and is now attracting attention all over Europe and America, owing to the writings of Apostoli, of Paris, and having lately had the pleasure of spending some time at his clinic, I thought it might be of interest to your readers to be furnished with some observations on this treatment. And although Apostoli himself is an enthusiast and therefore more impressed than anyone else with the advantages of his methods over all others, still there is so much reason in what he teaches, and his views are so thoroughly borne out by actual results, that no one can spend very much time under his tuition without becoming almost as much impressed with its advantages as he is himself.

Certainly the treatment of diseases of the uterus by electricity, either galvanic or faradic, has this in its favor, that it is the rational one for all diseases of that organ. Take, for instance, displacements; these all depend either on the womb being too heavy for its supports, or its supports being too weak to bear even a normal weight. In the first case the stimulating influence of a current applied to the muscular tissue or organ will have the effect of contracting its muscular fibres and consequently of diminishing its size and the calibre of the vessels supplying it with blood; for the muscular coats of the blood-vessels are made to contract, and the active and passive congestion is thereby diminished.

If on the other hand, the size and weight of the

organ remains normal and the displacement is due to defective action of the muscles which should support it, owing to their being in a state of degeneration, then no medication can be so effective as that which tends to tone them up and develop them to their normal strength. In most of our text books this cause of displacement is slightly dealt with. A year ago, at the meeting of the Canada Medical Association, at Quebec, in a paper which I had the honor of reading on Alexander's operation, I analysed the causes which lead to the uterus being held in place, and on my recent visit to Europe, the opinion I then expressed was fully endorsed by many of the leading authorities, whose views I obtained. Defective muscular tonus of the uterus and its muscular ligaments, and of the vaginal tube or column, and of the perineal muscles on which the end of that column rests, they all agreed was the cause of uterine displacements. This view is a rational one and is proven by the fact that they occur always in women whose muscular system is in a low state of development. Uterine displacements, I fancy, are unknown or at least very rarely met with in women living in a savage state, or among women of those countries where the manual labor is mostly performed by members of that sex. They are especially noticed among women of the higher classes, and among the lower classes living in a high state of civilization, whose muscular system, not only of the internal organs, but also of the limbs, is in a state of atrophy, amounting almost to wasting. In the dissecting-room we find cases in which the muscular system is so very much attenuated, that many of the muscles cannot be found. It is for this reason, doubtless, that in many cases for which the operation of shortening the round ligaments or round muscles has been performed, for the cure of retroflexions or retrodisplacements, the operator has been unable to find them. As women of very well developed uterine muscles rarely, if ever, have anything to complain of in that direction, it is, I fancy, rare to find these muscles well developed in cases of displacement. It was, therefore, with peculiar pleasure that I found Apostoli treating these cases by means of electricity. If we were called upon, for instance, to treat a case of lateral curvature of the spine depending upon the degeneration of the muscles of one or both sides, we would not be justified in trusting to artificial sup-

ports, such as iron stays, but rather we should, by electrical applications, exercise, good food and good air, develop those muscles, rather than make them more lazy by doing their work for them by means of supports. And as, every time muscles contract, they become larger and stronger (witness a blacksmith's right arm), so the best way of enlarging and strengthening the weak muscles would be to make them go through a course of gymnastics. It is within the experience of every doctor that displacements of the uterus have come on suddenly after an effort of some kind, while, in my own experience, some cases occur every summer regularly on the return of warm weather, when everything and everybody seems to be relaxed. Cases of displacement often come to us with a history attributing them to nervous shock or sudden fright. This could hardly be the case if the uterus owed its being held in proper position to ligaments instead of muscles, as only the latter depend upon the nervous system to any extent. Again, there is a large class of cases in which the disease consists of instability or disorder of innervation, in which the nervous system seems to act viciously for the want of proper control.

During my stay with Apostoli, I have over and over again seen women come to his clinic complaining of agonizing pain in the ovarian region, which was so real and so severe that they could not endure the weight of my hand. After ten or fifteen minutes' application of the faradic current passing through a long, fine wire, the disorders, under its influence, seemed to be so controlled as to no longer produce the manifestations of which the patient complained, and I could then press my hand deep down upon the ovaries without causing the slightest pain.

With regard to the sort of electricity; one should be able to distinguish the properties of galvanic and faradic currents, and even to accurately apply the different kinds of the latter, exactly in accordance with the requirement of each case. Thus, the current from the short, thick wire is suitable for putting the muscles through a course of gymnastics, and is, therefore, the peculiar remedy for muscular atrophy wherever it may be; while the current from the fine, long wire is especially adapted to disorders of the nervous system, being sedative and tranquilizing in its effects. The galvanic current is to be applied to disorders of

nutrition, and the effect varies according to the pole used. Thus, the negative pole has a caustic action similar to alkalies, such as potash or ammonia when used in sufficient strength, and leaves less tendency to retraction, while the positive pole, around which acids accumulate, has a coagulating and retracting action, and is especially suited to cases of hemorrhage. It is, however, in the treatment of fibroids of the uterus that Apostoli has achieved a world-wide and well-deserved reputation. The former treatment in vogue has been to remove the tumor, always a dangerous operation, or the removal of the appendages which is not without the danger common to any opening of the abdominal cavity. In these cases Apostoli uses a constant current, and for this he requires a good battery consisting of about 60 Leclanché cells, which have the advantage of working a long time without being refilled or cleaned, and only using themselves up while they are in actual use. 2nd, and perhaps the most important, a good galvanometer, by which he is able to measure out the exact dose of electricity suitable to each case. The importance of this instrument will be understood when we remember that the outflow, of electricity from any good battery varies from time to time and from day to day, so that what would be a suitable dose to-day would be a quite useless and weak one to-morrow. 3rd, a collector, by which he is able to bring in the circuit, one by one, as many cells as are necessary to produce the proper dose. And as the first cells are used up, he is able to bring into the circuit the middle or last ones which still remain fresh. 4th, an invention which is specially his own, and which has led to a revolution in the application of high currents (I refer to the clay electrode), consisting of a sheet of zinc about ten inches square, on the upper end of which is attached a wire, and on the under surface a cake of very moist potter's clay, held together by means of a piece of tarlatan on its under surface, the piece of zinc being embedded on its upper surface. Before the application of this material to the purpose of an electrode, the highest dose of electric current which could be applied without cauterizing was from 40 to 50 milliampères; but with the moistened cake of clay, by which the point of contact with the skin is spread over such a large surface, and by which the electricity enters by thousands of doors, I have

over and over again seen a strength of 250 milliamperes administered without the patient complaining of any sensation in the skin, or producing the slightest heat or redness. 5th, a uterine electrode, made of platinum, for the application of a positive current, for which, owing to the acids produced causing rapid oxidation, this metal is alone suitable. This platinum electrode is prevented from touching the sensitive vagina by means of a non-conducting covering for a considerable part of the length, otherwise the current would escape into the vagina, rendering the operation unprofitable. For this protecting covering he has found a celluloid tube the best.

In all cases of uterine fibroids occupying a position in the uterus, such as to render a safe puncture impossible, he employs a positive current in the uterine cavity, as will do in cases of endometritis, and when it is not advisable to destroy a large amount of tissue by puncture. When, however, the fibroid is in the posterior half of the uterus, so that he can reach it through the posterior cul de sac, he uses a negative current applied through an electrode made in the shape of a trocar. As much of his success is due to the observation of a number of little details which might be considered unimportant, I might describe the process of making a chemical galvanocaustic puncture :

1st. A thorough irrigating out of the vagina with a sublimate solution of 1000, from which he has never had any ill effect.

2nd. Having introduced his right finger so as to touch the fibroid, pressing down the uterus against it with his other hand, he inserts the celluloid tube to the place he has chosen for his puncture. He then introduces the steel trocar (the length having been previously arranged, so as to project one-third to two-thirds of an inch beyond its covering) through the roof of the vagina right into the tumor. The current is then very gradually turned, a careful watch being kept on the galvanometer. When the woman complains of pain he diminishes her sensibility by, for the moment, increasing the current beyond her endurance, then gently reduces it by a few milliamperes, so that she is better able to bear it by comparison without complaining. This is what he calls establishing tolerance. He then carefully increases the current by successive stages, to one hundred

milliamperes, for the first seance, but in subsequent seances reaching as high as two hundred and fifty. The woman is easily able to bear this high intensity without a great amount of pain, and also the short pain caused by the introduction of the short trocar. After from five to ten minutes the application of the current is very carefully and gradually reduced, as the sudden cutting of it off would cause a painful shock, owing to the induced current set up in the pelvis. The woman is then again carefully irrigated out and a small piece of iodoform gauze is introduced up to the wound, and the woman is then placed in bed for a few hours or for half a day, after which she returns to her home without any inconvenience. On her coming again a few days later, the gauze is removed with the slightest stain of blood or sometimes a little pus on it. The vagina is then again washed out and a fresh piece of gauze used, and after a week, or in some cases after two or three applications a week, the woman is able to return to her occupation.

Apostoli does not pretend that this method will rapidly remove a large fibroid, but he does pretend to cure the patient symptomatically ; that is to say, it is slightly reduced in size after each application, and the woman suffers no inconvenience from it.

I did not have to depend, nor did Apostoli wish me to depend upon his word for the advantages of his treatment, as he invited me to walk about among the patients and to converse with them as to the kind of sensation they felt before treatment and as to the relief they experienced after, and with few exceptions their reports were exceedingly encouraging, while in cases of acute pain in the organs on pressure I could myself observe the relief. There is one thing which he does very thoroughly and insists upon his assistants doing, and that is a thorough cleansing of the hands and instruments before and after each application, or even examination. The hands have to be well washed and the fingers scrubbed with sublimate solution, and the vagina of every patient is thoroughly washed, while the instruments which are introduced into the uterine cavity are rendered scrupulously clean by being passed through the flame of a spirit lamp, and afterwards dipped in a strong carbolic solution. That he has never had any trouble from sublimate poisoning, may perhaps be explained by a little knack he has of pressing

down the perineum with his finger after each washing, so as to prevent any liquid from remaining in what is called the seminal lake. His work is done with the patient in the dorsal position, with head and shoulders considerably elevated and her feet being held in supports, permitting the buttocks to be brought over the edge of the table so that any liquid falls into a receptacle placed beneath it.

In France and Germany I was so much impressed with the advantages of the dorsal position in certain cases, that I brought with me from Berlin a pair of supports for the legs, which I have had fastened to my office table, and have found that a woman can be kept in the proper position and more strongly and firmly held than if I had two assistants with me.

Another thing that strikes one at Apostoli's, and indeed at the clinics of all the leading men in Europe, is the little use they make of the speculum, while in America it is a common thing to find a dozen or so of them in the gynecologist's outfit. Apostoli only uses a Cusco's speculum and even that very seldom, trusting more to the sense of touch than to sight. Another thing which impressed me greatly, was the manner in which they do not hesitate to bring the uterus down to the vulvar orifice, or at any rate sufficiently so to make an operation upon it easy. Then Apostoli, when he cannot reach the uterus with his finger, presses it down from above until he can feel every part of it; while Martin and Olshausen, of Berlin, do not hesitate to grasp each lip with what they call a *kugelzahn*, which is as commonly in use there as a speculum is here, and then draw it down to the field of vision.

Another class of cases in which Apostoli's treatment is remarkably successful is that of chronic perimetritis, but he is very guarded in the use of this treatment if there is the slightest sign of acute inflammation. In a case of chronic cellulitis, the patient was enabled after five or six applications of the current, to walk a considerable distance, sometimes several miles, although before the treatment she had to come in a carriage. One case especially, which impressed me very much, was a woman who came there in a full state of hemorrhage. Apostoli cleansed the uterus and vagina and then introduced the positive platinum sound, five inches in length, into the uterus, and applied a strong current. After a few minutes

he requested me to withdraw the sound, which had entered quite easily, and to my surprise I was unable to do so. The instrument seemed to be grasped as though it had been held in a vice; after using considerable force I was unable to withdraw it, when it came out quite clean.

With regard to parovarian cysts, he thinks they might in many cases be punctured with the galvano-cautery through the vagina, which would prevent any escape of their contents into the peritoneum. This he has not yet tried, but suggested that it was a good field for experiment.

In cases of extrauterine foetation, he would prefer to push down the egg and puncture it with a chemical cautery. In cases of polypus, he removes the tumor by destroying the whole uterine mucous membrane, by means of a negative chemical cauterization.

In arrested development of the generative organs, he uses the faradic current from a long fine wire, and applied by means of a uterine or vaginal exciter, which is made of hard rubber, through which the two currents run to near the end, where they terminate in platinum electrodes, one or two inches of the non-conductor intervening between them. This furnishes a stimulating influence which spreads for a considerable distance all through the organs, increasing the activity of their circulation.

An immensely powerful current can be easily endured through the uterus, provided that the external parts are properly protected.

The ordinary currents used in medicine, if applied to the uterus, are quite inefficient for the treatment of uterine diseases.

If we were to touch the current he uses at its full strength, it would give a sensation that we would never forget.

In conclusion, I may state my conviction, that in electricity, we have one of the most powerful and at the same time most manageable of agents in the whole list of gynecological therapeutics.

In a future article I purpose giving the results of my own experience in the cases now under treatment.

Sir William Gall is recovering from his slight paralytic shock.

TREATMENT OF CHRONIC DISORDERS BY SWEDISH MOVEMENTS AND MASSAGE.

BY B. H. BROBERG, TORONTO.

For about seventy-five years the Swedish movements have been applied in Sweden, where Prof. Henry Ling, the originator of the system, opened the first institution in 1813. Thanks to the successful results of the treatment, Prof. Ling was granted a stipend by the Government, to enable him to enlarge the establishment. After the founding of the Royal Central Institute in Stockholm, other institutions gradually sprung up, not only in Sweden, but also in different parts of Europe, all under the direction of graduates of the Central Institution. The institutions on a large scale throughout Europe number at present about thirty-five. In the United States the system has of late years taken a firm hold; thanks to the zeal of Drs. Geo. Taylor and Wm. Karlsive, of New York; Dr. Benj. Lee, of Philadelphia; Dr. Sparre, of Chicago, and others, and being acknowledged and supported by such men as Prof. Louis Sayre, Drs. Pepper, Weber, and other prominent medical men, there is little doubt of its getting as good a foothold here as in Europe.

The system is divided into two classes of movements, Medical and Hygienic. The medical, calculated to improve imperfect physiological relations, and to break up long-standing ailments; and the hygienic, to produce a harmonious development of the whole organism. The former have exclusively to deal with disease, and the latter act as preventives to disease, inasmuch as the movements are essential, not only to the development of the growing generation, but also to keeping aloof ailments peculiar to persons of sedentary habits, and to old age.

The medical movements are divided into three kinds: Passive, Active, and Duplicated.

Passive movements (under which group we place massage) are given without any exertion on the part of the patient, and are usually administered until the patient has gained sufficient strength to take active and duplicated movements. Active movements are made by the will and power of the patient, and duplicated under resistance of operator or apparatus. It is an undeniable fact, that

persons of sedentary or "one-sided" habits are more subject to divers ailments, than those whose position affords them opportunities to put all their physical as well as mental powers into action. If the movements have the power to aid the development, and to prevent functional disturbances in growing humanity—as well as the mature—there is no reason why the organs impaired by disease should not, by the same means, be wholly or partially restored to the performance of their respective duties.

I propose, in as few words as possible, to explain some of the influences of the movements upon the various functions which constitute *health*.

1. What influence have the movements upon the blood?

Movements accelerate circulation and respiration. Increased circulation assists absorption of nutritive substances from the alimentary canal, and increased respiration supplies the blood with more oxygen (the chemical action of which is so essential in the reproduction of the organic bodies) and causes a decrease of carbonic acid. The increased supply of oxygen and absorption of nutritive substances gives a richer deposit of nutriment to the tissues, and causes an increased oxidation and absorption from them of substances useful for nutrition. The increased circulation also promotes separation from the blood of substances injurious to the organism.

2. What influence have the movements upon the nervous system?

We seldom meet sufferers from nervous disease among the working classes, or among those who—by means of health-giving exercises—keep their systems in good condition; whereas we very frequently find them among people who lead an inactive life. This is a fact so well known, that an answer to our question might seem unnecessary. The impulse of the will for active movements issues from the brain, and is distributed by the nerves to the muscles. An active movement consists, consequently, in a harmonious action of the will, nerves and muscles. According to physiological laws, muscular action develops and increases tissue, therefore it also must strengthen the nerves situated in the tissues, and the nerve centres with which they are connected. From this we also draw the conclusion, that muscular action has a beneficial influence upon the will.

3. What influence have the movements upon the respiratory organs?

As before mentioned, muscular action increases respiration. A deep inspiration, while moving the arms slowly upwards, elevates the head, the back is drawn erect and slightly backwards, the shoulders are drawn backwards, whereby the chest-muscles elevate the ribs, thus enlarging the chest cavity in a horizontal direction. The chest cavity is simultaneously enlarged in a vertical direction, through the contraction of the diaphragm.

In a strong expiration, the abdominal organs are pressed together by the abdominal muscles, the diaphragm is forced upwards, and the ribs are lowered. Here the chest cavity is made smaller, in a horizontal and vertical direction. Through a constant practice of respiratory movements the chest cavity is enlarged, and as a consequence the respiratory organs will obtain fuller play.

If movements result in an increase of oxygen and decrease of carbonic acid in the blood, as well as a speedier circulation, they must also have a beneficial effect on the digestive and secretive organs.

The effects of the movements in aiding the absorption from the alimentary canal, has already been mentioned. We all know that exercise increases appetite. This is to a large extent due to the stimulating effect upon the abdominal organs, by the indirect action of the voluntary abdominal muscles upon the involuntary muscles. In constipation, for instance, when, through weakness of the intestinal walls, feces have collected in the cecum, colon, sigmoid flexure, etc., strong movements of the abdominal muscles—together with outward pressures and manipulations—have rectified cases of long standing, without any other means whatever.

For the normal performance of functions of the lymphatic system, blood in a normal state, as well as a normal supply thereof, besides normal nerve power, is necessary. It has already been stated that the movements produce these results.

The effect of the movements upon the skin shows itself in the increased temperature and color. The stimulating effect upon the nerves located in the skin, by the simple passive movement, "stroking," for instance, shows itself plainly in the increased sensibility.

4. What influence have the movements on the urinary organs and organs of generation?

Several disturbances of these organs are brought on by inactivity. Amenorrhœa, dysmenorrhœa, menorrhœgia and other diseases of women, as well as urinary concretions, cystitis, etc., are more prevalent among persons of sedentary habits.

If the blood-pressure in the portal-venous system is greater than in other parts of the organism, it is quite natural that a sitting posture will increase this pressure, and consequently aggravate disturbances of the pelvic organs.

But it will also be conceded, that properly administered movements will counteract the effects of sedentary habits and totally rectify, or at least check the progress of disease.

Finally. What influence have the movements upon deformities?

According to statistics, the majority of deformities treated by the Swedish movements have been lateral curvature of the spine, and I will therefore take that disease as an example.

The deformity is attributed to various causes, such as necrosis, rachitis, scrofula, atrophy of the respiratory muscles, excessive use of the muscles of one side, weakened muscular action from tight lacing, etc. In every case we find muscular weakness, either as an immediate cause, or as a result of the trouble, which fact accounts for the successful results of the treatment in this special deformity. In cases where muscular weakness is the immediate cause, recovery is speedy, and complete, if the case is taken in hand before the vertebræ have sustained any injury. If a morbid change has taken place in the vertebræ, from one cause or another, the muscles attached to the spine will suffer first, and the weakness will gradually spread until a general collapse of the entire system will result. Movements are here applied with a view to checking the further development of the disease, not only by strengthening the muscles whose function it is to keep the spine in its natural posture, but also by improving the general health of the patient. A full recovery is of course impossible.

The ordinary lateral curvature is either Single or Double. The single curvature generally involves either the entire dorsal and lumbar regions, or the lumbar and lower part of the dorsal. In a very few cases we find the curvature confined to the dorsal region alone. In single curvature the convexity is in most cases towards the left. This

is to a large extent due to the habit of resting upon the right leg in preference to the left. A curvature with the convexity towards the right is often caused by the more frequent use of the right arm and side-muscles, the spine being drawn to the right by the repeated contraction of the muscles. We find upon a closer examination of a single curvature, a smaller curve visible, either above or below, in the opposite direction from the larger one. This small curve will, if the disease is left to itself, give rise to a double curvature. In double curvature the upper convexity takes in most cases a right direction, and the lower a left. As stated before, a single curvature appears more frequently towards the left. In this case the double curve begins in a right direction from the point where the single curve terminates. If the single curve involves the whole of the lumbar and the lower part of the dorsal regions, the double curve begins *above* the original curve. We have also seen that a curvature towards the right is in some cases owing to a more frequent use of the right arm and side-muscles. In such cases the curvature begins in the upper part of the spinal column, and the double curve commences in a left direction *below* the original curve. This explains the ordinary cause of the peculiar form a double curvature takes in the majority of cases.

It certainly seems rational to think that if the spine is curved towards the left or the right, or both, development of the relaxed muscles on the concave side, and comparative rest of the muscles on the side towards which the spine curves, or the convex side, will by degrees bring the spine into its natural position. Massage (French for kneading) is, as before mentioned, placed under the group of passive movements. Its principles are of old origin. The Greeks and Romans were fully aware of its beneficial influences, and it is now so universally known, if not yet practised, that it would be time wasted to speak of it in detail. That it is not more in use, is undoubtedly caused by the scarcity of intelligent operators.

It requires both intelligence and practice to do the massage treatment justice, and there is no doubt but what it has been to a large extent brought into disrepute by persons who, having read or perchance seen some of it, imagine themselves competent to give the treatment. In some cases the Swedish movements have been tampered

with in the same manner, but as a matter of course with less success, the principle not being so easily grasped. Massage is in most cases combined with the Swedish movements, but in some instances it is applied alone, as when the patient is unable to take active or duplicated movements, or when daily occupation affords the patient suitable exercise. In some cases again, and these are more frequent, the movements are administered without the aid of massage.

From the above synopsis it will be seen, that the main object of the movement system is to aid nature in its work under favorable circumstances in life, and to take nature's place, so to speak, when our duties in one way or another interfere with its demands.

The general succession of the *modus operandi* is gradual at the beginning, as well as at the end of the course. The treatment is always commenced with movements of a mild form, and by degrees the number as well as the force of the movements are increased. After the disease has been mastered to a decided extent, the number of treatments is gradually decreased. The prevailing idea that a treatment twice or three times a week is sufficient, is a great mistake. We never find a professional oarsman, for example, practise for a race twice or three times a week. He has his regular routine laid out before him, certain time for daily practice, certain diet, etc., and unless he follows this routine, necessary to strengthen his physical powers, he is unfit for his work. On the same principle, the system of the sufferer from chronic disease needs a systematic attention. A deviation from the rules of the treatment is apt to let the disease get the upper hand. Two days' rest will often undo the beneficial effects of one day's treatment. To begin with two or three treatments a week is wasted time and money for the patient, and energy for the operator. I wish to draw attention to two other points on which the system has been misrepresented. In the first place, persons professing to fully understand the system, have promised a cure in a very limited time, in order not to discourage the patient from taking treatment, and thereby losing an opportunity of earning a few dollars. I have had patients sent me by physicians who have been disappointed if a cure or a decided improvement has not been attained in three or four weeks, and some of these

cases have perhaps baffled the skill of one or several physicians for a considerable time, and they have been advised to try the treatment as a last resort. It is hardly fair to expect that in such cases the system can be built up in a few weeks. It takes, as a rule, a longer period of time for a chronic trouble to develop, so time must be allowed, not only for checking the progress of the disease, but also for recuperation.

The progress of improvement depends largely upon the duration and nature of the disease, the constitution and habits of the patient, etc.

In the second place, these persons have resorted to what they generally term "rubbing," and they make out that this mode of treatment defines the Swedish movement and massage treatment. This is another great mistake. There is more than one way to give massage properly, and as for the Swedish movements, they vary according to the disease, and no two patients out of twenty-five are treated exactly alike.

The following are a few extracts from the reports of the Swedish Movement Institution, in Gothenburg, Sweden:—

Diseases of the heart (functional): cases 10, cured 9, not benefited 1 (organic): cases 49, benefited 42, not benefited 7; defective capillary circulation: cases 7, cured 7; paralysis of all forms: cases 22, cured 7, benefited 15; constipation: cases 36, cured 20, benefited 16; rheumatism: cases 45, cured 14, greatly benefited 31; disordered menstruations: cases 6, cured 2, greatly benefited 4; debility in anemia: cases 67, cured 9, greatly benefited 52, not benefited 6; spinal curvature: cases 62, cured 20, greatly benefited 33, not benefited 9. Those not benefited were mostly irregular attendants.

I am fully convinced that the time is not far off when the medical profession in Canada, as in Europe and the United States, will profit by the aid of the movement system, not only in cases of chronic disorders, but also in cases of convalescence.

THE OLECRANON PROCESS SUCCESSFULLY WIRED.

BY N. E. MACKAY, M.D., M.R.C.S. ENG., ETC.
Surgeon V. G. Hospital.

W. G., aged 20, single, a lumberman, was admitted into the P. and C. Hospital on the 8th

day of September, 1886, suffering from an united fracture of the olecranon.

Previous history.—About ten weeks before being admitted, the patient while walking over a tumbled-down wharf, suddenly fell through a hole in it, and in falling, his elbow struck against a plank, producing fracture of olecranon process. The patient on getting up found the power to extend the arm very much impaired. The joint was very painful and swollen for some time after. He at once went to a "bone-setter," who told him the elbow-joint was dislocated and gave his arm a few wrenches and assured him the dislocation was reduced, and that in a few days he would be able to use the joint. In the meantime the arm was put up in a flexed position, but finding no improvement taking place, it was left in this position for five or six weeks. The patient feeling discouraged that no improvement had taken place, now consulted a doctor, who told him the olecranon process was fractured, and put the arm up in the straight position. This treatment was continued for two weeks, after which he made up his mind to come to the hospital.

Condition when admitted.—On examination the olecranon process was found fractured, and a distance of about one-eighth inch between each fragment in the extended position of the arm; but in the flexed position the bones were fully one and one-fourth inch apart, and there was no attempt at union of any kind. The circumference of the joint was fully one inch larger than its fellow and the power to extend the arm was much impaired. There was slight effusion of fluid into the cavity of the joint. The patient's general health was very good. A consultation of the medical staff of the hospital was held on the 12th, at which an operation was determined upon.

On the 14th I performed the operation of wiring the olecranon, in the following way, viz.:—The patient being etherized and an Esmarch bandage applied and the parts thoroughly washed in carbolic solution (1-20), I made a vertical incision two and one-half inches long, over the most prominent part of the olecranon process, beginning about an inch above its upper border, and carefully removed the soft structures from the ends of the fragments.

On exposing the bone, I found the fracture extended downwards and forwards from the

Correspondence

OUR NEW YORK LETTER.

THE BULKLEY CLINIC — WHITEHEAD'S OPERATION
FOR HEMORRHOIDS—THE MEETING OF THE
OTOLOGY AND LARYNGOLOGY SOCIETY.

NEW YORK, Nov. 21st.

posterior aspect of the olecranon to its base, and no attempt at union of the fragments. The soft structures being now held well apart by two assistants, I removed a very thin slice of bone, with a Hay's saw, from the broken surfaces of the two fragments and then drilled two holes in each of them from their periosteal surface. The oozing of blood being stopped, I washed the wound thoroughly with bichloride solution (1 to 3,000) and then brought the vivified surfaces of the fragments together and held them there with platinum wire. There was no drainage tube inserted in the joint, but a catgut drainage was placed in the wound in soft parts. The edges of the wound were brought in position and held there by catgut sutures and a Lister's dressing was applied. The arm was then put up on a well padded straight anterior splint. The operation occupied an hour and a quarter in its performance, and was done under a spray of carbolic acid and with strict antiseptic precaution. On the evening of the day after the operation his temperature ran up to 100° F., but was normal on the second day and remained normal until the evening of the fourth day when it again rose to 100° F. This day he complained of pain at the bend of the elbow, and on removing the dressing I discovered a large swelling over the upper end of radius and external condyle of humerus (radio-humeral articulation), but the wound looked very well. An ice-bag was kept over the swelling for three days and nights in succession. From the 18th day to the 21st, his temperature ranged from 99° in the morning to 101° in the evening. On the 21st, the seventh day after the operation, the stitches were removed, union having taken place by first intention. On the 20th of October the fracture was found firmly united by bone. On this day active and passive motion, together with stimulating liniments, friction and shampooing were commenced with and continued until the natural movements of the joint were completely restored. On the 18th December, when he was allowed to go home to spend the Christmas holidays, he could touch his forehead with his hand easily. But before leaving, he was instructed to exercise his arm well, while away, by chopping wood. On the 9th January, 1887, he returned to hospital with all the movements—flexion, extension, induction and supination—completely restored. On the 12th, I removed the wires, and on the 25th he was discharged completely cured.

One of the very best skin clinics in New York is the Bulkley Clinic, held in New York Hospital once a week by Dr. Bulkley, of this city. There is plenty of material, and the doctor is careful to select good cases, while his splendid collection of wax preparations helps him to show the differential diagnosis. The clinic is for practitioners only, who show their appreciation by crowding the room an hour before the appointed time in their efforts to get a good seat. At his last clinic the doctor showed a case which is not at all uncommon, but which is very untractable to treatment, namely, a case of onychia hypertrophans. This disease is a thickening and hardening of the nail matrix, generally found in women, particularly those who have to work hard. The cause is partly some general dyscrasia, usually caused by disease of the liver or kidneys, and partly some local affection. The symptoms are a gradual thickening of the nail matrix; the nail is raised and looks rough and ragged, while some are broken off, but in no case do they suppurate and slough, which diagnosis this affection from suppurative onychia and onychia syphilitica. Dr. Buckley treats this affection both locally and constitutionally; the local treatment being to dip the fingers, every night, in and out of water as hot as can possibly be borne, for at least twenty minutes, or alternately from hot to cold. The object is to get the shock and reaction. The nails are then covered as far back as the roots with a thick coating of diachylon ointment, and wrapped in lint. In the morning this is washed off, and a simple dressing applied during the day. This may have to be kept up for days and sometimes for weeks. By these means the hardened mass can be scraped off, and a healthy action set up. The constitutional treatment resolves itself into correcting any visceral derangements and giving some tonic, preferably arsenic with some of the alkaloids.

Since Whitehead of Manchester published his

successful operation for hemorrhoids a few months ago, it has been tried several times by surgeons of this city. The operation was described by Whitehead in the *Brit. Med. Jour.*, for June of this year, with statistics of 300 cases on which he has operated. It consists in dividing the mucus membrane where it joins the skin completely around the anus and dissecting it from the muscular coats of the rectum up beyond the pile area, and cutting it off. The upper part of the mucous membrane is then drawn down and stitched firmly to the integument and so covers the denuded part (See CANADA LANCET, Sep. '87). Dr. Weir, of the New York Hospital, has performed this operation twice within the last month, and in both cases got good useful ani, with little danger of the recurrence of piles and no danger from stricture of the rectum.

At a meeting of the Otology and Laryngology Society this evening, a paper was read by Dr. J. W. Gleitsman on "The Hypertrophy of the Tonsil of the Tongue, with History of Cases." The tonsil of the tongue is the name given to a mass of lymph follicles, found in the lingual fossa, just anterior to the epiglottis; it is a ductless gland, continuous with a chain of lymphatics which run across the pharynx and connect with another collection of follicles at the pharyngeal opening of the Eustachian tube. Dr. Gleitsman believes the collection in the lingual fossa to be histologically the same as the faucial tonsils, and, therefore, calls it the lingual tonsil. However, the practical point is, that this, like all other glandular tissues, may enlarge and cause a great deal of disturbance. It may cause simply a little mechanical irritation in the throat when eating or speaking, or if it is large enough to press on the epiglottis, it causes disturbance in speech, violent fits of coughing, dyspnoea, and globus hystericus, and has been known to bring on regular asthmatic attacks. The singing voice is markedly affected, the singer not being able to use the voice as much as formerly, as long use causes pain; the notes cannot be sustained and there is often a break in them.

Dr. Jarvis, who first described this growth in 1884, thinks it is often caused from a wrong principle in teaching singing; in some of the notes the tongue is made to arch posteriorly, a most unnatural position. He found these glands enlarged in every member of a class of thirteen of a certain singing-master in this city. The diagnosis is

easily made. In all cases of laryngeal irritation the upper part of the larynx should be examined as well as the interior, and if these growths exist they will be seen on the root of the tongue, in the lingual fossa, just anterior to the epiglottis. The treatment he practises is the same as for adenoid growths in the pharynx. Vienna paste, silver nitrate fused on a wire, or better than all, is the galvano-cautery. Lunar caustic should only be used when the growths are soft, but the doctor raises a warning note against the destruction of all these growths, for some of them disappear without treatment, the same as enlarged tonsils or turbinated hypertrophies.

Dr. Delavan cited two cases of very severe hemorrhage after tonsilotomy in the adult, both of which he accounts for from the fact that the tonsils contained a great deal of hard, fibrous tissue, which mechanically prevented the contraction of the divided arteries. In the discussion which followed, it was shown that tonsilotomy is contra-indicated in all cases where the tonsil is round, and even in outline and firm in consistence, which shows that it contains a large proportion of fibrous tissue. In the hemostatics suggested in cases of hemorrhage, a novel idea was brought out, namely, that the surgeon should have ready a muslin bag, about the shape and size of a small sausage, filled with a good astringent, say alum; this can be used for pressure, while there is a constant astringent being supplied through the muslin.

CANUCK.

To the Editor of the CANADA LANCET.

SIR,—My attention has been called, during the past few months, to the existence of a worm in the flesh of the codfish caught on the coast of Nova Scotia. This worm is generally found in the fleshy part of the back, near the backbone, towards the head. In a fish weighing about two pounds, caught the other day, and sold to me perfectly fresh, I discovered nearly two dozen. This parasite is found rolled up like a coil of rope, with one end (the head I presume) pointing upwards on a level with the coil. In shape it appears to be similar to the earth-worm. When alive in the flesh of the fish, its color is similar to that of the flesh; but when taken from the flesh, it assumes a reddish-brown color. The bed in which it is found is covered with mucus, and the flesh around it is apparently in-

flamed. In length it varies from one to five inches, while it is about as thick as an ordinary darning-needle. I have submitted several specimens of this worm to the medical practitioner of this place. He examined them and finds that this worm is pointed at both ends and has a body in shape like the ordinary eel. When it is placed in a tumbler, or any other vessel, its movement is exactly like that of the earth-worm.

Even after the process of cooking, life is still clearly shown, but there is less activity than when taken fresh from the fish.

I should like to call the attention of some scientist to the subject, and ask:—Are such fish fit for human food? How can we account for the existence of such a worm in the codfish? What the worm really is, and how is it to be classed?

Perhaps some reader of the LANCET may have had a similar experience with myself. They have existed for years, because our medical practitioner remembers seeing them when a boy—twenty years ago. However, I cannot hear that any notice has been taken of the matter up to this date.

JAMES SPENCER,
Rector of Petite Riviere.

Nova Scotia, Oct. 25th, 1887.

Reports of Societies.

MEETING OF THE ONTARIO BOARD OF HEALTH.

Nov. 1st and 2nd, 1887.

After minutes of last meeting were read and confirmed, Dr. Bryce's motion, *Re* Diphtheria and Typhoid, was received as the report of the Committee on Epidemics.

Moved by Dr. Covernton, seconded by Dr. Macdonald,—That Dr. Cassidy be appointed associate delegate with Dr. Oldright, to represent the Provincial Board of Health of Ontario at the thirteenth session of the American Public Health Association, convened at Memphis, Tennessee, for November 8th of the present year.—*Carried.*

Dr. Bryce read the report of the delegates to the International Conference at Washington. The report was adopted on motion of Dr. Bryce, seconded by Dr. Covernton.

Dr. Cassidy referred at some length to the fact

that Dr. DeWolfe, of Chicago, and others have found clothing from infected parts in Italy, which had passed ocean ports uninspected. He thought that local attention should be drawn to the matter. It was then moved by Dr. Cassidy, seconded by Dr. Macdonald,—That in view of the disclosures made by Dr. DeWolfe, Medical Health Officer of Chicago, about clothing from Palermo having been introduced into Chicago, thus exposing the people of that and other cities to the danger of infection, this Board would draw the attention of medical health officers in Ontario to the fact, and desire them to take the necessary steps to prevent similar dangers to those within the field of their own jurisdiction.—*Carried.*

Moved by Dr. Yeomans, seconded by Dr. Covernton,—That the Provincial Board of Health, now assembled, desires to draw the attention of the American Public Health Association to the rumors circulated through newspapers, to the effect that cases of cholera have been reported in the New York official bulletin as measles; and also, that articles of clothing packed in Palermo and exposed to cholera infection, have been distributed at various points in the country without having been subjected to disinfection at New York. In view of the fact that such reports create uneasiness and apprehensions of danger in the public mind, this Board requests the Provincial delegates to bring the matter to the notice of the meeting of the American Public Health Association at Memphis, on the 8th instant, in order that enquiries be instituted and the accuracy of said reports ascertained.—*Carried.*

Moved by Dr. Macdonald, seconded by Dr. Cassidy,—That the report of the Committee on Epidemics be received and adopted, and that the committee be instructed to draw up a form of regulations, to be forwarded to municipalities, in relation to Milk Supply and Milk Inspected, with recommendations for the adoption of those regulations.—*Carried.*

After some other routine business, the meeting adjourned.

Selected Articles.

UTERINE FIBROIDS AND OTHER PELVIC TUMORS.—THE CONDUCT TO THE MENOPAUSE.

A large number of the cases of uterine fibromata and analogous growths, though apparently more or less rapidly approaching from bloodlessness, or other circumstances connected with the growth, a fatal degree of exsanguination,

are not in a condition that would justify abdominal section for either hysterectomy or oöphorectomy with or without salpingotomy. Other subjects; when candidly informed of the discouraging statistics of the one, and of the mutilation and barrenness of the others, absolutely refuse to submit to these operations, or withhold their consent until the period of even the forlorn hope they offer has passed; and yet another class with tumors of varying size, location and histology, are of an age to regard the hope offered by the approach of the menopause as a promise of ultimate relief in the decadence of vascular and trophic activity so universally recognized as an attendant on post-menstrual life.

These later cases, as may be seen in the following quotations from Keith, have good ground and encouragement for resisting both hysterectomy and oöphorectomy as well as salpingotomy, any of which operations indeed, in my own opinion, are seldom justifiable at that age, though this as it seems to me, appears to be the only period of life at which the two latter procedures have been able to claim any marked success in arresting the menstrual nisus and flow.

"To the woman with a fibroid uterus," says Dr. Keith, "who has passed the best of her years in weariness and pain, middle age brings relief, and old age may be spent in peace. Hence the difficulty in knowing how far we are justified in advising interference for a disease that troubles for a time, though it rarely kills. It is often said that the operation for the removal of uterine fibroids is in much the same position now that ovariectomy was five and twenty years ago. It is not so. It never will be so. The history of these two diseases is entirely different. As a rule, ovarian disease is a merciless one; it goes on and kills. As a rule, the active existence of an uterine fibroid is limited; it rarely interferes directly with life. When menstruation ceases, the troubles of the patient soon begin to pass away, while the tumor itself, after a time becomes smaller, and in a few years little or no trace of it may be found. The patient gets along, lives more or less comfortably, generally not even aware of its existence, and dies of something else. * * * * They have not much to gain by chancing a dangerous operation, and they may lose much, having much to lose.

"Till of late years, uterine tumors were let lie undisturbed unless when they were mistaken for ovarian cysts; but the restless surgery of to-day will let nothing alone; it has no patience for the menopause, and would attack all and sundry in some way or other, till one almost begins to think that individual responsibility has become old-fashioned and gone out of date. So far as operations for the cure of this disease have yet gone, the mortality is out of all proportion to the benefits received by the few. * * * *

"Dr. Bigelow, of Washington, has lately collected all the cases placed on record up to March, 1884. At best, this must be an imperfect list, and can only show the least bad side of the operation. Of 359 operations there were only 227 recoveries and 132 deaths, or a greater mortality than one out of every three operated on. * * *

The sum of misery in the 359 operations to the subjects of them, and to their friends, is something simply incalculable. So far as hysterectomy has thus gone, it has done more harm than good, and it would have been better that it had never been."

Though I have thus quoted from Dr. Keith, as one of the highest, and perhaps the latest authority on uterine tumors, such principles as are in accordance with my own views and the objects of the present paper, it would be injustice to him to leave the impression that hysterectomy is banished from his surgery. On the contrary, though he so strongly condemns the operation in cases offering the possible chance of relief, by the limitation of the menstrual life of the subject, his record in cases forlorn of this hope—and these are his only admitted ones—has been marked by successes the most brilliant, and sometimes wonderful to contemplate. Unquestionably then, the menopause must be regarded as the great crisis in the life, activity and growth of the great majority of pelvic tumors, but especially of the uterine fibromata, and of the softer non-malignant growths of this organ. Whatever methods of management have been found to sustain the life of the patient, and in any measure to lessen the exhausting hemorrhage, or to retard the growth of the abnormality until the advent of this period of reprieve, are certainly worthy of our careful consideration. All the several classes of cases just mentioned, viz., those which cannot, those which will not, and those which ought not to be operated on by abdominal section are known—many of them—besides the burthen of the growth, to be subjected also to the most profuse, alarming and exhausting hemorrhages. Their pale and oedematous faces, their dropsical limbs, their oppressed and gasping respiration, and the tumultuous action of the feeble heart tell us, at a glance, of a stage of exsanguination almost incompatible with continued existence. In profound interest, not unmixed with alarm, we debate in our minds the momentous question: "Can she hold out, to reach the longed-for goal of her relief?" Wide observation in regard to many subjects even in the extreme condition here represented, endorses the answer given by Keith: "Even in the worst of them, the chances are that they will live on—not in comfort, certainly, some perhaps in misery—but still they will live, and not die."

Few women with uterine non-malignant and pelvic growths have applied to me in the past thirty years, and more especially where bleeding

and atonic conditions were involved, who have not been placed with marked benefit upon the treatment herein reported. In the large majority of these cases the blood-losses were greatly diminished and a better condition of health and strength secured; in many the rapidity of the growth was obviously retarded, while in a few the diminution and final removal of the tumors seemed to be the happy result of the continued medication.

In condensed statement, I may say that the iodide of potassium in combination with tartrate of iron and potassa, and ergot in combination with quinine—these agents being persistently continued, constitute the *basis* of the medicinal treatment referred to.

At the present time, the following is the preparation used:

R. Ferri et potassæ tart., ℥vj.
Syrupi, ℥viiij.

M.

R. Potass. iodidi, ℥vj.
Elixir. simplicis (vel aquæ), ℥viiij.

M. S. Take one or two teaspoonfuls from each vial three times a day in half a glass of water, before or after meals.

In addition to the above, I seldom omit, whether the cases are marked by excessive hemorrhage or not, to place the patient upon the following combination:

R. Quiniæ sulph., ℥ij.
Ext. ergotæ solid, ℥iss.

Mix and divide in forty pills, cover with capsules.

S. Take one pill twice daily.

In the submucous variety of uterine fibroids—*intra-uterine polypi*—*metrorrhagia* is frequent and profuse, or it may be constant and in a milder flow, but the subjects are always anæmic, somewhat dropsical, with heart and lung perturbation under the least fatigue.

The indication in such cases, is not so much to check the growth, or to diminish the size of the tumor, as it is to check the hemorrhage, rehabilitate the blood and promote the expulsion of the fibroid from the uterus, that it may be removed by operation.

In this class of cases I therefore eliminate the iodide of potassium from the treatment, and place the patient on the following:

R. Ferri et potassæ tart., ℥iiij.
Extract ergotæ solid, ℥ij.
Quiniæ sulphat. ℥ij.

M. and divide in forty pills. Take one pill morning and noon, before eating.

Under the above treatment the tumor is expelled into the vagina in from two to six weeks, the *metrorrhagia* greatly diminished or arrested, the complexion and strength improved, while the patient is put in better condition for the oper-

ation, whether by ligature, *ecraseur* or excision. In these cases of course, the expulsive efforts of the uterus are principally promoted by the ergot, but to the quinine, besides its action as a general tonic. I attribute a material influence in giving steadiness and persistence to the uterine muscularity. Its effects also on the middle or muscular tunic—of unstriped fibre—of the arteries, is similar to that of ergot on the uterine muscle, constructed of the same kind of fibre. By this same physiological action, and its attribute of lessening the morbid supply of blood to the growth, I believe it to be valuable in checking the increase of the subperitoneal fibromata, as well as that of other tumors and infarctions within the pelvic cavity unconnected with the uterus.

The considerations heretofore presented have had in contemplation, women in the middle and later stages of menstrual life, who have been discovered to be the subject of uterine and other pelvic growths and suffering from the disturbing and exhausting result attendant upon their presence and advancement. This is the period at which most of these tumors come under the purview of the gynæcologist and general practitioner. It is the period of greatest activity of the growth, of the most frequent and abundant hemorrhage, and of the greatest exhaustion and danger to the woman. From this time to the completion of the menopause, all expedients are exhausted to check the hemorrhage, to sustain the vitality of the patient, and to prop her in her staggering journey towards the goal of her relief. This is the period, too—treatment having been neglected or failed to stay her downward progress—when abdominal section with the view to *oöphorectomy*, *extirpation* or *hysterectomy*, can not unwarrantably, be debated; but as I think, always only as a last and desperate resort.

It is in view, as I have said, of cases in this stage of menstrual life, that I have endeavored to formulate and systematize from the records of a somewhat extended experience, a persistent course of medication and management, that may serve to sustain and guide the woman through the bight and narrows of the most perilous strait in the progress of her disease. I will here distinctly state that the treatment is not instituted with the expectation of removing the enormous growths and uterine fibroids that distend the abdomen, but for rendering them less burdensome; not with the expectation of entirely arresting or preventing the hemorrhage, but rendering it less profuse and exhausting; not with the expectation of restoring health, but for rendering disease, dire and dreadful, more endurable. I do not remember ever to have known a simple or multiple fibroma of the uterus to directly cause the death of the subject, but in the low condition of *exsanguination* caused by the hemorrhage and irritation of

fibroids, I have seldom failed to realize marked improvements in the general condition of the patient, and in many cases I have observed what appeared to be a notable retardation in the increase of the growth. In several pelvic and abdominal tumors of both men and women, unconnected apparently with the uterine apparatus, I can report decided benefit to the general health and marked reduction and even disappearance of the tumor, on prolonged use of iodide of potassium in combination with tartrate of iron and potassa. Of course, there are some cases of pelvic tumors or infarctions in which, while this or something similar may be the only *rational* medication practicable, yet, no reasonable expectation of relief can be entertained. Were I to endeavor to formulate *principles* from the foregoing consideration, and from my own observation and experience, the following may perhaps be legitimately stated :

1. A large proportion of uterine fibromata and other pelvic tumors outside the ovarian cyst, are not properly the subjects for surgical treatment, either by hysterectomy, oöphorectomy, salpingotomy or excision.

2. Though these growths, especially the uterine fibroids, seldom *per se*, destroy the life of the subject, and are limited in the duration of their injurious influence, they yet impose upon the woman a prolonged period of depression, exhaustion and ill health, during which period she is liable to succumb to intercurrent invasions of disease before the establishment of the menopause, or the time of expected relief.

3. A systematic and persistent therapeutic course, rationally adjusted to the nature and condition of the disease is highly desirable.

4. From the known physiological effects of ergot in combination with the salts of quinine, and of iron, with iodide of potassium, and in view of the results above presented, we may regard such a combination as rationally applicable, during the prolonged period of hemorrhage and exhaustion so frequently marking the progress of these pelvic growths.

5. While such medication cannot be expected ordinarily to remove large fibroids, or materially arrest their advance—it exercises marked influence in diminishing the blood-losses, and in improving the nutrition and general health of the subject of such tumors ; and in some rare instances, apparently in younger subjects, it results in the entire disappearance of the growth and its deplorable concomitants.

6. In view of the danger of impaction, much pain being often produced from this cause, with increase of bleeding, a womb with growing fibroids should be frequently lifted out of the cavity of the true bony pelvis, by nightly self-replacement in the knee-breast posture.—Dr. Campbell in *New Orleans Med. and Surg. Jour.*

QUESTIONS IN THE TREATMENT OF INEVITABLE ABORTION.

There are differences of opinion and also of practice in regard to the treatment of inevitable abortion, and especially of that form in which the expulsion of the ovum is incomplete. A brief discussion of some of these differences may not be unprofitable.

It is in many cases difficult, if not impossible, to know that the abortion is inevitable. If the hemorrhage be marked, and fragments of decidua are expelled, or if the ovum be felt at the os, the cervical canal having been so far dilated as to permit its descent, a conclusion often verified by the event may be made, that the pregnancy must be interrupted. And yet these symptoms do not justify the conclusion. For example, I have seen a patient at the third and also at the fourth month of pregnancy, have so profuse a discharge of blood from the uterus that a dozen napkins were required in twenty-four hours, and at times one of these napkins was saturated with blood ; nevertheless, the pregnancy continued.

In general, it may be said that only in case the embryo or fetus is dead, and a free rupture of the membranes has been made, or their extensive detachment effected, can the abortion be declared inevitable. The recognition of the death of the fetus is possible if its life has been previously made known by auscultation ; for, having once distinctly heard the sounds of the fetal heart, and then failing to hear them again after careful and repeated examinations, the just conclusion is that the fetus is dead. But in the majority of cases this evidence is not available, for the threatened miscarriage is present before the throbbing of the fetal heart can be heard. A free rupture of the amniotic sac certainly will be followed by abortion ; whether a mere puncture with only partial evacuation of the contained fluid will then result in all cases, may be considered doubtful ; for certainly not only cases of spontaneous rupture of the membranes, and also those of their puncture, in the latter weeks of pregnancy without labor coming on for some time after, have been observed. Even though the membranes have been punctured, or spontaneous rupture has occurred, the fact is in most cases not known to the practitioner. Again, it is rarely that he knows that large detachment of the ovum from the uterus has been made ; while such detachment results in hemorrhage, yet, as before indicated, this symptom may occur and the pregnancy continue. There are two proofs that the abortion is inevitable, which are available in those cases in which the two essential symptoms, viz, uterine contractions and flow of blood, continue for two or three weeks or more, and these symptoms are, arrested development of the uterus and retrograde changes in the

mammary glands. Now that the method of bimanual examination as a means of obstetric and gynecological diagnosis is so familiar to the profession, it is not necessary to more than refer to it as available for the recognition of arrest of that increase of size of the uterus resulting from the pregnant condition; in other words, if this organ ceases to grow, the embryo or fetus is dead. Again, if the enlargement of the breasts, which usually begins at the first menstrual absence following conception, has occurred, and these organs from having been full, plump and possibly the seat of occasional pain, become shrunken, flaccid and painless, it may be regarded as almost if not quite certain that the pregnancy cannot continue. Here let a word of caution be said. In some cases, by no means frequent, it happens that the breasts after increasing in size in the first months of pregnancy lessen somewhat, and remain thus only partially developed until after labor. But this fact is not frequent, and the condition of the mamme is by no means that which is observed following the death of the embryo or fetus.

In threatened abortion we have no two remedies comparable to rest and opium; these are also invaluable in case the miscarriage is inevitable, and many observations have led to the conclusion that the pregnant woman bears opium remarkably well. By this means we lessen one of the dominant symptoms, pain, and indirectly by slowing the circulation, hemorrhage. But the means of especial value as a uterine hemostatic is hot water injected into the vagina; of course the injections should be copious, and given if the discharge be great, at frequent intervals. One advantage that this treatment presents in abortion is, that it may be employed in cases in which there is hope of continuing the pregnancy—it does not excite uterine contraction so much as it does contraction of the blood-vessels. By these injections possibly we will render unnecessary in the majority of cases the administration of ergot or the application of the tampon; nevertheless ergot and the tampon are means which may become essential in the treatment, and they are probably most efficient if used conjointly.

Antiseptic vaginal injections should be used twice daily during the continuance of the abortion.

Of course if notable hemorrhage persists in spite of hot water, opium, ergot and the tampon, the indication is plain to empty the uterus by manual or by instrumental means, following the removal of the ovum by antiseptic applications—e. g., injections into the uterus of a 5 per cent. solution of carbolic acid, or of 1 to 2,000, or 3,000 corrosive sublimate solution, or swabbing the intra-uterine surface with one of these solutions, or with the tincture of iodine, or the introduction of an iodoform tampon. Here let me say a word in regard to the effort to reject corrosive sublimate

as an antiseptic in obstetric practice, in consequence of mercurial poisoning having occurred in a few cases. In only two of many cases in hospital practice in which 1 to 2,000 corrosive sublimate injections into the vagina and into the uterus were employed, have I seen unpleasant consequences result; and these consequences ceased upon discontinuing the remedy. I believe if the uterus and vagina are thoroughly emptied after the injection, none of the fluid being left behind for slow absorption to occur, by following it with an injection of water that has been sterilized by boiling, no injurious results will be seen. Nevertheless, it is advisable in all cases where corrosive sublimate solution is used, either in connection with abortion or after labor, to observe from day to day the gums, and the moment these are found red and swollen to at once discontinue the solution.

As to methods of emptying the uterus in incomplete abortion, that in which only one or two fingers, first carefully made aseptic, are employed is the best; the patient lies upon her back and the physician places one of his hands upon the abdomen to press the uterus down to the fingers of the other hand, so that they more readily enter its cavity. If instrumental means be required, my preference is for Emmet's curette forceps, if the abortion be within the first ten weeks of pregnancy; many, however, employ a blunt curette.

I hold, too, that evacuating the uterus is clearly indicated in incomplete abortion, not only by such hemorrhages as have been mentioned, but by an offensive discharge, for such discharge may fortell septic infection. Many excellent authorities, more especially of the German school, advocate immediate emptying of the uterus in all cases when a part of the ovum remains. Now the objections to this are: First, there may be a twin pregnancy, and one ovum may be expelled and the other retained until complete development is accomplished, and thus the operator in assisting one abortion makes a second one. Second, there is danger of causing a traumatism either in the dilation of the cervical canal, or by the use of the curette upon the uterine wall. Third, it should be remembered that the uterine decidua, the *decidua vera*, is not fused with that covering the ovum until some time in the fourth month, but is quite firmly united to the uterine wall; abrupt detachment of it is a violence which may produce more serious consequences than those which result from its gradual breaking down and discharge, nature's method of casting it off.

Let it be called conservatism, if anyone chooses, nevertheless my faith and practice are in cases of incomplete abortion to wait, if the os be closed, until the symptoms which have been mentioned occur—without one or both of these, no interference, but an armed expectation and the regular use of antiseptic vaginal injections. It is worthy

to be observed that the advocates of immediate interference sustain their position by adducing instances in which continued hemorrhages, or offensive discharges, or even septic infection, followed delay in emptying the uterus. Certainly, and cases presenting such symptoms demanded earlier interference; if the practitioner had been wise enough to be warned by the first two, and proper response was made to the warning, the third would scarcely be known. The multiplication of cases of early incomplete abortion in which hemorrhage persisted for weeks, and then fragments of membranes or of placenta being removed the patient got well, do not prove that the practice of immediate interference, that is the artificial complete removal of the ovum is demanded in every case of abortion in which spontaneous expulsion does not occur. Certainly there are advantages in a prompt and perfect deliverance, but it is not exempt from dangers if violence is used in effecting it, and in some instances it may abruptly end a pregnancy which in other practice might continue to its normal termination. The advocates of immediate interference claim the best results. Carlyle has said, "Granted, the ship comes into the harbor with shrouds and tackle damaged; the pilot is blame-worthy, he has not been all-wise and all powerful; but to know *how* blame-worthy, tell us first whether his voyage has been round the globe, or only to Ramsgate and the Isle of Dogs." So we would like to know the number of cases treated in this particular way prior to giving an opinion as to its value. Further, before the question can be finally settled, a sufficiently large number of cases thus treated must be compared with a like number in which no interference with the process, so far as the uterus is concerned, is made without symptoms require it. Of course at the time of the miscarriage make it complete if possible without injury to uterus—let the interference be digital rather than instrumental, unless the former fails and hemorrhage persists; but that time past and part of the ovum being retained, the os closing, I believe it better to wait until distinct call for action is given. There is a middle ground between immediate intervention and absolute expectancy; and in that ground, my faith is, the path of safety lies.

One of my most valued professional friends, an able, conscientious and distinguished practitioner, in reference to this special view of the treatment of abortion, as well as the management of labor, has written me that my methods are too artificial and I do not trust enough to nature, adding, that in a practice of fifty years—and I know that during a great part of that time his practice has been large—he has not lost a single woman as a consequence of labor or from miscarriage. I do not know, but it is quite probable that this

gentleman has attended 2,000 cases of labor, for as the result of observation and of inquiries my conclusion is that the general practitioner, even if his practice be large, does not have more than an average of forty cases of confinement a year. Of course there are exceptions, some devoted exclusively to obstetric practice, or connected with maternities, or having a large *clientele* of the poor, or at least of those in very moderate circumstances, may count in the course of their professional lives three or four thousand obstetric cases. But for one who can thus number his cases, there are ten who are under the average that has been mentioned. If one were to take the extravagant and improbable statements of some few physicians who, we will suppose, guess at a number and multiply it by two so that nothing shall be lost as to the number of labors they have attended, and then make it the standard for the profession in general and for midwives, the population of this country would be increasing in such a frightful ratio that Malthus would not rest in his grave, or else there would be a slaughter of infants in comparison with which that by Herod was infinitesimal. In this department of obstetric statistics I believe there are more unfortunate mistakes than in any other.

Returning from this digression, the number of abortions attended by one who has had charge of 2,000 cases of labor will be not less than 250, or according to some estimates of the relative proportion between miscarriages and labor at term, even 600 or 700. Bush's proportion is 1 to 5.5; Whitehead's 87 out of 100, and Hegar's 1 to 8. Taking the smaller of the numbers mentioned, there certainly is a strong argument for the expectant treatment of abortion in the fact that 250 thus treated recovered.

But I do not want to urge such treatment as invariably the best, for expectation has its limits, the definition of which this paper has endeavored to present.—Dr. Theophilus Parvin, in *Medical and Surgical Reporter*.

PRACTICAL POINTS IN THE SELECTION AND ADMINISTRATION OF ANESTHETICS.

Analysis: (1) The best method of administering nitrous oxide and ether in combination or succession; (2) the prevention of vomiting during or after the administration of an anesthetic; (3) the danger of inducing general anesthesia in patients suffering from obstructive dyspnea; (4) the possibility of dangerous symptoms occurring from the exhibition of morphine or opium prior to the administration of ether or chloroform.

1. It is taken for granted that ether, preceded by nitrous oxide, is the best anesthetic for the

bulk of cases in general surgery. The preliminary administration of nitrous oxide is especially to be recommended in muscular, alcoholic, nervous, or excitable patients. Atmospheric air should be rigidly excluded during the inhalation of the nitrous oxide; ether vapor should be *gradually and increasingly* admitted when the signs of nitrous oxide narcosis commence to appear, and, when much epileptiform movement occurs, a small quantity of air should be allowed. A portable apparatus, by which it is possible to administer these anesthetics in the manner advised, is manufactured. The sudden transition from the inhalation of nitrous oxide to that of strong ether vapor is not desirable. By the above method, coughing, excitement, inhibition of breathing, and struggling are prevented.

2. Vomiting during the administration of an anesthetic is usually to be prevented by rapidly and thoroughly anesthetizing the patient, the diet having been previously regulated. Deep narcosis having once been established, reflex acts should be carefully watched for. Among these, deglutition is often an important indicator of incipient coughing or vomiting, and if it occurred the administration should be pushed. The chances of vomiting after the administration can be lessened by the above means; in addition to this, the swallowing of mucus or blood should be prevented by keeping the patient's head upon its side. The patient should be moved as little as possible after the operation. Experiments with cocaine (in aqueous solution administered before the operation) have been made, but it is difficult to say whether it had answered its purpose.

3. It is questionable whether any anesthetic should be given to patients suffering from obstructive dyspnea. In a case in which a large innominate aneurism pressed upon the trachea, and which was rapidly enlarging, an operation was decided upon. Previous experiment had shown that digital pressure upon the subclavian and carotid arteries did not materially increase the dyspnea. Chloroform was cautiously given. After the ligature of the carotid the breathing became feeble, and, after the other artery had been tied, it ceased and could not be restored by artificial means. It was probable in this case that the nervous mechanism of respiration, doubtless somewhat exhausted before the operation, could not be sufficiently stimulated during anesthetic sleep by the imperfectly oxygenated blood. Artificial respiration was ineffectual, although, before the operation, the chest and abdominal movements were perfectly competent to maintain the due oxygenation of the patient's blood. Another case of a similar nature, and with an equally untoward result, had been reported to the author; and in future he would certainly refrain from administering an anesthetic to such patients.

4. The sedative effects which opium or morphine exert upon the respiratory system should certainly contra-indicate their employment in cases in which respiratory embarrassment or failure would be likely to occur. Professor Victor Horsley has advised the subcutaneous injection of morphine in cerebral surgery; and the injection of morphine with atropine before the administration of a general anesthetic, has been adopted by many surgeons upon the continent. The practice, however, was one which should be followed with the greatest caution, and in many cases altogether avoided. In illustration of this may be cited the following remarkable case, in which it seemed probable that the cessation of breathing which occurred was partly or wholly to be attributed to morphine thus administered. The patient was a young woman who presented unmistakable symptoms of a cerebral tumor in the cortex of the brain. When prepared for operation she was semi-comatose and hemiplegic; the corneal reflex was well marked; her pulse was 90, weak but regular; her respiration was feeble. A hypodermic injection of morphine was given, and the administration of the anesthetic (a mixture of four parts of chloroform to one part of alcohol) was commenced with a Junker's inhaler. Very little of the anesthetic was needed (one drachm throughout). As the operation proceeded, respiration became more and more feeble and then ceased. It was restored by artificial means, but again ceased and was again restored. One hour and a quarter after the commencement of the operation it ceased for the third time and could not be made to return. Artificial respiration was then kept up (with occasional intermissions to see whether automatic breathing would return) for *four hours*, during which time the operation was successfully completed. After four hours, automatic breathing re-commenced, but ceased not very long after (about two hours), and the patient died. The probable explanation to be given of such an occurrence is this: the respiratory nervous mechanism, already much enfeebled, and possessing like the rest of the nerve tissues but a very limited store of energy, was rendered less capable of emitting those impulses upon which depended the respiratory movements of the patient, by reasons of the sedative drug introduced into the system. There was no reason to accuse the anesthetic; for the cessation of respiration was not like that observed in chloroform poisoning, and when artificial respiration has re-established automatic breathing in the latter condition, recovery invariably ensues in the absence of complications. The manipulations to which the brain was subjected, or the loss of blood which necessarily took place, might have exerted some influence; but from the general considerations of the case, and from the knowledge of the dangerous effects which morphine may produce in conditions

of respiratory feebleness, the more reasonable explanation of the symptoms is by the last-named hypothesis. It is known that Cheyne-Stokes respiration can be brought about by giving morphine to etherized dogs, and this form of breathing is usually to be regarded as indicating a lessened irritability of the respiratory centers. It is therefore probable that a similar condition might be produced in human beings, and under certain circumstances might be so pronounced as to partially or completely paralyze the respiratory functions. Artificial respiration would probably be successful in such cases if persevered with for a sufficient length of time—*F Hewitt, M. D. in Annals of Surgery.*

THE TREATMENT OF PALPITATION.

The treatment of palpitation is moral, hygienic, and medical, and the value of these stands in the order in which I have placed them.

1. *Moral Treatment.*—In the moral treatment the grand point is to impress the sufferer with the confidence that there is no instant danger from the seizure; for palpitation is fed by fear, and so little as an expression of fear by the looker-on increases the intensity of the over-action. In like manner all hurry and worry aggravate the symptom, and so, during the attack, the utmost care should be taken to avoid noise, haste, and fussiness. A gentle persuasion toward quietness, a firm assurance that the seizure will very soon pass away, and the best help of an encouraging kind is supplied.

2. *Hygienic Treatment.*—The hygienic measures for the treatment of palpitation have reference to the directions which should be given for warding off the attacks and for removing the unhealthy conditions of body which dispose toward them. In these directions it is essential to include, first and foremost, the removal of all possible causes of excitement, worry, and exhaustion, mental or physical. To this must be enjoined regular habits of life. Early hours for bed are requisite, and a continuance in bed in the recumbent position for eight hours out of the twenty-four at least is very important. During the day moderate out-door exercise, with avoidance of rapidity and of over-action from climbing steep ascents, should be specially enforced.

To the moderate open-air exercise above suggested, should be added daily and free ablution in water just sufficiently warm not to create a shock or to leave a sense of chilliness of the skin. Brisk friction and the use of a flesh brush may follow the bath with advantage. I would, however, while on the subject of baths, offer a word of warning as to the Turkish or Roman bath in this class of cases.

Good as that bath is in cases of disease properly selected for it, it is not good for persons subject to acute and extreme palpitation. The stimulus of the heat has caused, in two patients I have known, a severe and troublesome seizure.

Meals should be taken at regular times; at no time should a heavy meal be indulged in, and the simpler the diet the better. Some articles of diet in ordinary use should be limited. Too much animal food is bad. Light and easily-digested foods, in moderate quantities, and fresh fruits are always good. In one of my cases a trial of a purely vegetarian system of diet had unquestionably a very good result, but as different scales of diet are suitable for different persons I cannot here lay down any hard-and-fast rule. The plan I am accustomed to follow in prescribing diet is to find out from the patient's own report what articles of diet suit best, and then to use my own judgment at the time for advising the selection.

As regards drinks, there are three which, in my experience, are always unfavorable in cases of palpitation. These are tea, coffee, and alcohol in every shape. I know of no case of the kind in which tea has not proved injurious. Coffee is not so bad as tea, altogether, but there are very few instances in which coffee can be readily tolerated. Alcohol is often much craved after, but it is a most deceitful ally. A little excess of it is prone of itself to excite the over-action without any other spur, and soon after it has been removed from the body it causes a depression which favors the recurrence of palpitation, under any excitement, in the most marked degree. The quantity of fluid taken should be limited in amount; and as to quality, the nearer it comes to water pure and simple the better.

Something requires to be said about mental as well as physical food. Readings, amusements, and pastimes which keenly affect the emotional faculties are to be avoided as much as any more plainly physical forms of excitement. Whatever mental food keeps the mind awake, whatever makes the sufferer hold his breath with wonder or anxiety, is bad as bad can be. Exciting novels, plays, exercises, games of chance, should most surely be put aside. But good, pleasant, steady mental work is not harmless merely; it is useful; it prevents the mind from brooding over the bodily incapacity, and it becomes an element of cure.

Under this head of hygienic practice there is one habit, bearing chiefly on the male sex, to which I must allude, and against which it is absolutely necessary to protest. I refer to the habit of smoking tobacco, and to the use of tobacco as a luxury in every way. Tobacco is the worst of enemies to soundness of heart and steadiness of heart work. To those who are subject to acute palpitation, tobacco is so mischievous that it is hopeless to attempt to treat them until the habit

is abandoned. On this point there must be no mistake.

3. *Medical Treatment.*—During an attack of acute cardiac palpitation, medical treatment of a direct kind can only be palliative. It is a common practice to place the patient in the perfectly recumbent position, but as this position leads, frequently, to breathlessness and much discomfort, I never enforce it unduly. The sufferers usually find out the best position for themselves, and standing up, and even gentle walking backward and forward, commonly appear to bring relief, as if the general muscular action equalized the local over-action.

For the actual palpitation, digitalis is the only remedy I have found of any positive service, and it combines well with remedies which have a tendency to promote quickly the cutaneous and renal excretions. I usually prescribe the tincture of digitalis in five or ten minim doses, with half a fluid drachm of nitric ether, and two fluid drachms of the liquor ammonia acetatis. In instances where there has been prolonged sleeplessness, with palpitation, I have combined morphia, in full doses, with digitalis, with good effect, adding the narcotic dose to the formula just named.

In general treatment I am accustomed to follow, whether the heart be organically sound or unsound, the same methods as those described in my previous essay on intermittency. The organic bromides of iron, quinine, and morphia, and the mixture of iron carbonate ammonia, and morphia, are excellent remedies. The only difference in treatment, in fact, relates to the use of alcohol, which, valuable in some cases of intermittency, is less compatible in cases of palpitation.

4. *Treatment of Epigastric Palpitation.*—The rules already offered for the management of cardiac, apply equally to the epigastric palpitation. There is, however, in cases of epigastric palpitation more frequent necessity to meet dyspeptic symptoms, including flatulency and constipation, by alterative and mild aperient correctives.—Benjamin Ward Richardson, M.D., F.R.S., in *Asclepiad*.

THE ABUSES OF MILK DIET IN THERAPEUTICS.

The therapeutical employment of milk, not only has been popularized and the lay public made familiar with its various adaptations, but in the wake of the general appreciation has followed the usual exaggerations, and hence it is prescribed with little regard to the conditions properly requiring it. Under these circumstances it seems desirable to indicate the limitations of this therapeutical food, and to show wherein it may be hurtful rather than beneficial.

In certain disorders of the digestive functions,

milk causes a sense of discomfort, decided uneasiness, oppression—sometimes even pain, and it prolongs the morbid condition. The cases of this kind may be grouped into two classes: those in which the casein is the offending material; those who cannot properly digest the cream or butter. We find examples of the first class more frequently amongst children, but they are by no means uncommon in adults. They are detected the more readily in early life, because the curds are rejected by vomiting, or appear undigested in the stools. Adults unable to digest casein, or who digest it slowly or painfully, have epigastric distress, heaviness and oppression for several hours after meals, stupor and disinclination for exertion coming on after an hour or two and continuing until the offending material has passed well down the intestines.

An excellent substitute for the milk when the casein disagrees is barley-water with cream. The barley-water should be carefully strained and have the density of good skimmed milk, and one-sixth or one-fourth cream added, so that the mixture has the consistency of rich milk.

Another class of subjects to whom milk is unadapted are the cases of duodenal, hepatic and pancreatic diseases, because of the deficiency in the secretions necessary to the process of emulsifying fats, and preparing them for entrance into the lymph vessels. Fats decomposing form very irritating fat acids, and the change in the reaction of the intestinal juices is the cause of various secondary troubles in the biliary functions and elsewhere. To fit milk for use, under such circumstances, it must be skimmed, and about the time the stomach digestion is completed, aids to the intestinal digestion should be administered. Such aids are a soda alkali, and it may be, some pancreatic solution to effect complete digestion of the fatty constituents.

The mere bulk of the milk is an objection to its use in certain diseases. In dilatation of the stomach, the space occupied by the necessary quantity perpetuates the disease. The reflex effects of distension of the stomach in cases of weak heart, and in angina pectoris, may not only cause distressing symptoms, but may even prove fatal. It cannot be too strongly stated that milk is a highly objectionable aliment in heart diseases, whenever the motor apparatus of the organ is diseased, and whenever its movements are readily influenced by morbid states of the stomach through the reflex channels.

In no malady, as I conceive, is milk more abused than in acute rheumatism. It is very often the chief—sometimes the only aliment employed during the whole course of this disease. Besides the objection inherent in its mere bulk, certain theoretical considerations of its nature should have considerable weight in deciding the question of

use. The very obvious objection that milk furnishes lactic acid as a product of its fermentation, should not be ignored. All the world knows the intimate relations between lactic acid and the rheumatic poison. By the introduction of lactic acid, a form of endocarditis not distinguishable from the rheumatic, is set up, and of those diabetics treated by lactic acid, a considerable proportion suffered from attacks of rheumatic fever (acute rheumatism). It is difficult, of course, to determine this point with certainty, but I have reason to believe that patients with rheumatic fever do not get well so quickly, and are much more apt to have relapses when they consume much milk during the course of the disease. Surely, sufficient reasons exist for undertaking a thorough investigation of the question. My own practice, in the cases in which I am consulted, is to advise against the use of milk as an aliment in acute rheumatism.

In typhoid fever, milk is the one food now given, irrespective of the character of the cases. Of late this almost universal practice has come to be challenged. It has been depended on, without investigating the state of the digestive functions, and quite unmindful of the effect it may have on heat production. It is often given in too great quantity at a time, or so frequently that the stomach has not disposed of one quota before another is thrust upon it. Unless the gastric juice has preserved, to a considerable extent, its power of converting the albuminoids into peptones—which we have no right to expect—the casein resists its action; hence it follows that the materials of digestion should be administered soon after the milk is taken, and to prescribe it without reference to the ability of the stomach to dispose of it is to insure increased fever and delirium, and more frequent stools. Besides supplying the means for proper digestion of the milk, attention should be given to its administration at such intervals that every portion given may be disposed of before another is permitted to enter the stomach. It is a trite observation, which is not therefore less true, that it is more important to the nutrition if some food be well digested rather than a large amount be merely swallowed.

Notwithstanding, since Donkin's first reports, milk has entered largely into the dietary of diabetics, its utility has recently come to be seriously questioned. If conversion of milk sugar into grape sugar does not take place, there can be no doubt of the value of milk in this disease, since it possesses so great a number of alimentary constituents. If, as is now asserted, this conversion does take place, the free administration of milk in diabetes, must be regarded as an abuse.—Bartholow, in *Journal of Reconstructives*.

THE author of the "Ode to Bacillus," published in Nov. LANCET, is Dr. Todd Helmuth, of N. Y.

THE REMEDIES I USE IN PRACTICE.

Dr. P. H. Carson (*Kansas City Medical Index*):

For Bronchitis.—There is no combination in which I derive so much satisfaction in the treatment of ordinary "colds" as R. Ammonii chloridi, ʒj; tinct. opii camphoratae, f ʒ ss; syrapi scillae comp., f ʒjss. M. Sig. Teaspoonful every two or three hours, as the cough may require. If there be some fever, I add a suitable quantity of tincture of aconite.

For Pharyngitis.—As a "gargle," I derive most benefit, in acute inflammation of the pharynx, from: R. Potassii chloratis, ʒj; aquae destillat., f ʒ ij; ft. solut. et adde; tinct. ferri chloridi, f ʒ ij. M. Sig. Use as a gargle four or five times daily. Sometimes, if the inflammation be severe and accompanied by constitutional disturbances, I prescribe internally tincture of phytolacca decandra, with the happiest results.

For Lumbago.—For the relief of lumbago, I order a belladonna plaster over the neuralgic parts, and internally a mixture of: R. Extracti cimicifugae, f ʒ ij; codeinae sulphatis, gr. x; syrapi acaciae, f ʒ ss.; aquae, q. s. ad. f ʒ ij. M. Sig. One teaspoonful every three hours until relieved. When the pain is not severe it is best to leave the sulphate of codeine out of the prescription.

For Burns.—There is nothing so beneficial for recent burns as carron oil: R. Olei lini sem., aquae calcis, aa f ʒ ij. M. Sig. Apply to burned surface. Afterwards, if there be much suppuration, subiodide of bismuth may be dusted over the parts, making just a very thin film; if this produces much irritation, the sub-nitrate in conjunction with some mercurial in vaseline may be used. Iodoform is worse than useless.

For Conjunctivitis.—In cases of conjunctivitis, I have long since discarded any irritating applications. Nitrate of silver, sulphate of zinc, acetate of lead, only add fuel to the fire. I write R. Hydrargyri oxidi flavi, gr. ss; unguent. petrolei, ʒ ss. M. et ft. unguentum exactum. Sig. Apply two or three times a day until relieved.

For Anemia.—As a tonic in anemia there is nothing equal to some preparations of iron. The most eligible mixture containing iron is one which I have used for a long time without a single complaint of nausea or other gastric disturbance, consisting of: R. Ferri citratis (*solubl.*) ʒjss; aquae destillat., f ʒ ij; fiat. solut. et adde: acidi sulphurici aromatici, f ʒ ij; glycerinæ, syrapi simplicis, aa f ʒ j. M. Sig. One teaspoonful one hour after each meal. When the iron is given immediately after meals it unites with the tannic acid of the tea or other articles of diet, forming an insoluble tannate of iron—a pure ink, but not very valuable therapeutically.

For Delirium Tremens.—In quieting the delirium of acute alcoholism, I sometimes use chloral hydrate or the bromides, but more often rely upon: R. Extracti lupulinæ fluidi, extracti hyoscyami, aa f ʒ ss. M. Sig. One teaspoonful every two or three hours until delirium subsides. Monobromide of camphor acts well to control the persistent insomnia in certain instances.

For Diarrhea.—In controlling obstinate cases of diarrhea there is nothing more efficacious in my hands than the old prescription: R. Pulv. opii, camphoræ, plumbi acetatis, aa gr. x. M. et dispens in capsul. No. x. Sig. One capsule every two hours until the diarrhea ceases. In some cases large doses of tannic acid may be used or bismuth subnitrate in combination with one or more of these three drugs; but when other remedies have failed this prescription will be found to check the discharges, particularly if there be blood in the feces.

For Vomiting of Pregnancy.—For this often intractable trouble I generally give: R. Acidi carbolici, gtt. ij; bismuthi subnitratiss, ʒ j; aquæ menth. pip., f ʒ ij. M. Sig. One teaspoonful as often as necessary to check vomiting. If one dose be ejected, wait a few moments until the nausea subsides and then repeat. Certain cases do well on iced champagne, while others persist until dilatation of the cervix is performed.

For Sleeplessness.—When opium is contra-indicated, and there is persistent insomnia, my choice usually is: R. Ammonii bromidi ʒ iij; aquæ q. s. ut ft. sol.: tincturæ hyoscyami, q. s. ad f ʒ ij. M. Sig. One teaspoonful every hour or two until sleep is produced.

For Fetid Sweating.—For the fetid secretion of the axilla or of the feet, a solution of salicylic acid is excellent, or this may be used: R. Potassii permanganatis, ʒ j; aquæ, Oj. M. Sig. Apply to the parts night and morning.—*Amer. Med. Digest.*

MEDICAL NOTES.

Among the numerous agents used to *deodorize iodoform*, freshly pulverized coffee is useful.

"A *persistent fissure* in the middle of the upper lip is a very suspicious sign of a scrofulous diathesis."

Dr. Longstreth recommends a large-handled knife for *post-mortem operations* as less tiresome to use than one with a small handle.

Soft, thin, *waxed paper* is found to answer the purpose of oiled silk or muslin in the majority of dressings, and is very much cheaper.

It is not an uncommon thing to have the temperature of a *typhoid fever* patient rise as much as 2° when a storm is approaching, and then revert again when the storm is settled or over.

The carbolic acid solution, formerly 3%, used for washing surgical instruments in the Jefferson Hospital, has been reduced to 2%; this answers the purpose and does not affect the hands.

Prof. Da Costa recently prescribed five-grain doses of effervescing bromide of nickel in combination with iodide of potassium three times a day, for a girl, 19 years old, suffering from *epilepsy*.

A practical way to distinguish *atheromatous degeneration* of the arteries from a wiry pulse, is to place the finger lengthwise along the artery, and the difference is very noticeable. (Da Costa).

For a case of *gastro-intestinal catarrh*, Prof. Da Costa ordered broth diet and a prescription containing—

R. Bismuth. subn t., gr. x.
Pulv. aromatic., gr. iij.
Pulv. opii, gr. ʒ.
Ft. chart. j. M.

SIG.—Take four times a day.

A neat and convenient way to handle *corrosive sublimate* for making antiseptic solutions is to dissolve 15 grs. in f ʒj of alcohol, which, added to a quart of water, makes 1-1000, and does not undergo chemical change if used immediately.

Prof. Da Costa has noticed what he calls an *emotional temperature* in cases, most especially women in childbed. The temperature may reach as high as 110°, and yet recovery take place. The duration is very short, only lasting a few minutes at a time.

The following prescription has been used with favorable results in general *constipation* among the patients of the out-door department of the Jefferson Hospital:—

R. Ext. cascariæ fluid,
Ext. glycyrrhizæ fluid, aa f ʒj. M.

SIG.—Teaspoonful at bedtime.

Prof. Bartholow used for a long time a five per cent. solution of carbolic acid in a case of *epithelioma*, injected hypodermatically two or three times a week; not curing but preventing further growth after two surgical operations had failed to remove the trouble.

Cocaine hydrochlorate is rapidly increasing in favor as an anesthetic; a great deal of minor surgery is done without any suffering of the patient by its use, a 4 per cent. solution being the strength generally employed. Inject in and around the part; allow five minutes before operating.

Prof. Parvin treated a case of *umbilical hernia* in an infant by reducing the hernia, pinching the skin together and painting with collodion, and ordered the painting to be repeated three times a week; the truss that the child had been wearing

acted as an irritant and had to be changed every few weeks.

The following prescription is in use in the throat department of Jefferson Hospital for general inflammations of the throat:—

R. Potas. chlorat.,	ʒij.	
Tinct. guaiac. ammon.,	fʒij.	
Mel. despumat,	ʒj.	
Tinct. cinchonæ comp.,	fʒij.	
Aquæ, q. s. ad	fʒij.	M.

Add two teaspoonfuls to one-half glass of milk ; gargle and take one swallow.

For a clinical case of *pneumonic phthisis*, Prof. Da Costa ordered the following prescription:—

R. Digitalis pulv.,	gr. ss.	
Cinchonidinæ sulph.,	gr. ij.	
Opii pulv.,	gr. ʒ.	
Ft. pil. j.		M.

Sig.—One t. d.

In combination with this, cod-liver oil and small blisters were ordered.

A pill containing the following is being used with very satisfactory results in *phthisis* by Dr. Stewart in the medical department of Jefferson Hospital. The patients in the majority of cases immediately improve very decidedly:—

R. Iodoform,	gr. iss.	
Ferri redact.,	gr. j.	
Acid. arsenios.,	gr. ʒ.	
Ft. pil. j.		M.

Sig.—One t. d.

A case of *neuritis*, involving the sciatic and crural nerves of one side, accompanied by loss of power and wasting of muscles, was recently presented at the Jefferson clinic, and the following plan of treatment advised:—

R. Syr. calcii lactophosphatis,	fʒj.	
Liq. potassii arsenitis,	gtt. ij.	

Sig.—Ter die. M.

Also of ol. morrhue ʒj ter die.

Locally, to lessen congestion, a constant, descending, stable galvanic current as strong as could be borne was advised to be used to the affected nerves; faradism, if need be, to exercise the muscles; and for the pain, if it became at any time necessary, the hypodermatic injection of cocaine in the neighborhood of the nerve.—*Col. and Clin. Rec.*

BONE-SETTERS AND SURGEONS.—In commenting on the recent death of R. H. Sutton, the bone-setter, who was well known in London, and especially in sporting circles, the *British Medical Journal* remarks: It is significant, though by no means surprising, that the daily press has taken the opportunity of singing the praises of bone-

setters this week, to the disparagement of orthodox surgery, as far as diseases of joints are concerned. The subject, as we are all aware, has been repeatedly discussed in medical journals and before medical societies. Some of the many sources of the bone-setter's success are self-evident. The public believe in "gifts" and "inborn genius," in men who know without learning. This feature in human nature is reflected in works of fiction, where the hero is made to scribble off some masterpiece of literature, or to dash off a picture which puts the old masters to shame, all without study, his time being taken up, as the narrative usually shows, by more picturesque but less professional employments. The bone-setter is popular partly because he is believed to be a genius who has not crammed his head with Doctor's Latin. Another class of the public have some personal objections to medical men and chant the praises of bone-setters without looking into facts. There remain, however, the important truths that bone-setters have gained the confidence of hundreds of intelligent persons, and that, although it has repeatedly been shown that gross errors of diagnosis and complete failure have often attended the practice of these empirics, it is equally certain that they sometimes cure cases which ought to have been cured by qualified men already consulted. Patients with chronic articular diseases expect manual treatment, not advice. Too often they get only the latter from the surgeon, whilst the bone-setter does the work which the qualified attendant only tells the patient to do for himself, or at the most leaves it to be done by a "rubber." Thus not rarely we hear of a patient applying to some distinguished surgeon for relief from chronic synovitis of a joint, the result of a sprain. He is told to rub the affected part, and perhaps some lotion is prescribed. Now it does not follow that he has the least idea how to rub the joint, and at the best, manipulative treatment of one's-self is unsatisfactory. The services of a rubber may be recommended; then, if the joint be cured, the rubber rather than the surgeon gets the credit. When, on the other hand, a patient consults the bone-setter for the same affection, the joint is dexterously wrenched after it has been pronounced to be "out," old adhesions are torn down, and permanent benefit often effected, and all this is done by the bone-setter himself at one sitting. Of course, a success of this kind inspires public confidence in favor of the empiric, who also knows when the extra services of a rubber are needed. He makes a show of doing something for the patient himself from the very first, and uses terms at random which give the impression that something definite has been done. The surgeon is consulted because he is supposed to cure with his hands. He is never above operating, so there is no reason why he should be above manipulating. When

surgeons become as ready to rub and manipulate old sprains in the consulting-room as they are to open thecal abscesses, and to master the details of breaking down old adhesions as they now master the steps of an operation, the bone-setter's occupation will be gone.—*Gaillard's Med. Journal.*

A NEW SEXUAL SEDATIVE, *Salix Nigra*.—J. Hutchinson, M. D., writes in the *British Medical Journal*, July 30th, of his experience with the *salix nigra*, or pussy willow, his attention having been called to the virtues of the drug by a report in the "Transactions of the Texas State Medical Association," from Dr. Paine, who prescribed it successfully in cases of ovarian hyperesthesia, uterine neuralgia, etc., and also in spermatorrhea and nocturnal pollution. His verdict upon the drug is that it is a powerful sexual sedative, similar in its action to bromide, but without its depressing qualities.

Dr. Hutchinson obtained a supply of the fluid extract, and has been employing it for some months. The most numerous class of cases in which he exhibited the drug were women of nervous temperament, in whom the nervous irritability reaches its height at the menstrual period, when, along with the general *malaise*, is added a very decided pain in one or other ovary. They also suffered from hemicrania, the pain being situated above the left eyebrow, and resembling the feeling as if a nail were being driven into the skull (*clavus*). Many of them, too, complained of pain under the left breast, and extending round to the back. On one or two occasions, he has noticed patients complaining of the above symptoms, and in only a moderate degree, under favorable conditions—as for example, long-continued anxiety or alcoholism—go from bad to worse, till they become hystero-epileptics. In cases of this kind, it is supposed that the centre of inhibition has in some way got out of gear, and the severity of the symptoms depends upon the amount of disturbance in this nerve centre.

In cases where the ovarian distress was the symptom for which advice was sought, as being, in the patient's eyes, the most prominent, he usually succeeded in eliciting other indications of an irritable nervous system, and placed them upon half-drachm doses of the fluid extract of *salix nigra*, three times a day. In quite seventy-five per cent. of the patients so treated, a great amount of relief was obtained after two or three days' treatment. Not only was the ovarian hyperesthesia relieved, but the nervous palpitation of the heart was abated, and the patient felt in every way stronger.

He has also given the drug in two cases of nocturnal emissions, with marked benefit. The pollution ceased entirely while the drug was being taken, and for several months thereafter. Virile power and passion were not much, if at all dimin-

ished, but the relief from the ailment gave great satisfaction.—*Boston Med. and Surg. Jour.*

THE PRODUCTION OF ALCOHOLIC CIRRHOSIS OF THE LIVER.—At the meeting of the Society of Biology, held in Paris, July 16th, Straus communicated the results of some experiments which he had made, with the assistance of his interne, Blocq, on the artificial production in animals of alcoholic cirrhosis of the liver. His experiments pertained to twenty-four hares, into the stomach of which he had directly injected a daily dose of half an ounce of a mixture of absolute alcohol and methyl alcohol, diluted with three parts of water. Immediately upon receiving this injection, the greater part of these animals fell as if paralyzed, and for several hours they lay in deep coma. When, after the expiration of a certain time, these animals were killed, the experimenters invariably found the usual lesions of alcoholic gastritis, thickening of the mucous membrane, ecchymotic petechiæ of the surface, etc., but what especially attracted their attention was the pathological condition of the liver. This organ did not present to the naked eye any very marked alterations; it was smooth on surface as well as on section; the acini, nevertheless, were surrounded by a reddish gray line, and in animals that had been kept most of the time intoxicated for three or four months, the ultimate perilobular portal spaces were found infiltrated with embryonic cells. In hares that had been kept constantly subjected to the action of the poison for seven or eight months, the hepatic lobules were completely surrounded by a crown of connective tissue cells, and the experimenters had before them typical cases of annular perilobular and monolobular cirrhosis.—*Boston Med. and Surg. Jour.*

COCAINE IN DIABETES MELLITUS—Cocaine having a pacifying effect upon the brain and a most excellent remedy for the relief of polydipsia from other causes, I prescribed two drops of a four per cent. sol. every three hours, and an anti-diabetic diet.

After a few days the polydipsia disappeared and the urine was little above the normal quantity. The pruritus vulvæ was much less annoying. The itching and dryness of the skin was absent. The other conditions remained the same. I continued the same prescription, adding another for the anemia and as a tonic, viz.:

R Tr. opii f ʒ j
Tr. ferri chlorid. f ʒ j

M.S.—Twenty drops three times a day in water after meals.

The patient was ordered to return in two weeks.

I saw the patient again in three weeks, when all the symptoms had disappeared. The anemia was very much diminished, and she felt "as well

as ever." The nervous symptoms had all improved and the palpitation of the heart had not recurred once. I now continued one drop of a two per cent. solution of cocaine, and the iron. After using this treatment for a month longer, the case could be called cured, as all traces of sugar were absent when I made the last examination of the urine. I have since heard of the patient, and there is no return of the symptoms.—*Med. and Surg. Rep.*

PREPUTIAL DILATATION.—Dr. de Saint-Germain says:—The accidents which sometimes attend circumcision—serious hemorrhage, partial gangrene, and diphtheria of the wound—have led me to discard this operation or to reserve it for those cases (about one in every three hundred) in which dilatation is impracticable.

Dilatation, as advocated by Nélaton and practiced by many surgeons, consists in the insertion of a dilator in the orifice of the prepuce and the gradual enlargement of the opening. I prefer a dilator having two blades instead of the three blades of Nélaton. This operation, which is completed by separating the adhesions with a grooved director and followed by daily massage, in which the gland is alternately covered and exposed, has given the most satisfactory and durable results. Ignipuncture of the tonsils may well take the place of tonsilotomy, an operation not free from the possibility of fatal accidents. The mere mention of uncontrollable hemorrhage and diphtheritic invasion of the wound makes it clear that the operation is not so free from danger as many suppose.

Krishaber has substituted cauterization, but his superficial application of the thermo-cautery prolongs the treatment indefinitely. I operate with a modification of Smith's gag, thrusting the thermo-cautery in the shape of a pointed hook into each tonsil to the dept of three-eighths of an inch. The application is repeated from two to four times at intervals of eight days, when the tonsils appear evacuated and shrivelled and present only small and unimportant stumps. I have met with no accidents and have had invariable success.

In view of the frequency of these two classes of cases and of the satisfactory results obtained without risk to the patient, ought we not to consider the substitution of preputial dilatation and ignipuncture of the tonsils in the place of circumcision and tonsilotomy, an appreciable surgical advance.—*Am. Med. Digest.*

BOVININE.—This preparation is a raw extract of beef and mutton, free from drugs, minerals, salts or any artificial aid to digestion. This solution gives the blood spectrum very strongly and contains so much albumen (34.70 per cent.) as to become almost solid with dilute nitric acid. Of course, it

is an exceedingly powerful and easily digestible form of food. Among other applications the use of Bovinine as an enema will strike every one. J. C. White, M. D., Toronto, says:—"I am satisfied that Bovinine is an excellent supportive in cases of anemia or debility. I have used it this past season with much satisfaction."

NOVELISTS' MEDICINE.—Lady writers of fiction, as a rule, limit their literary eccentricities to excursions among amorphous elements of novelists' French and un-English grammar. They sometimes dose freely with poison and the dagger, but rarely venture on strictly anatomical details. The most unfortunate *lapsus calami*, however, which has come under our observation is the following: The hero; with great difficulty, has succeeded in saving the heroine from falling over a precipice. The lady has fainted and is apparently lifeless, but the hero finds, to his intense relief, "by the pulse in her femoral artery," that her heart still beats.—*Bristol Medico-Chirurgical Journal.*

WHENEVER YOU HAVE AN INQUIRY about electrical appliances for medicinal use, you will never go astray in commending those made by Jerome Kidder & Co., 820 Broadway, New York. Every desirable feature of electrical methods of treatment are embraced in the varieties of instruments they manufacture. They have stood the test of time, of medical surveillance, of public observation, and to-day they lead all others in merit and sale.—*Pharmaceutical Rec.*

COLORLESS TINCTURE OF IODINE.—I find a formula in the fifteenth edition of United States Dispensatory, for making colorless tincture of iodine. Equal parts of compound tincture of iodine and aqua ammoniæ mixed constitutes the formula. This must stand for twenty-four hours before it becomes colorless. I find by adding four drops of carbolic acid to the ounce, and shaking, it becomes colorless.—Brewer in *Atlanta Med. and Surg. Jour.*

WE have received from Battle & Co., manufacturers of Bromidia, a certified copy of a decree of the Circuit Courts of the United States, restraining D. W. Gross & Son from manufacturing that article. In a recent number of this journal, we deprecated the piracy by which manufacturers of genuine articles are defrauded, by having cheap and worthless imitations put on the market. We do not say that in the present case the article called Bromidia was cheap or worthless for we know nothing of it, but Battle & Co. have a property right in the word Bromidia, and their rights should not be infringed.

THE CANADA LANCET.

**A Monthly Journal of Medical and Surgical Science
Criticism and News.**

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

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AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & CO., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, DECEMBER, 1887.

*The LANCET has the largest circulation of any
Medical Journal in Canada.*

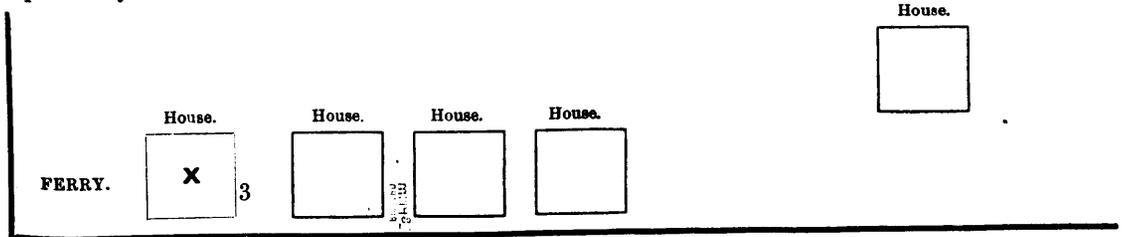
HOW ENTERIC FEVER IS SPREAD, AND HOW IT MAY BE PREVENTED.

Mr. Baker, Secretary to the Michigan State Board of Health, sends us the following instructive account, by Dr. McColl, of Lapeer, of the way typhoid fever was spread in one instance. This report may lead others to trace the spread of

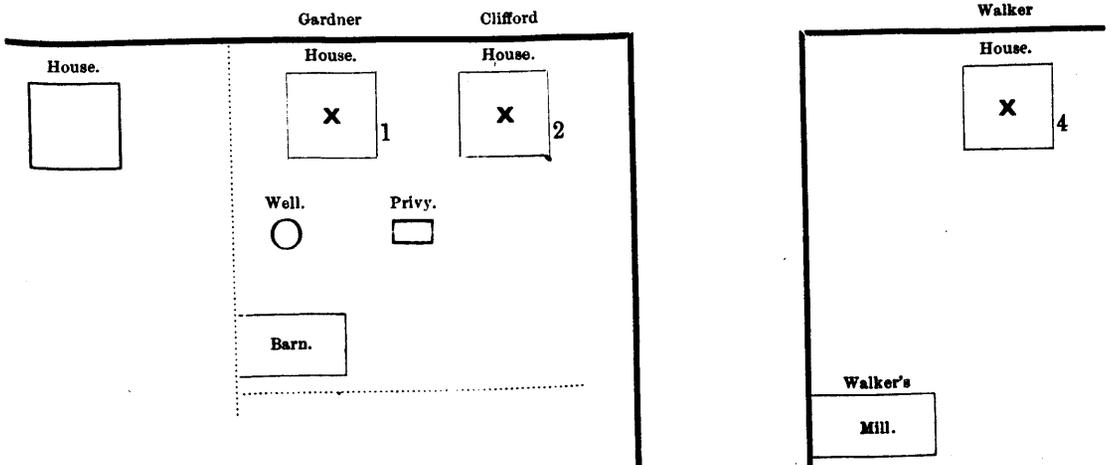
this important disease, and, what is of greater importance, act intelligently for the prevention and restriction of the disease, as Dr. McColl did in this instance.

“ Houses marked X are the ones in which cases occurred. Nos. 1, 2, 3 and 4, order of outbreak. Cases 2, 3 and 4, traceable to water from well in rear of No. 1.

About September 1st, 1887, M. Gardner, railroad employé, came from the south sick with fever to his father's home, No. 1 on Diagram. His case was supposed to be malarial. No care was exercised with stools in the way of disinfection, but they were thrown into privy vault in rear of house, and in close proximity to well. Wash water was thrown on the surface of the ground, which was very dry at the time. About 7th or 8th September, a copious rain fell and soaked the sandy soil; and on the 14th, Wm. Gardner and wife, father and mother of M., and E. D. Gardner a brother (who was a student in my office), and who boarded at home, were attacked with fever. On this day I got home from Washington, and found four of them down with a severe type of typhoid fever, and in two weeks M——'s wife and child were attacked; also a child, across the



SAGINAW STREET.



street at Terry's, who had used water from the Gardner well. About the same time, three cases occurred in the Clifford house south of Gardner's, who also used water from the Gardner well. None of the people from either of these houses were in the Gardner house. In the Waiker house, still further south, one case has occurred, and I was at a loss to account for this case till a few days ago, when the young man said that at the mill where he was working, they had used the Gardner water for a few days, owing to disarrangement of the pump at the mill. Two others of the mill hands—Anderson and Lester—who used the same water, were attacked about the same time. Lester is now convalescent. Anderson is dead, as also the child of Terry's. When I took charge of the cases I ordered the discontinuance of water from the Gardner well, and the disinfection of the stools; and no new cases are now reported. People who assisted to take care of the Gardner and other families, and who use water from other sources have not been attacked. Clearly, M. Gardner brought the fever home, the well became infected after the first rain from slops and privy, and the other cases got their seed from the water."

The above is of extreme interest and importance to the profession just now when typhoid is so prevalent, especially in country districts and small villages. There is nothing new in it, nor are we exaggerating when we say that not one medical man in a hundred doubts that the disease is always spread by seed from the bodies of patients infected, in the vast majority of cases through the drinking water used. But it will perhaps call anew their attention to the necessity of exercising the most scrupulous care in the disinfection of typhoid, excreta, and so far as is possible, of educating the laity to understand how the disease is propagated, so that they may act intelligently in concord with the medical attendant. It is not always easy or even possible to trace the seed, but if more attempts in that direction were made, and the results when clearly made out, explained to the people, a powerful factor would be introduced for the prevention of epidemics. The attendant may give careful directions, but unless those who have charge of the patient are made to understand the *reason* for all the necessary precautions, some old woman who has the reputation of knowing a good deal about sickness and nursing, may render

all the Doctor's instructions valueless, by stating that she never saw such measures taken, etc.

TRINITY MEDICAL SCHOOL ANNUAL DINNER.

The eleventh annual banquet of Trinity Medical School was held at the Rossin House on the night of the 10th inst., and was one of the most successful that have ever been held under the auspices of that institution. The chair was taken by Mr. D. M. Campbell, of St. Thomas, and the vice-chairmen were Messrs. Johnston, Uren, and Sutherland. Among the invited guests who were able to be present were Bishop Sullivan, Revs. G. M. Milligan, D. J. Macdonnell, Dr. Thomas, Hon. G. W. Allan, Col. F. C. Denison, M. P., W. S. Lee, P. Hughes, Drs. Carlyle, Daniel Clark, Caniff, O'Reilly, McFarlane, Buchan, Graham, Ryerson, Stark, as also the whole faculty and staff of lecturers of Trinity.

The scene, when the whole party of students and guests sat down to partake of the good things prepared by mine host, Mr. Irish, was very impressive, and one which will be long remembered by the students present. The dinner was excellent and the utmost good feeling and harmony prevailed while the inner man was being satisfied. Letters were read from Sir Alexander Campbell, Sir John Macdonald, Premier Mowat and others expressing regret at their inability to attend the banquet. The speech of the chairman was exceptionally good and was listened to by all present with marked attention and interest. The fame of Trinity, her graduates, undergraduates and faculty did not lose anything by the manner in which she was represented by the eloquent speaker, who expressed the hope and indeed the conviction that she would long stand in the vanguard in the furtherance of medical science. The Glee Club was in excellent form and interspersed the proceedings with some new college songs, which while they may not have awakened the same fond memories in the minds of the veterans who occupied seats at the board as "Litoria" or "Old Grimes" might have done, were a delightful change. It was remarked that the speeches from the vice-chairmen and representatives of the various years were unusually good, perhaps because these gentlemen said what they had to say and stopped.

The loyal toasts were enthusiastically honored in cold water. The Dominion Parliament and Local Legislature were responded to by Senator Allan and Col. Fred. Denison. Dr. Caniff replied for the Mayor and Corporation. Dean Geikie replied for the faculty, and the toast of "Sister Universities" was responded to by Senator Allan, Rev. G. M. Milligan, Dr. McFarlane, Mr. Turnbull, Dr. Kennedy (McGill, Montreal), Mr. Horsey (Royal Military College, Kingston), Mr. McDonald (London), Mr. Houston (Trinity) and Mr. Lea (Toronto). "The Sister Professions" was responded to by Bishop Sullivan.

The Dean, in response to the toast, "Trinity, her graduates and undergraduates," gave as is his wont an interesting and instructive resumé of the position Trinity occupies among the medical schools of Canada to-day, and pointed out that she had attained to that position by thoroughness in her course of instruction, and a genuine desire to do the very best that circumstances permitted to further the interests of medical science and of her alumni. He was confident she would "go on conquering and to conquer."

The representatives from McGill, Queen's and the Western were all well received, and showed in what respects their several institutions lead the van in medical education.

Dr O'Reilly responded for the Hospital, Dr. Graham for the press, and Dr. Bingham for The Ladies. The meeting broke up at an early hour, after an extremely pleasant evening, and by far the largest medical banquet ever held in this city.

LENGTH OF MEDICAL COURSES.

The two years' system seems to be the prevailing one in the United States. This needs no comment, but we quote as authority, and as placing the matter tersely and forcibly, the following extract from a letter by Dr. A. B. Palmer to the *N. Y. Med. Jour.*:—"The mass of students in the medical schools of New York and of nearly all the cities in this country attend only two sessions of not more than six months each; and during each six months the whole field of medical science, including anatomy, histology, physiology, pathology, chemistry, and materia medica, as well as what are called the *practical* branches of practice of

medicine, surgery, obstetrics, diseases of women and diseases of children, and the various specialties, is attempted to be traversed. Now, it is not within the bounds of the human capacities or of the natural possibilities that this should be accomplished, and much less that, after this, there should be time, strength, and interest for bedside instruction, however clearly and skilfully such instruction may be presented. With all these subjects on their hands and an examination upon them all, however lax, before them, students will not and can not in any proper sense give attention to bedside observation and instruction. This is too apparent to require any more than the simplest statement."

We are better off in Canada, comparatively few of our graduates taking even a three years' course, the great majority putting in four sessions of six months each. There have been, of course, even here in Ontario, occasionally instances in which men have got their degrees in less than even three years, but such cases are few and far between. But we believe that our Councils should be more strict than they are, and that nothing less than the four years' course should be accepted. The writer above referred to goes on to show the importance of *clinical* work, and at the same time the impossibility of getting even a fair share of such work with anything less than a four years' course. We have been somewhat handicapped in this direction in Canada, owing to a want of material, but that state of affairs is rapidly passing away, especially in the two larger cities. In Toronto, by a scheme arrived at by the faculties of the two medical schools, who work together in this branch, a pretty thorough clinical course is given, and it will be a student's own fault if he does not get a very fair practical knowledge of his profession. The arrangements for such study are really good, and no pains is spared by the management of the hospital to aid students in every way possible, and at the same time to protect the interests of the patients. A very large hospital is not necessarily a good one for purposes of study. It will of course present a larger number of rare and strange cases, but with these the general student need not, in his own interest, have much to do. If he obtains during his college days a good practical knowledge of every day work, it is all his time will allow and this may be obtained at any fair-sized hospital

where clinical instruction is properly given. The new scheme in Toronto Hospital seems to be giving satisfaction to the students generally.

BACTERIA IN RHEUMATISM.

The question as to the aetiology of rheumatism is of great importance, and much interest has been taken in experiments and investigations towards its settlement. Lately, Dr. Alfred Mantle in the *Br. Med. Jour.*, argues that, since certain bodily conditions are favorable to the development of these three diseases, rheumatism, scarlatina, and erythema nodosum, we should expect to find the real cause of rheumatism to be bacterial, or essentially the same as, say, scarlet fever. Dr. Mantle set about his investigations apparently convinced of the truth of the above views. He took, with the greatest precaution as to antisepsis, a drachm of serum from the knee-joint of a patient suffering with acute rheumatism, and with this serum at once inoculated a number of sterilized tubes of gelatinized meat infusion, and in every tube the result was a copious growth. He discovered two kinds of bacteria, a micrococcus and a small bacillus. Under the microscope the blood and serum showed micrococci as single cocci or pairs, and in acute cases zoogloea masses; in addition, small, short, thick bacilli were also seen, either single, in pairs, or in colonies. These bacteria were readily stained with methyl-violet, or with fuchsine.

In one case of gonorrhoeal rheumatism, bacteria were found in the blood only, while in two cases of purpura rheumatica none were discovered. They were, however, found in both chronic rheumatism and rheumatoid arthritis. The question is then put, whether the chemical products of these bacteria may not be lactic acid, which would thus form the chief ptomaine of the disease. The writer says he found that he was able to produce lactic acid fermentation in sterilized milk, by making cultivations of the bacilli of rheumatism, amygdalitis, erythema nodosum and scarlatina.

WE are pleased to notice that Dr. Hetherington, of St. John's N. B., has been lately elected a fellow of the British Gynecological Society.

THE TEMPERANCE LEAGUE.

One of the prominent features of University and College life at the present day, is the tendency on the part of students not to be satisfied with the attainment of scientific and technical proficiency, but to go beyond this and strive to benefit their fellow-students both morally and spiritually. With this object in view, there was established in November, 1886, a Temperance League of the Medical students of Toronto, the object of which, as stated in the constitution, is "the promotion of the temperance cause among the students." No small success crowned the efforts of the committees, for, when the League was only four months old, there were already enrolled 165 total abstainers. It is hoped that this number will be considerably increased during the current academic year, and the newly-elected committee are already at work endeavoring to raise the League to that high standard of growth and development which it must soon attain.

The following officers were elected at the meeting in October, 1887:—Hon. Pres., Dr. Powell; Pres., W. H. Smith; 1st Vice-Pres., M. C. Dewar; 2nd Vice-Pres., J. J. Broad; Sec.-Treas., L. F. Barker; also four representatives from Trinity School, and four from the University of Toronto Medical Department. Two public meetings will be held, one before and one after Christmas. By attending these, the members of the profession will show their sympathy with a movement calculated to raise the status of the medical student in the community, and do good not only to the individual, but to the profession at large, and through it the whole population, wherever medical men shall be found willing to advocate the principles of temperance in the fullest and truest sense of the term.

PREVENTION AND TREATMENT OF PUERPERAL FEVER.—As expressing the most recent views held on this subject, Dr. T. More Madden, of Dublin, in a paper read before the late International Association at Washington, gave the following instructions (*Maryland Med. Jour.*) as to precautionary measures.

1. The most scrupulous attention to puerperal hygiene.
2. The preparatory treatment of the patient—suitable nourishment, fresh air, and ap-

propriate tonics—of primary importance. The author ordered a mixture of potassium chlorate, iron and quinine, to be taken during the last couple of months of gestation, and he has never seen puerperal septicemia in a patient who had been thus treated before her confinement. 3. From the first day after delivery until convalescence has taken place, the uterine cavity as well as the vagina should be daily thoroughly washed out with water, as hot as may be well tolerated. Carbolic acid and rectified spirit of turpentine may be added, while corrosive sublimate is unreliable and dangerous. 4. He does not use a siphon syringe, but employs More Madden's irrigator. 5. As a general rule, liquor creasoti (B. P.) should be administered two or three times daily in full doses. This may be advantageously combined with the tincture of the chloride of iron. 6. The prevailing type of puerperal fever is of a distinctly remittent typhoid character, and should be primarily treated by appropriate general stimulants and nutriment, as well as by attention to the removal of all septic matters from the uterus, in the way already pointed out. Turpentine, iron, quinine, ergot, and opium, are the only medicines that deserve consideration. Turpentine, the most important, may be exhibited per os, or per rectum, or by the skin. Turpentine is stimulating, depurating, increasing the elimination by the skin and kidneys, and arrests the development of micro-organisms.

THE PRACTICAL USE OF BACTERIOLOGY was illustrated lately, says the *Med. Rec.*, in the following way:

"An Italian steamer arrived loaded with immigrants. There had been no cholera on board, but, as the vessel reached this port, a suspicious case of diarrhea occurred in a child. The symptoms were not perfectly typical of cholera. Some of the dejections were taken, and sterilized tubes were inoculated and taken to the Carnegie Laboratory in this city. It would take four days to develop the cultures, and the question arose whether the steamer should be delayed for that period of time. It was finally decided to do so. The cultures developed in the way characteristic of Asiatic cholera, and the diagnosis was made. Subsequently other cases of cholera appeared and the culture-diagnosis was abundantly confirmed. But no more striking example of the

utility of scientific studies could be furnished than the one referred to."



ROGERS' GROUP OF STATUARY.

—The present group of John Rogers, is one well suited to our Christmas and New Year festal season. The title is "A Frolic," or the "Old Homestead." The representation is the time-hallowed sport of "blind man's buff," and the scene chosen is that of covering the eyes of the lady of the house. To those who have, in past years, patronized the artistic productions of Rogers, no commendation will be necessary, and we think those who now, for the first time, become purchasers, will be strongly inclined to repeat their orders. Catalogues may be obtained by addressing John Rogers, 860 Broadway, New York.

SANTONIN IN AMENORRHEA.—Dr. Walter Whitehead, Surgeon to the Manchester Royal Infirmary, speaks highly (*Manchester Lancet*) of the action of santonin in bringing about the re-appearance of the catamenia. He discovered it accidentally, having prescribed it for worms, and having learned that its use was in one case followed by the flow, he, by what he calls "association of ideas," prescribed it again and again with the happiest results. He has had very beneficial results in chloro-anemia, "subordinate to anemia." He orders it in ten grain doses for two consecutive nights, to be followed by a saline (Seidlitz powder) in the morning.

"MEDICAL SCIENCE."—This new medical journal, which put in its first appearance in November, is under the joint editorship of Drs. Bryce, Nattress, Strathy and Nesbitt. From a perusal of the introductory article, we should conclude that there is not only a good deal of poetry in the composition of the editors, but also a large amount of erudition. The journal is well printed and presents a neat appearance. We wish our brother editors all success in their new undertaking.

FOR RENAL HEMORRHAGE, Bartholow says the following is extremely useful:

R Ext. Ergotæ fl.,
Tinct. Krameriaë, ʒii.
Sig.—ʒi every hour or two.

NEW CAUSTIC PASTE.—The following (*Med. Rec.*) promises well: Powdered starch 37 parts, wheat flour 112 parts, bichloride of mercury 1 part, dried chloride of zinc 110 parts, croton chloral 10 parts, pure iodol 10 parts, bromide of camphor 10 parts, crystallized carbolic acid 10 parts, all to be mixed up in a glass mortar, the ingredients being well pulverized separately, and gradually add to the whole the quantity of distilled water necessary to obtain a homogeneous paste, which keeps in a perfect state of preservation for an indefinite time. When required to be used the quantity necessary should be pressed in the hand previously moistened, and the paste could then be pressed into any shape or form. The following advantages are claimed for this preparation: 1. Moderate pain without any general reaction. 2. Production of an eschar which is hard and well limited, detaching itself quickly or allowing itself to be easily removed with a sharp instrument or by scraping. 3. Marked alterative and antiseptic action. 4. Powerful hemostatic. 5. Easy to be manipulated. 6. This caustic not being fusible, nor deliquescent, may be easily applied to any part, where it may remain from 6 to 24 hours, according to the intensity of action the surgeon may wish to obtain. 7. The eschars fall off in a few days.

THE NEW ANESTHETIC.—In our last number we gave a note of *Gleditschine*, the new alkaloid of the tear-blanket tree, which was said to be a rival to cocaine. It appears, however, that there was some fraud connected with it, the alleged alkaloid containing cocaine and atropine with which it had been adulterated. A good deal of controversy has taken place on the subject, and Dr. Claiborne, on whose authority we believe the original report was made, has not stated definitely what his opinions on the matter are. The matter will soon be settled by examination by manufacturing chemists and others, of leaves which cannot have been tampered with. The ones used in the former trial are said to have been soaked in solutions of cocaine and atropine.

TREATMENT OF COCCYDYNIA BY INJECTION OF PURE CARBOLIC ACID.—Dr. Illingworth, writing to the *Prov. Med. Jour.*, says he has cured cases of coccydynia in women by the above method. He

had tried Sir J. Y. Simpson's tenotomy operation for isolation of the bones, producing only temporary relief to the patient. He injects six minims of the pure acid into the most tender part, having first smeared the adjacent parts with olive oil. This gave instant relief for ten days, when the operation was repeated. The pain did not return for fourteen days, when a third injection completed the cure. The only drawback was a small fistulous opening which remained; this was easily healed.

OIL OF TURPENTINE AS AN ANTISEPTIC.—Recent researches by Hohlmsfeld *Fortschritte der Medicin* go to show that oil of turpentine is of small value as an antiseptic. It requires to be employed for a long time and in large quantities, to exert its germicide power. This is contrary to the generally accepted idea, and it is well to be borne in mind. Many good authorities, among them the late Angus Macdonald, of Edinburgh, have upheld this drug as an antiseptic agent, but it would appear that it is of value only when nothing better is to be obtained.

BRITISH DIPLOMAS.—The following Canadians have recently been admitted to the L.R.C.P. & S. Ed., and L.F.P. & S., Glasgow: J. D. Thorburn (Toronto), D. Mitchell, E. Clouse and A. Thompson (Trinity). It is remarkable that at this examination, out of forty-eight successful candidates only four or five are Scotchmen; the remainder hailing from all parts of the globe where English is spoken. It may also be noted that our Canadian graduates have either given London a wide berth, or have been in what plucked candidates call "hard luck."

THE CROWN PRINCE.—The growth in the Crown Prince's throat is cancerous, and is situated just below the left vocal chord. There is said to be a slight growth beginning on the right side which will preclude the operation of partial extirpation of the larynx. It is said the Prince will not consent to total extirpation, so the only remaining operative measure is tracheotomy, which may give him a margin of a year or two of life.

NITRO-GLYCERINE IN SUSPENDED ANIMATION.—An interesting case is reported in the *Sei-i kwoi* medical journal of Japan, of the resuscitation of

a woman apparently dead by the hypodermic injection of nitro-glycerine, in a case of collapse after child-birth. The doctor in attendance injected ten drops of a solution of nitro-glycerine (strength not given) into a vein. She made a good recovery. It has been suggested that this drug be used in cases of overdoses of chloroform and shock from surgical operation.

PRECAUTIONS IN CHANROID.—Besnier (*Rév. de Thérap.*) enjoins the following precautions in the above disease:—The contact of urine with the chanroid should be avoided, as suppuration is then favored. After micturition the chanroid should be washed with a solution of boric acid and covered with a protective ointment. The pubes should be frequently bathed with soap and water, and a pomade of boric acid, one-tenth per cent., thoroughly applied. If a bubo occurs, the parts should be shaved, and collodion applied.

PROCESS OF PETRIFYING ANIMAL BODIES.—The means of petrifying animal bodies was discovered (*Lancet*) by Dr. Massedaglia in the early part of this century. When he died he left a description of the method in a sealed packet to his lawful heirs. No heirs came forward till quite recently so that the secret may now be expected to be revealed. It is said there are some bodies of animals, petrified by the original discoverer, in the Museum of the University of Padua.

CORONERS.—Robert James Lockhart, M.D., of Hespeler to be an Associate Coroner for Wellington.

THERE are in London three hackney coach drivers, and one stage driver, all over eighty years of age. Only those who have seen the crowded thoroughfares of the modern Babylon can appreciate fully what the above statement means.

MR. SAVORY, F.R.S., President of the Royal College of Surgeons of England, and Senior Surgeon to St. Bartholomew's Hospital, has been appointed Surgeon Extraordinary to Her Majesty, in the place of Richard Quain, deceased.

SHE KNEW.—Helen: "Mamma, what is a *casus belli*?" Mother: "My child, never speak of anything so indelicate! It is the Latin for stomach-ache."

Books and Pamphlets.

CYCLOPÆDIA OF OBSTETRICS AND GYNECOLOGY.
Wm. Wood & Co.

In consequence of the painful event which rendered necessary new arrangements for continuance of the publication of the LANCET, an accumulation of four of the volumes of the above series has resulted. We now have before us the 6th and 7th, and the 9th and 10th vols. The two former, by Drs. Hegar and Kaltentback, have been edited by Dr. Grandin. The subjects treated of are the morbid affections of the ovaries, and their therapeutic and surgical treatment, in vol. 6th; and operations on the uterus, vulva, perineum, vagina, etc., in vol. 7th. The wood engravings number no less than 248, presenting an instructive representation of both the normal and the morbid anatomy of the parts treated of, and an arsenal of gynecological munitions and devices which cannot fail to impress the neophyte in this branch of medical art, with the conviction of its vast amplitude, even now, when it is yet but in its infancy; and it may go without saying, that the fiscal returns from so large an investment must be very respectable.

Volume 9th, by Dr. Gusserow of Berlin, is devoted to the diseases of the mammary glands and the new growths of the uterus, and volume 10th to "diseases of the female urethra, bladder and vagina," by Dr. Winekel, of Munich. The same editor, and of course translator, has laboured in all the four volumes, and he has done his work in a very creditable manner. It is now beyond question that the young practitioner of the healing art should give serious attention to those maladies which are peculiar to the weaker sex; indeed, the senior members also might benefit by the study, for it is well known that the field is one of rich soil, and gives abundant returns.

The age has passed away, though it is not long since, in which the entire code of obstetrics and the corporeal troubles of our grandmothers could be squeezed into a single volume, or even the tail end of one. If the ailments of the sex were then as multitudinous as they now appear to be, perhaps the bliss of ignorance was alike comfortable to the physician and to his trustful patients. The completion of the Wm. Wood series of 12 volumes must convince the young, although hardly all the

aged, that there was dense darkness in the past. Let us hope that the light now bursting on us is devoid of illusory safraction, and that it will reach our centres of vision free from chromatic aberration. Medical science is now bounding forward in seven-leagued boots. To halt in the march, is to fall helplessly and hopelessly into the rear, and to lose all chance of sharing in the booty. So, young men close up your ranks, keep your dress'ng, and let *forward* be the word. *Sic itur ad astra.*

DIFFERENTIAL DIAGNOSIS; a Manual of the Comparative Semeiology of the More Important Diseases. By F. de Haviland Hall, M.D., Assistant Physician to the Westminster Hospital, London. Pp. 255. 1887. Philadelphia: D. G. Brinton. Toronto: Carveth & Co.

This is the third American edition of the work founded upon Dr. Hall's *Synopsis of the Diseases of the Larynx, Lungs and Heart*. The plan adopted by Dr. Hall has been extended to embrace all the more frequent and important diseases. The present edition has been revised and extended by Dr. Frank Woodbury, and is now a complete work within the limits which it aims to cover. The trend of scientific and even of literary education seems to-day to be in the direction of tabulated knowledge, and more or less towards the getting up of facts for the purpose of passing examinations. This is certainly to be deprecated, and used in such a way this book would be not only useless, but harmful. Nevertheless, it will be of great use not only to the practitioner, but to the student in comparing the semeiology of diseases, and will save many a weary hour in making comparative tables for such purpose. It is complete and well arranged, and we can recommend it to the busy practitioner and over-worked student.

A PRACTICAL TREATISE ON THE DISEASES OF THE HAIR AND SCALP. By George Thomas Jackson, M.D., Instructor in Dermatology, in the N. Y. Polyclinic, etc., etc. Pp. 326. \$2.75. New York: E. B. Treat. 1887.

The first 60 pages of this useful work treat of the anatomy, physiology and hygiene of the scalp and hair. Part two, treats of the essential, and part three, of parasitic diseases of the hair. In the concluding section are discussed those diseases which are secondary to diseases of the skin. The work is well written, not cumbersome, and not too scientific for the general practitioner, to whom it will be valuable as setting forth concisely the latest ideas on the subject, as well as giving simple and practical methods of treatment.

THE MEDICAL NEWS VISITING LIST FOR 1888. Philadelphia: Lea Bros. \$1.25.

We have just received from the publishers a copy of the above. It is greatly improved and is deserving of the highest commendation. It is a companion which will be found of more than ordinary use, containing, as it does, an almanac, ordinary and metric system of weights and measures, poisons and antidotes, some remedies not yet in general use, etc. We have only to say that to fully appreciate the value of this book it must be seen.

PHYSICIAN'S VISITING LIST FOR 1888. Philadelphia: P. Blakiston, Son & Co.

This is quite up to the usual merit of this annual work, and indeed has much new matter to recommend it. The publishers have added, Aids in the diagnosis and treatment of the more common superficial ocular affections; a Diagram showing the eruption of the milk teeth, by Louis Starr; a Posological Table from Guy's Hospital Pharmacopeia; and have retained all the useful information found in previous years' lists. Different sizes are published, that for 25 patients per day or week being \$1.00; interleaved edition, 25c. extra. The binding is durable, and altogether the book is invaluable to the practitioner.

TRANSACTIONS OF THE ASSOCIATION OF AMERICAN PHYSICIANS. Second Session held at Washington, D.C., June 2nd and 3rd, 1887. Vol. II. William Osler, M.D., Recorder, 1502 Walnut st., Phila.

In addition to the books already on our Special Club List, we have great pleasure in supplying the "Cottage Hearth," a worthy monthly periodical, with the LANCET at \$3.50 per year. For special rates see advertising pages.

RESEARCHES IN ELECTRO-ALOTROPIC PHYSIOLOGY; Uses of Different Qualities of Electricity to Cure Disease. By Jerome Kidder, M.D. Book of 111 pages, sent free upon application. Address, mentioning this journal, Jerome Kidder Mfg Co., 820 Broadway, N. Y.

A useful pamphlet, containing selections from periodical medical literature and specific directions for the use of electricity as a therapeutic agent.

Births, Marriages and Deaths.

At New Westminster, B.C., Dr. Charles Newland Trew, aged 49 years.