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Original Communications.

RESECTION OF CÆCUM.

By J. A. SPRINGLE, M.D.,
Surgeon Western Hospital.

The patient was a young woman of 21 years of age, and gave the following history: She had a grave attack of appendicitis, for which she was removed to the Western Hospital, and operated upon by Dr. Perrigo on the 27th May, 1892. A large abscess was found, walled in by recent adhesions, and evidences of beginning general peritonitis.

She made fair progress towards a recovery, and went home after a stay of 2 or 3 weeks in hospital. The incision, however, did not permanently close.

On June 24th, the sinus, which had ceased discharging some days previously, again discharged a quantity of pus and faecal material.

This condition of affairs continued, and was aggravated by a continual formation of abscess upon abscess in this region.

She rapidly lost weight, and several times appeared to be in the last straits of septicæmia. After a sojourn in the country in 1893 she appeared to gain slightly for a time.

For three years she was practically bedridden, and a nuisance to herself and those about her.

When seen on the 10th of March, 1895, her condition was pitiable. She weighed barely 100 pounds, very anæmic, and unable to eat or sleep.

Upon examining the abdomen, 7 discharging sinuses were found. Two of these were situated 3 inches behind the upper spinous process of the ilium, and of these one led 10 inches into the pelvis and the other joined the 3 sinuses in the scar left by operation. One sinus was situated below the groin fold, and appar-

ently passed behind the femoral sheath to the outer side and into the abdomen. The seventh opening was situated close to the pubic spine. On palpation it was very evident that a large mass of cicatricial tissue existed in this region. At times, and particularly when gas passed from the small into the large intestine, a jet of fluid fæcal matter would spout three inches high from the three sinuses in the scar. This necessitated a constant change of dressing and washing. An attack of diarrhœa would soak through dressings and into her clothing and bed-linen.

The condition of the heart and lungs being healthy, and no secondary changes being observable in the abdominal viscera, it was decided that an attempt should be made to close the bowel.

On the 16th of March, 1895, after each sinus had been thoroughly injected with a strong solution of methyl blue, so as to distend it as much as possible, an incision was carried down upon directors or probes inserted into each, the sinus in each case being thoroughly exposed to view as far as was possible. The sinus above the iliac crest was found to lead down under the colon or cæcum to the pelvis. Here a cavity was found into which the open hand could be inserted. Its walls were very tough, almost cartilaginous to the touch, and it was apparently situated behind the rectum. The sinus opening at the pubes lay beneath the external oblique muscle, following the route of the round ligament.

The sinus in the groin led up under the femoral sheath to reach its outer side, and connected with one of the sinuses in the scar by passing under the cæcum.

The greater part of the cæcum and lower part of the ascending colon were solidly fixed in cicatricial tissue. On following the course of the scar sinuses, it was found that they led to an opening in the cæcum into which the median finger could be easily introduced.

It was found necessary to remove an elliptical piece, 3 inches long, from the bowel, to close this, four tiers of sutures being used.

After all sinuses had been scraped with a sharp spoon, the cavity was packed, and the skin united with sutures. The operation took nearly 3 hours to complete, and the patient was in a state of collapse for nearly 24 hours afterwards, before rallying.

On the third day a slight leakage of fæcal matter occurred, upon which it was thought advisable to remove 3 or 4 skin sutures opposite the bowel incision and to reinforce this with firm packing.

The wound healed rapidly, and the patient quickly regained strength, returning home six weeks after operation.

It is now nearly a year since this took place, and she has gained nearly 25 pounds in weight, is able to follow her employment without pain or inconvenience; nor is there any appearance of hernial protrusion.

Remarks.—It is rare, considering the number of operations done for appendicitis, to find such a condition as this following. Probably in this case a further perforation took place at the junction of the appendix with the cæcum, or the ligature came away prematurely.

The injection of some coloring agent in such a case as this renders the extirpation of all sinuses and cavities much easier.

GOLD A SPECIFIC FOR INEBRIETY.

By OLIVER EDWARDS, M.D., Ottawa, Ont.

The specific treatment for inebriety, as administered by me, is as follows:—

1st. *Wyeth's Hypodermic tablets of Chloride of Gold and Sodium*, the $\frac{1}{10}$ th of a grain 3 or 4 times a day for 2 or 3 days. Then drop to the $\frac{1}{40}$ th of a grain (that is, one tablet will do for 2 injections), and continue that 3 times a day for at least 3 and sometimes 4 weeks. Use a syringe with a solid piston as sold by Chapman of Montreal, and use *always* a platinum needle. After a day or two you may have some local hyperæmia—use lanoline or carbolized vaseline, and shower the arm with hot water morning and evening. This does not usually last beyond the second week. I inject between the elbow and shoulder of the left arm.

2nd. *Vegetable bitter tonics.*—Use any you like, but use always non-alcoholic tinctures. I use cinchona co, gentian co, columba and coca, and give these before meals.

3rd. *Induce refreshing sleep.*—If a man is on a spree and nervous, use bromide of sodium and chloral for 1 or 2 nights. If he is not drinking heavy, use no hypnotic. But you will not have used the gold for 3 or 4 days before a decided tendency to sleep will follow, what I call the health-giving sleep of childhood; this will continue during the treatment and after the treatment is over. Watch for this; it is one of the most remarkable things in medicine

4th. *Nervine tonic pills*.—The formula I use is as follows:—

℞ Quinæ Sulph, gr. iss.
 Strychnia nit., gr. $\frac{1}{30}$.
 Ol. Resinæ Capsici, gr. $\frac{1}{3}$.
 Zinci oxidi, gr. ii.
 Acid Arsenious, gr. $\frac{1}{30}$.
 Ferri Redact, gr. iss.

Sig.—One 3 times a day one hour after meals ; where iron is not judged advisable, I have a pill similar to the above with iron omitted.

The hypodermic tablets (Wyeth's), the non-alcoholic tinctures (Wyeth's), and the nervine pills known as Dr. Edwards Nervine Pill, No. 1 or No. 2, according as you wish to use iron or not, can be ordered from Davis & Lawrence, Montreal.

If for the first few days you wish to use a liquid beef preparation, I advise by preference for a hot beef tea, that made from the Mosquena Beef Jelly ; if you use a cold preparation, use Wyeth's Beef Juice with ice.

Always give a good calomel purge at the outset, and get rid of all poisonous ptomaines that may be in the bowels.

After you have taken your patient through the treatment, instruct him that alcohol in any form of beverage, from cider up, to him is poison and poison only. He can never touch a drop. The odor of alcohol will become so repugnant that he will not be able to endure it without turning sick, yet at any time after one single drink of whiskey will as I say "reverse the current," and the old appetite be quickly aroused. The permanency of the treatment depends on the character of the man.

That inward craving, which formerly dominated his life, and compelled him to drink, his will in the matter having no control, is subdued, and will remain subdued *just as long as he may wish*.

My full paper gives 34 cases treated showing the appetite subdued in every case, and where lapsing took place as it did in a percentage of cases, but where that happened, in every case the man or woman admitted he or she was *entirely* to blame.

Any doctor can administer this treatment, and I hope it will become general, and the reproach will be removed from our profession which now stands when we see Gold Cure Institutes saying by their presence: "We can render medical help where the old profession is absolutely helpless."

Gold is a safe and helpful drug, and you can use it with perfect confidence. I asked Dr. Burgess this question, when I met him in Montreal: "You know the treatment I follow. Is there anything in this treatment that can induce insanity?" His answer was: "Nothing; such an idea is perfectly absurd."

Expect the insatiable appetite for liquor to be subdued always within a week, often inside of 2 or 3 days, and at times inside of one day.

If a man is drinking hard, let him have a limited quantity just as long as he wants it. If he is not drinking, don't give him a drop.

NON-ALCOHOLIC TINCTURES.

Patients who have been treated for alcoholism should never have the ordinary tinctures or fluid extracts prescribed for them in the event of subsequent illness. Alcohol taken in medicine may act as an irritant, arousing a tendency that has effectually been subdued.

A few weeks ago I brought this fact to the attention of Messrs. John Wyeth & Bro., of Philadelphia, and they are manufacturing as full a line as possible of non-alcoholic tinctures. The menstrua used are acetic acid and glycerine. There are some drugs that necessitate alcohol, but the greater part can be prepared in the way indicated.

Thus the objectionable element—alcohol—is removed; furthermore, the cost will be reduced about 50 per cent. It is the columba, gentian and cinchona we wish our patients to get, and not of necessity the alcohol. They are therefore paying for what they do not need.

Whenever a physician prescribes for any patient that he knows has been treated for alcoholism he should always avoid giving alcohol. This may seem on the surface an insignificant matter, but those who have given special attention to this work realize how absolutely necessary it is that these patients shall never have alcohol in any form. It will quickly seek out a part previously weakened and arouse the appetite.

OBSTETRICAL NURSING AND THE IMPORTANCE OF ASEPSIS.

A lecture delivered to the Canadian Nurses Association

By JAMES PERRIGO, M.A., M.D., M.R.C.S., Eng.,

Professor of Gynaecology University of Bishop's College, Surgeon to the Western Hospital.

I understand you have had a lecture on the ideal nurse. I fancy from the faces I see before me, you have profited by that lecture, as I am quite sure there is none but the ideal nurse here.

I am quite within my right if I say that Montreal, for its size, is as well equipped with well-trained nurses as are larger centres. I have been able to observe the work and training of nurses elsewhere, and I am quite sure other medical men will confirm what I say,—we should be satisfied with our training schools here, and the quality of the graduates turned out by them.

Remember, when I say this, I do not say there is not room for improvement, and that you are to rest on your laurels because there is nothing more to learn. This would be a mistake, and absurd. There is always something to learn in any walk of life, and this is doubly true in medical and surgical work. The medical man who thinks he knows all that is necessary to be known, when he graduates, will know a great deal less ten years after his graduation, and become simply a cipher in the professional ranks. This is equally true of your own work, and I am glad to see you are aware of that fact, and are attempting to hold on to what knowledge you already possess, and are wishing to add to it. You are fully in the medical ranks. A medical man can do very little satisfactorily without you. You are a necessity to him in most cases he is called to treat. You are to bear this in mind—in fact, it is upon the careful nursing and ceaseless watchfulness and tact of the nurse that many a difficult case is pulled through. I am speaking now from experience of my own work. I could give you cases of typhoid fever, one particularly, and others in surgical and obstetrical work, where, if it had not been for the devoted care of the nurse, they would have been lost. When I say this you will easily perceive how much we are dependent upon your assistance, and in no class of cases are we more so than in obstetrical work. It is upon your nursing and our attention that a mother is again restored to her position in the family.

In obstetrical nursing you have to remember all you have been taught in asepticism and the objects to be attained by it. It

is here where it is most absolutely necessary. I cannot impress that fact too often upon you. Do not forget it. You will understand you cannot attain in your work ideal asepticism, but you can get as near to it as you possibly can. All the links in your chain of asepticism must be complete. Break one, and there is no asepticism. If you receive instructions to douche a vagina with a sublimate solution, and you use a dirty nozzle of a syringe, your aseptic nursing is a farce and you open the door for trouble. To make you understand this better, I had better give you an illustration from my own work. Not long ago, I had to attend to a confinement, and on entering the house, met the nurse, who told me that everything was all right, and that labor was going on well, that she had made an examination and that she had given a preliminary douche.

I was rather astonished at all this information, took a quick glance at the hands of the nurse, and saw her finger nails were not clean. Asked her if she had boiled the nozzle of the syringe, and she said yes, but the manner in which the answer was given showed me pretty clearly that the truth was concealed. After making my hands and the parts of the patient aseptic, I made an examination, and found what the nurse considered was all right and everything going on well was a breech-presentation, with the membranes already ruptured, and this in a primipara. I felt that everything was not all right and that things were not going well. I need not tell you I had septic trouble in this case, and septic pneumonia; and if it had not been for the good care given by another nurse, I would not have saved my case. You will now understand what I mean by attention to the details of the aseptic methods. This nurse not only did not understand aseptic methods, and the object to be obtained by them, but she had no right to make an examination, or to use a preliminary douche unless requested by the medical attendant. You have to remember the upper portion of the vaginal tube in a woman of ordinary good health is already aseptic, and that examination by a nurse is wholly uncalled for, and is productive of mischief.

A woman immediately after delivery is particularly susceptible to the absorption of micro-organisms. It is on this account medical schools will not allow students who are attending dissecting classes to attend any cases in the Maternity Hospital, and that medical men take the utmost precaution if they have any erysipelas or scarlatina in their practice. Some will not undertake this responsibility. This fact, of being absolutely clean in every detail

of your work, cannot be too forcibly impressed upon you. If it holds good in general surgical work, it is equally so in obstetrics. The statistics of obstetrical work have steadily improved since aseptic methods have been introduced. If you could read the history of this class of work the world over, you would read of many deaths from the so-called puerperal fever how it would break out again and again in some institutions, and how, sometimes, it would follow the practice of some individuals,—indeed, so much, that obstetrical work would have to be relinquished. Asepticism has changed all this, and the Maternity hospitals are the safer places for the poor people to go to, and we do not hear of one man being followed by the nightmare of puerperal septicæmia. The general public are alive to all this, and demand now more careful work from both the physician and the nurse. When a lady calls to engage you for her confinement, it is always better to stipulate that you should be in the house a day or two before the expected event. If the lady has already had children, it may not be so necessary, as she has had previous experience and knows how to prepare, but it is different with a primipara, who is wholly ignorant of what is before her. In such cases, I consider it advisable that the nurse should be in the house a few days before the confinement. The nurse is some comfort to the patient, who perhaps dreads the approaching event, and she can encourage her, and answer all questions, and make the preparations that are requisite in the lying-in room. Not only this, you will see that your patient takes sufficient exercise, and in doing so, she does not go beyond the point of fatigue. You will also see that her bowels are kept regular. You will also be able to note any symptoms that might make it necessary to send for the physician without unnecessarily alarming your patient. You will see that all superfluous furniture is removed from the room. Heavy hanging draperies are not required in a sick room, and at the best are only collectors of dust, and sometimes are dangerous if a gas jet is near them. The bed should be away from the wall, so that you can get easily around on both sides, and discard any feather mattress, which is an abomination. Have all cupboards and closets examined, and see they are clean. It is surprising how this is neglected. It is hardly your province to have the drains examined, but you will, in most cases, be able to tell if there are noxious odors about. It is then your duty to call attention to them, when the master of the house will have the cause remedied. You will be asked a lot of questions by your patient, perhaps one

of them will be whether you prefer the old-fashioned napkin, or pad as it is now used. You must remember, there are lots of people yet who talk of their common sense, usually the mother of your patient ; she may be opposed to what they are pleased to call the new-fangled ideas of the doctor. Such people are dangerous, and here it is your tact will come into service, to minimize any mischief they may do. There is no question of the superiority of the pad of jute, either the carbolized or the sublimated. You will see, therefore, that sufficient jute, either carbolized or sublimated, according to the physician's wishes, is obtained, and also the gauze to enclose each pad. We will suppose now that all your preparations are complete, and the expected event has commenced. You will be able to note this by your patient complaining of perhaps slight pains in the back and over the abdomen. These pains are slight at first, and might be mistaken for flatus, but they come and go, and gradually increase, until there is no doubt left of what is going on, and you send for the accoucheur, and get things, your patient and yourself ready for the confinement. While you are waiting for the physician, you will have your sleeves rolled up above your elbows, and you will scrub your hands and forearms with soap and warm water, and nail brush, and then thoroughly immerse them in a sublimate solution of 1-2000. You can then prepare your pads and cover them with a sterilized towel, so that they may not become contaminated. The physician arrives, and after a few questions, chiefly to know when the pains first began and when the bowels were last moved, he will ask you to prepare the parts of the patient in the same way as you have treated your hands and arms. While you are doing this, he will be making his own hands and arms aseptic. After which an examination is made. You see, there has been no preliminary douche advised. In ordinary private practice it is wholly unnecessary. I admit there is some divergence of opinion upon this point, but the majority would agree, I think, upon its uselessness. It is different, however, in those cases that are sent in labor to a Maternity Hospital, cases that may have been examined, too frequently perhaps, by a careless midwife or an equally careless physician. Again, such hospital cases are only too frequently suffering from specific diseases, when not only a preliminary douche is required but a thorough bath as well. This will also hold good when your patient's confinement is a difficult one, and either manual or instrumental interference is required. Here, the usual surgical aseptic precautions must be

taken. The whole vaginal canal must be disinfected as well as the external parts. This applies to the instruments as well. Leaving aside operative traumatic lesions, the risk to the lying-in woman is septic infection at the hands of her attendants ; and when I say this, I do not exclude the physician. You see, therefore, the absolute necessity of paying strict attention to the details of your work. You will also note I have said nothing about the nurse making an examination. This is not required, and not in your province. This is the work of the accoucheur. It is a golden rule in obstetrical work to make as few examinations as possible. It lessens the danger of sepsis. The physician who asks the nurse to make examinations shirks his work and makes her a partner in his responsibilities, whereas he should bear the whole of it, as he is the chief, the one who gives orders, and the one who should see they are carried out. We will suppose, now, your patient has been confined, and that it has been an ordinary case. The condition of the patient will depend upon the previous state of health and temperament, and whether it is a first confinement or not. If she has had children before, the termination of the labor will be that of rest and intense satisfaction. If it is a first case, and in a nervous temperament, there will be some shock to the nervous system, shown by intolerance of light and sound, along with some exhaustion. From these latter cases keep away anxious friends. Allow no one in the room. The physician will most likely place the bandage on himself. Most patients desire it. You will watch how he does it, so as to do it exactly in the same way. It must be sufficiently wide to reach from the trochanters up to the lower ribs. It must be smooth. A wrinkled binder is an annoyance and a source of discomfort to the patient. It must be drawn comfortably tight over the hips, and lessening degrees of tightness as you approach the lower ribs. Some physicians use a compress over the uterus, to retain it in a state of contraction. Some do not, and some will not even use a bandage. I do not agree with them, as I think the bandage is of very great service in giving support. I can recall many a time where patients have expressed their sense of comfort from the bandage immediately after delivery. I look upon it as a necessary part of the treatment, at least for the first five or six days. The compress might in ordinary cases be dispensed with, but even it is required where there has been a post-partum hæmorrhage. Before the physician arranges the bandage, you have to prepare your patient

for it. You will remove all soiled clothing from beneath your patient, and you will wash the parts thoroughly with warm water, and then again with a sublimated solution (say 1-4000), after which dust them with equal parts of iodoform and boracic acid. When this is done, take one of the pads of carbolized or sublimated jute, which you have already prepared, and place it in position. The pads for the first twenty-four hours should be changed every two hours, and after that time at longer intervals. The pads, as they are removed, should at once be sent out of the room, and destroyed. Of course, before the bandage is applied the accoucheur will satisfy himself that the uterus is firmly contracted; if not, he will remain and keep firm control of it, until firm contraction ensues. This is imperative, in so far as his work is concerned. When all this has been done, perfect quiet is required, and the room somewhat darkened to secure sleep. There is nothing so recuperating to your patient as refreshing sleep. The physician before leaving is sure to enjoin this upon you, and to see that the natural functions of the bladder are attended to six or eight hours afterwards. All affectionate friends to be kept away, as information about the patient's condition, the sex of the infant, and who he or she may resemble can be given in the parlor. If they are sensible, they will not ask to see the patient. If you are obliged to use the catheter, use a glass one, and boil it each time. By so doing, puerperal cystitis will be avoided. You should always be provided with them. Do not use a metal catheter. I want to repeat here again, that the asepsis began by you at the time of the confinement must be continued during the whole time you are in attendance upon your patient. If, while changing the pads, you bathe your patient's genitalia and your hands not aseptic, and sterilized towels not used, where is your asepsis? A towel if only slightly soiled must not be used again. No doubt, before leaving, the physician will tell you what to give in the way of diet until his next visit. The old days of starvation during the first few days have gone by. Semi-starvation retards milk secretion, while, on the other hand, you must not take upon yourselves the responsibility of too generous a diet. The doctor will prescribe the diet, as he well knows, or should know, that each case will require its own consideration. When speaking of the catheter, I should have stated that some physicians recommend placing the patient in a semi-recumbent position, as a great many in that position can easily pass water who could not do so lying down.

The old objection to this method was the fear of hæmorrhage, but this fear has, I think, been exaggerated. I would not advise it when the labor has been tedious and exhausting. However, whatever you do in this respect will be governed by the instructions of the attending physician. When the physician makes his first visit, you will have your chart ready, with the temperature, pulse, amount of lochial discharge, whether clots were passed or not, whether urine was passed voluntarily, or the catheter used, and the amount and character of sleep. If the case be a multipara, there will be after-pains, and some women suffer very severely from them, as they disturb sleep and produce exhaustion. In such cases, the physician will leave you an opiate to be given, if required. The after-pains may continue for three or four days, gradually declining as convalescence proceeds. Years ago, it was thought, on the third day a dose of castor oil or some other laxative should be given. I call this dose the military or regulation dose. It is not always necessary, and may in a good many cases be dispensed with, particularly in women who have paid attention to their bowels just before their confinement, or have been under the guidance of their nurse. However, in this, as in all the rest, you will follow your instructions. I am in the habit myself, when it is required, to give a laxative,—castor oil or compound liquorice powder,—just before the lacteal secretion, as I think it prevents too sudden secretion of milk and helps to lessen the distension of the breasts. Milk is secreted about the third day, rarely is it postponed beyond the fourth. With this secretion of milk, there may be some general disturbance, a slight rise of temperature, perhaps slight chilliness, headache, and a pulse somewhat quickened. This does not last long, and will pass away in a day. There may also be some tenderness of the breasts, particularly at their periphery. Excessive distension of the breasts may be prevented or considerably lessened if the child be put to the breasts early,—that is, after the mother is rested by a good sleep, which may be about twelve hours after confinement. This also helps to promote the contractions and involution of the uterus, and assists very much in forming the nipple, particularly if they are flat, or, as is sometimes the case, imbedded in a prominent areola. You can begin with your discipline of the child at once. Do not place it to one breast more than another. Do so alternately, and at the start, every two hours is sufficient during the day; but at night the child should be trained not to nurse more than once, or at the most

twice during the night. A child should sleep from 11 p.m to 5 a.m. This gives the mother a chance for rest and to regain strength. If you walk up and down the room at night to quiet the infant, you are teaching it a bad habit, and are laying the foundation of a lot of wearisome work for the mother when you leave. You must remember, you will not in every case have a wealthy patient, who can command any amount of attendance, but more frequently patients who, either for want of means, or from love, will attend wholly to their own infants. You will, therefore, understand what I mean by this midnight walking. A great many mothers will give the breast to quiet the child, but this a great mistake. I am not wrong in stating that most infants are over-nursed, with results both harmful to the child and mother. A child is the creature of habit, and if put to the breast at stated intervals from the first, much trouble will be avoided. Babies will cry, but there is a difference in the cry from hunger and that from colicky pains. The cry from hunger is a strong cry, and is a sharp demand for more food ; but it is a continuous peevish cry, accompanied by movements of the legs, when from colicky pains.

A point you must be particularly careful about is the care of the nipples. I would advise you to always wash the nipples with a boracic solution, both before and after nursing. Never allow a drop of milk to remain in the nipple, as fungi will form. In some cases, particularly primipara, the nipples are very tender at the beginning of lactation, and you must remember cracked nipples may cause mammary abscess, so do not hesitate, if you consider the nipples are more tender than they should be, to call the physician's attention to them, and he will give you his instructions. In most cases this will not be necessary, as he will examine them himself at every visit. To go back to the mother.—At the time of her confinement, and when the placenta is being removed, there will be naturally some hæmorrhage, and this may continue to ooze, but the accoucheur will take care this does not become a flooding, by exciting efficient contractions of the uterus. For the twenty-four or thirty-six hours, the discharge will be chiefly of pure blood, perhaps with some clots. This discharge is called the lochia. From the second to the fourth day the color becomes of a pale red, as the sanguineous elements are diminishing. Later on, the flow becomes thin and is of a grayish or greenish color, and about the end of the third week there may be little or none. When

your patient is allowed up about the tenth or eleventh day, there may be a slight increase of the discharge ; but if the discharge should still be of a red color, the getting up should be delayed. The lochia have a peculiar odor, but it should not in a healthy individual be offensive. If you notice anything like this, and there is some time before the physician's next visit, you can, in the meantime, douche the vagina with a warm water injection containing carbolic acid (1-100) or a boracic solution. In doing this you do not forget your aseptic precautions. This is the first item, I have told you, you might do in the absence of the physician. There are other occasions where your services will be of the highest value to your patient. We will suppose your patient has been confined, and the medical attendant has gone, and is perhaps not more than three hours out of the house. He left everything apparently safe, but you notice your patient suddenly becomes pale, restless, says she is smothering, wants some air, and at the same time there has been quite a gush of blood. You find the pad saturated, and perhaps the bedding as well. You will quickly loosen the bandage, or, better, remove it, and grasp the uterus to make it firmly contract again, also pass pieces of ice well up in the vagina, and if you can do so into the uterus, all the better. A piece of ice in the palm of the hand compressing the uterus will assist. If this fails, or if there be no ice at hand, place the bedpan under the patient and use the syringe, and douche vagina and uterus with clean hot water. You will do this slowly and continuously, and allow the water to return as it flows in. These are truly alarming and critical cases, and you must keep your wits alive and do not let your patient see any nervousness. Send at once for the physician, and if he cannot be had, send for the nearest physician, who, when he is told the nature of the case, will come immediately. What I have told you to do, you will do, not without sending for the medical attendant, but while waiting for him to return. It does not matter what your training is, you must not handle such a crisis upon your own responsibility, and then simply give a report of the occurrence next morning ; but your training may save a life while you are waiting for the doctor. These cases of flooding occur sufficiently often for everyone who is in attendance upon a case of midwifery to be always on guard. Prompt attention and quick, skillful work are demanded, and it is in cases like this your training, while waiting for the physician, will be productive of brilliant results. The old-timer would get in a

flurry, would send for the doctor, and then wait for his coming, while the patient would be bleeding to death. Some cases, fortunately rare, nearly always have a flooding, and their confinements are looked forward to by the physician with anxiety. Others again, who may have a fibroma of the uterus, nearly always run this risk, as the tumor interferes with the efficient contraction and retraction of the organ. However, I need not say anything more on this point, as I must not forget I am lecturing to nurses and not medical students.

Septic infection, in spite of all our care and attention to cleanliness, will sometimes ensue. This is an occurrence we all dread. It may show itself about the 3rd up to the 5th day ;—very seldom later. At the end of the week most of the dangers are passed. In some cases it may be earlier, when the patient may have been infected just previous to her confinement. I need not go into all the details of the various methods of infection and the different local lesions accompanying, or I should say resulting from them, as there has been an endless amount of discussion in the profession upon this point ; but I am right in saying the profession the world over are emphatically decided that most of the cases are infected from unclean hands, unclean instruments, soiled linen,—in fact, anything that may be used in the sick room, if not clean, may infect the patient. When infection occurs, there is a period of incubation, and the symptoms will vary and be governed by the character of the local lesion. The patient may be seized with a rigor of greater or less extent, the temperature may go up to 103° or 104° , great heat of skin, a quickened pulse, and she may complain of pain in the pelvic region, which may increase over the whole abdomen. Other cases will only complain of chilliness, with a gradually rising temperature, and no pain. This is only an outline of the beginning of the complication. As a rule, the earlier such symptoms occur after a confinement the more serious will be the case. When these symptoms ensue, do not wait for the physician's visit next day, but communicate with him at once, and in the meantime during the rigor cover the patient with extra blankets, place bottles filled with hot water to her feet and along each side of her, to restore the heat to the surface of the body. Some stimulant with 5 grs. of quinine will also help to lower the temperature. If the lochia be offensive, you can, at the same time, give a vaginal douche of hot water and carbolic acid (1-100) or the boric solution. However, I must tell you in some cases of

puerperal septicæmia there may be no offensive odor to the lochia at all. You are always safe in giving the douche, as, perhaps, the infection may have arisen from wounds of the vagina and cervix. When the physician arrives, he will examine everything in detail to discover the source of the infection, and he may, in all probability, direct you to continue them. Time will not allow me to go further in this lecture, but there is a great deal more to say that could be said profitably. It is not so long ago that any woman thought she could be an obstetrical nurse. If she lost her husband, and had a child or two of her own, that was enough. She became a nurse at once, and if she was passed middle age, she was all the more dangerous, as she would have opinions of her own, which were usually put into practice in the absence of the physician. Fortunately for the community, all this has been changed, as both the profession and the public recognize the important fact that training in obstetrical nursing is just as important as in either medicine or surgery. Up to this point we have not said much about the new arrival, and we do not yet know which parent the infant resembles most, but we will correct that now. When the doctor hands you the infant, you have a blanket ready to roll it up in, as you have to remember it has come from a warm climate. After you have attended to all the details necessary for the mother's comfort and safety, you must then wash and dress it. The child will be covered with a greater or less amount of the vernix caseosa, to remove which you will use vaseline, olive oil, or some unctuous material. This will soften the vernix caseosa, after which complete the cleaning with soap and warm water, and dry thoroughly with soft warm towels. After this is properly done, then attend to the dressing of the stump of the cord. I have discarded the usual way of dressing, and employ now boracic acid or iodoform, in small quantities, and apply a pad of absorbent cotton, or of soft iodoform gauze. All this is held in place by a flannel bandage. The cord undergoes a process of putrefaction, and in the course of 5 or 6 days will separate. There may be, after the separation, a tendency to the formation of umbilical hernia, particularly in those infants that cry a great deal. You will prevent this by continuing your iodoform dressing and the iodoform pad, all kept in place by the flannel bandage. The child should be warmly clothed, and flannel should be the material used. Strict cleanliness is important, and you will show your good nursing by the management of the napkins and the protection of the parts

from the contact of urinary and fæcal discharges. The child must be kept dry as well as clean, or the parts will soon become excoriated. I have already told you when to apply the child to the breast. The first milk is slightly laxative, and assists in the evacuation of the meconium. This will cease in about ten days, when the evacuations become feculent. During the first washing of the child always examine it for any infirmity, caused by want of development, spina bifida, cleft palate, and imperforate anus. Imperforate anus must be attended to at once to save the child's life. With regard to the bathing of the child after the first few days, you had better be governed by the strength and vitality of the child. Delicate infants will not stand two baths in the day. As a general rule one is enough, and 4 to 5 minutes is sufficiently long, during the first few weeks. I have already spoken to you about the regularity of nursing, and the better trained the infant is when you leave, the more your services will be appreciated by the patient.

Progress of Medical Science.

MEDICINE AND NEUROLOGY

IN CHARGE OF

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A RATIONAL TREATMENT FOR PHTHISIS PULMONALIS, TOGETHER WITH SOME NOTES ON A NEW REMEDIAL SOLUTION.

By CYRUS EDSON, M.D.,
NEW YORK.

Dr. Edson has furnished to the world another remedy for tuberculosis, which he puts into the hands of the profession for trial, modestly claiming for it recognition on the basis of its rationality, and the favorable results obtained in a few cases in which it was given a trial. The following is a synopsis of his paper which appears in the *Medical Record*, New York.

Phenol is found in the urine of man, the horse and the cow, and is much increased in diseased conditions, being one of nature's devices to destroy germ infection, and Dr. Edson has labored to find a solution of it that could be used effectively against germ infections which would be tolerated by the system. He concluded that the creosote treatment owed its beneficial effects to the small amount of phenol it contains.

Creosote and phenol given by the mouth produced derangement of the digestive organs, hence the remedy would be better administered hypodermatically, and should be one without irritative or toxic effects. The blood itself is antiseptic, and may not require such percentage of aid to be effective as laboratory experiments had indicated was required outside the body.

The fluid finally selected is a solution of phenol and pilocarpine phenyl-hydroxide, and for convenience is called *Aseptolin*.

Dr. Henry A. Mott, chemist, describes the process of manufacture. Its composition is:

| | |
|--|---------|
| Water (H ₂ O) | 97.2411 |
| Phenol (C ₆ H ₇ O) | 2.7401 |
| Pilocarpine - phenyl - hydroxide (C ₁₁ H ₁₆ N ₂ O ₂ O H. C H ₅) | 0.0188 |
| Total, | 100. |

The composition of pilocarpine - phenyl - hydroxide is:—

| | |
|---|-----------------|
| Pilocarpine ($C_{11} H_{16} N_2 O_2$) | 53.92 per cent. |
| Phenol ($C_6 H_7 O$) | 46.08 “ |

“Your experiments have shown that none but the very purest chemicals can be employed. The phenol obtainable in the market, besides containing traces of para-cresol ($C_7 H_7 O H$), contains, as a rule, other impurities which unfit it for the direct preparation of this fluid.

“Starting with phenol distilled directly from its hydrate ($2C_6 H_6 O H_2 O$), which has a much higher melting-point and a much lower boiling-point than the phenol ordinarily obtainable, I find that you subject a solution of such phenol, distilled in water, to an additional distillation, heating the vapor as it passes from the retort to the receiver in an oil-jacketed tube (in which a thermometer can be inserted), and then condensing the same in a double-stoppered receiver, which enables you to reject the first ten per cent. so condensed, utilizing the remainder, with the exception of the last ten per cent., which is likewise rejected.

“In the preparation of pilocarpine-phenyl-hydroxide, it is necessary only to weigh out an equivalent proportion of this purified phenol solution (after determining its strength by chemical analysis), heat the same to about $100^{\circ} C.$ ($212^{\circ} F.$), and then gradually add to it an equivalent amount of the pure alkaloid pilocarpine, when, on standing for ten or twelve hours, the uncrystallized pilocarpine-phenyl-hydroxide will separate out. From this salt the fluid may be directly prepared, by following the analysis given above. The usual method, however, adopted in its preparation on an extensive scale is as follows:

“The highly purified phenol is diluted with distilled water until the percentage of phenol is reduced to exactly 2.75 per cent., which can be determined by the phenolometer. This is introduced into glass-stoppered receivers, which have been thoroughly cleansed with boiling water. In the receiver the right proportion of the alkaloid pilocarpine is put, so that, as the phenol distills over and condenses, it immediately combines with the pilocarpine in the production of the fluid. The temperature of the receiver is kept reduced by means of a small stream of water, yet sufficiently high to insure the desired union, but is never allowed to approach a temperature which would permit of the alkaloid suffering any other chemical change.

“Experiment has demonstrated that strict adherence to the above methods is required in order to produce aseptolin of a uniform composition and of an absolutely colorless physical appearance. A cloudy, milky, or slightly tinted preparation should be rejected. The proportions of the constituents do not permit of the presence of even traces of foreign bodies, if reliable results are to be expected.”

Pilocarpine induces leucocytosis, stimulates glandular activity,

and is an expectorant and stimulant of secretion causing increased amount of water also to be poured into the lung cells.

Any competent chemist can prepare the fluid, but great carefulness is required. The solution is colorless, with the odor and taste of phenol. Sharp, burning pain follows the injection with little or no local irritation after, and no visible physiological action is noted with doses even of 250 minims, but phenol is found increased in the urine and in the breath and stomach.

The effect when injected into the system when suffering from active germ infection is to directly inhibit bacterial development, which it does quickly and positively. The treatment has the advantage of not interfering with the functions of the digestive organs. The dose is from 50 to 70 minims daily, increasing 10 minims daily—until 100 or 120 minims are reached, and this dose continued until the patient recovers or some contra-indication occurs. Besides the injection he gives inhalations once or twice daily from a sass spray tube and globe inhaler, using a 10 per cent. solution of iodoform in ether, and given under a pressure of one atmosphere, the patient inhaling and exhaling deeply during the delivery of the spray.

When the inhalation causes too much irritation he uses a few sprays of the following before beginning it :

| | |
|--------------------|----------|
| R Acidi carbolici, | 3 parts. |
| Glycerine, | 10 “ |
| Aquæ distl, | 87 “ |

When ether cannot be borne, olive oil may replace it. In atelectasis besides lung gymnastics, compressed air is recommended to assist deep inspirations in expanding the lung.

Dr. Edson finds aseptolin a greater specific in malaria than quinine.

The total number of cases that have been and are being treated with this fluid which have been reported to me to date is 216. Of these, improvement is reported in 212 cases, and no improvement in 4 cases. Of the improved cases, 23 have been discharged cured; 66 will, in the opinion of the attending physician, be discharged cured; and in 91 cases, while improvement is noted, no definite prognosis can be made yet. In 32 cases the improvement was only temporary. Of those in which no improvement has been noted, 1 has died.

ARTHRITIS DEFORMANS IN A CHILD SEVEN YEARS OLD.

Henry Koplik, M.D., of New York, describes a case of this kind in the March number of the *Archives of Pediatrics*. This rare affection is to be distinguished from arthritis, affecting many joints following the exanthemata, due to streptococcic invasion of bones, the bone symptoms of late hereditary syphilis, tubercular

arthritis and recurring acute articular rheumatism. The author agrees with Charcot in regarding arthritis deformans as of neurotic origin, owing to the symmetry of the affected joints, the atrophy of muscle and skin, absence of any history of syphilis, tuberculosis, cardiac disease or rheumatism. Only some eighteen cases are described. Garrod and Charcot lay stress on the enlargement of the ends of the bones, the effusion in the joints, the deformity in flexed or extended positions of the limbs, the comparatively rapid invasion of many joints (within a few months), and the prolonged chronicity after primary invasion of the joints and the resistances to all treatment.

The author's case is typical, pains and swelling occurring in some joints, and spreading to others, permanent deformity with gradual lessening of power of movement, the failure of all treatment.

THE TREATMENT OF MULTIPLE NEURITIS.

HENRY W. COE, M.D., Portland, Ore., in *Medical Sentinel*, January, 1896, states that although this disease occasionally has a somewhat sudden onset, we need to appreciate that the cure is only possible after a course of treatment continuing through a somewhat extended period.

The local manifestations are often but the most striking evidences of a general state of lowered vitality, and may so clearly indicate to us some special cause in the case, as alcoholism, lead poisoning, or syphilis, that a course of appropriate treatment is easily and rationally indicated.

If a sequela of typhoid fever, rheumatism or diphtheria, our knowledge of these diseases and the care of sequential affections, which are often looked for, will avail us much.

In all these cases there is a general lowered vitality, and there is no place in neurological treatment where iron does better than in such affections. The tr. ferri chlor., as I have said before, seems to me to render the best results of any form of iron, although, no doubt, many other forms do well. Arsenic, beginning with a small dose of Fowler's solution, and pushing it to its physiological effect, and then reducing it to four or five drops for an adult thrice daily, may be used for many months. Another excellent form of arsenic is the bromide of arsenic, which may be pressed to its fullest extent, until puffiness of the lids be noticed, when the dose should be reduced to a limit within which no marked arsenical symptoms shall be manifested. The patient should enjoy both mental and physical rest. This rest, like other agencies in the case, should be used as long a time as possible. Alcohol, an important factor in many of these cases, should be carefully withdrawn. If spirits have been the liquor indulged in, beer should be substituted for a time, and then this entirely withdrawn. The bowels should be kept moderately free, remembering that in many

of these cases constipation is a common symptom. Maltine with cascara is an excellent preparation where constipation exists, the maltine providing not only a nutriment but also an aid to digestion, while the cascara which the preparation contains combats the tendency to constipation, and, in fact, if continued for a time, will largely remove such condition from the bowels. I might say that the bitter tonic in cascara is not removed from this preparation, and it is quite likely that this accounts for the superiority of this preparation over many others.

Warm applications upon the affected nerves at the onset of the disease often afford much relief, and warm baths are of value, but, as pointed out by Sachs, care needs to be exercised where anæsthesia exists, that serious burns and ulcerations do not result.

Anodynes should be used with much caution, for many an habitu  has been created by the use of morphine in this disease. In many cases, however, as a last resort, some remedy to relieve pain must be employed. Atropine and hyoscine, either alone or in combination, should be given a trial before a resort is had to morphia, and these should be employed hypodermatically.

Electricity offers promise of much good, and no doubt the best form for this disease is the current from a voltaic battery. Gowers advises s ances of twenty minutes, the current to be given along the muscles supplied by the affected nerves, and applied through large sponges of such degree of current as shall visibly produce contraction. Massage has its defenders, and may be of some value in the latter stages of the disease. Contractures should be provided against according to approved surgical methods.

THE ABOLITION OF THE GARGLE.

(*Medical Press & Circular*, No. 2959.)

The length of time which it takes for any scientific fact to receive general recognition is unequalled, possibly even exceeded, by the difficulty experienced in inducing practitioners to discard measures or methods which more recent experience has shown to be inadequate, inefficient, or even injurious. It is to be feared that the time-honored gargle falls into this category; but even its antiquity, coeval though it be with the poultice and the leech, cannot blind us to the fact that it necessarily falls short of the mark when the diseased tissues are on a plane behind the posterior pillars of the fauces. Even a casual study of the conditions which obtain in the act of gargling, as usually understood, will show that the fluid is kept in front of the lowered soft palate, so that it is impossible for any effects to be exercised on tissues posterior to that structure. A gargle, as ordinarily employed, is, therefore, only a mouth wash. Under these circumstances, it is really surprising that it should have been reserved for Mr. Lennox Browne to enter

a protest against the continuance of a practice which is not only useless, but, in presence of actual inflammation, is exceedingly painful, and may be injurious. Mr. Browne describes, however, another method of gargling, using the term gargling in the sense of trickling a fluid through the mouth into the pharynx, which is free from one, at any rate, of the objections already alluded to, viz., the method of Von Troelstch, for which the directions are as follows:—"Take a tablespoonful of the gargle in the mouth, hold it in the back of the throat with the head thrown back, then, closing the nose with the finger and thumb to prevent entrance of air, open the mouth and make the movements of swallowing without letting the liquid go down the throat." By this means the medicated fluid can, it is true, be brought into contact with the pharyngeal tissues, but the process is by no means easy to carry out in an effectual manner, and in the majority of instances it is quite out of the question. Gargles, again, are quite inadmissible in cases entailing the dorsal decubitus, such as diphtheria, in which cardiac failure has to be sedulously guarded against. Another obvious objection to gargles is that they must perforce comprise only the most harmless ingredients, if we are to avoid subjecting the patient to the danger of poisoning in the not improbable event of any portion of the fluid escaping control and finding its way down the œsophagus. Moreover, solutions thus employed must not contain any considerable quantity of an active ingredient, because they will come into contact with vastly more healthy, than diseased, tissue. The moral is that gargles should give place to more scientific and precise methods of applying topical agents to diseased surfaces in the throat, especially in children, in whom gargling of any sort is virtually an impossibility. The future, therefore, is towards irrigations, sprays, lozenges, and, in the case of children, to medicated confections.

TYPHOID FEVER IN YOUNG CHILDREN.

The occurrence of typhoid fever in young children has been a subject of discussion in several pediatric societies during the past two years. The evidence adduced renders it clear that the disease is extremely rare during the first two years of life and uncommon under three years. Several gentlemen who have expressed the belief that it was not uncommon in "children" have evidently not been able to restrict themselves to children under three years. We are not aware that the claim has been made that it is particularly rare above that age. The records of four of the largest children's hospitals of the country disclosed the fact that not a single patient under three years of age had been admitted with typhoid fever for many years. Of these the New York Foundling Hospital furnished the most striking proof. Eleven hundred of the eighteen hundred children continuously

under its care are "boarded out," in the city and surrounding towns, and are returned to the hospital when ill. Not a single case has been seen in this institution for twenty years, the facts being vouched for by Drs. Northrup, O'Dwyer, and J. Lewis Smith, and corroborated by 2000 autopsies of Dr. Northrup.

The reasons thus far given to account for this insusceptibility are unsatisfactory. This is the age at which children are especially susceptible to intestinal diseases. Marked susceptibility to such diseases rapidly diminishes after two and a half years, the age at which typhoid susceptibility begins. If typhoid does not occur in infants because they are fed on sterilized milk and boiled water, why do they die from summer diarrhoea in such appalling numbers? The germs of both diseases enter at the same portal—the digestive tract.

The condition which is most commonly mistaken for typhoid fever is, unquestionably, catarrhal pneumonia, a disease in which the physical signs are often obscure and the rational symptoms indefinite. In young infants it is prone to pursue a prolonged course. Grippe, with slowly developing pneumonia, has also been mistaken for typhoid. The febrile conditions resulting from indigestion or simple gastro-intestinal disease may be the source of a similar error. It is certain also that pleurisy with effusion, and other obscure pulmonary and pleuritic disorders have been overlooked, and the fever accompanying them has been attributed to typhoid. The fact that a continued fever in a child may be due to tuberculosis should never be forgotten.

Typhoid fever is so rare in young children, and is so closely simulated by other febrile conditions, that we are in full accord with Dr. Northrup's desire to encourage a healthy scepticism as to typhoid fever in an infant, in the absence of an epidemic, when the symptoms are not present which would lead to a diagnosis in an adult.—*Archives of Pediatrics, January, 1896.*

THYROID GLAND AND MORBUS BASEDOWI.

Scholz in his experiments with thyroid tabloids in the healthy and morbid state measured the amount of elimination both before and after administration.

Before administration, the elimination was equal to the ingestion. On the use of the tabloids no change in the elimination of nitrogen took place, while in the healthy it was reduced, but did not disturb the balance, as no reduction of weight took place in either case.

The phosphoric acid elimination was tenfold increased in morbus Basedowi, while it was only four times in the healthy. In both cases, during the administration of thyroid, more phosphoric acid was eliminated than taken in. This agrees with Roos' results, and bears out Kocher in his opinion that phosphate of soda is the rational treatment for morbus Basedowi.—*Medical Press & Circular, No. 2964.*

THE BLASTOMYCETES OF SARCOMA.

Roncali, who is acting under Prof. Durante, in Rome, affirms that he has found the same microbe as Sanfelice in sarcoma and adenoid carcinoma of the ovaries. It requires a specific coloring agent, as it resists both acids and alkalis. The parasite is found both within and without the cell. When young, and without covering membrane, the protoplasm is chromatic; as it increases in age the membrane thickens and the color recedes. The "Blastomyces" in the cancerous tumor is still awaiting confirmation, as many efforts by other investigators have failed to obtain this parasite.—*Medical Press & Circular*, No. 2964.

TUBERCULOSIS.

Dr. R. M. Cunningham, in his presidential address at the meeting of the Tri-State Medical Society of Alabama, Georgia and Tennessee, reported in the *Southern Medical Record*, December, 1895, and in *Universal Medical Journal*, on this subject based on observations made in the Alabama penitentiary, stated that of an equal number of white and negro convicts there were seven deaths among the latter to one among the former from tuberculosis. These figures demonstrate the wonderful racial predisposition of the negro race to tuberculosis, compared to the white under precisely the same environment. He expressed the opinion that the negro has acquired since his emancipation a predisposition to tuberculosis which, for the present and succeeding generations, is hereditary. He shows a greater liability to diseases which produce a local predisposition to tuberculosis, notably bronchial and intestinal catarrh and pleurisy. He is physically; mentally, and morally inferior to the white man, and therefore more liable to contract disease, particularly tuberculosis and thoracic diseases. "His changed social, religious, political, and industrial relations, involving, as a rule, a change from the segregate to the aggregate—from country to town and from farm to public works—are also important factors, as well as his disregard for all rules of sanitation.

GYNÆCOLOGY.

By A. LAPHORN SMITH, B.A., M.D., M.R.C.S., Eng.

Professor of Clinical Gynæcology in Bishop's College; Gynæcologist to the Montreal Dispensary and Samaritan Hospital; Surgeon Western Hospital.

Chronic Cystitis in Women.—Dr. Carl Engel of Minden, Ohio, has an article on this subject in the *American Journal of Obstetrics*, January, 1896, in which he advocates treatment by dilatation and rest. He describes a case of an emaciated woman with a sallow complexion, having strongly acid urine, who had to get up three or four times every night to pass water. The meatus was raw, and

surrounding parts appeared inflamed. He placed her on 4 grains bicarbonate soda in a tumbler of water three times a day, with hyoscyamus and buchu, with considerable improvement. But it was only after he had dilated the urethra under cocaine, washed out the bladder with boric acid, and left a permanent catheter in to drain the bladder that she could sleep all night without getting up. Once he washed out the bladder with 1-50 solution of nitrate of silver, or 10 grains to the ounce, followed by weak salt solution. The patient was completely cured:

This is a very instructive case, and it may be of interest to draw attention to some of the more striking points, as we are frequently called to attend just such cases. In our experience, about 50 per cent. of the benefit is due to inducing the patient, under one pretext or another, to drink more water. In fact, a great deal of cystitis in women is largely due to the habitually concentrated condition of the urine owing to their rarely if ever taking a drink of water. Not only does the delicate mucous membrane of the bladder resent the presence of even a dram or two of the highly concentrated urine, but the urethra, meatus, and even the surrounding parts of the vulva, become intensely red and swollen and painful from the irritation caused by its passing over them. We have frequently avoided cauterizing the urethra and meatus, and even cured urethral caruncles and eversion of the mucous membrane of the meatus in the following simple manner: first, by securing free evacuations of the bowels; second, by diluting the urine by inducing the patient to drink two quarts of water a day more than she has been doing; this may be taken in the form of flaxseed tea, weak tea, beef tea, thin broth, watery gruel, mineral water, river water, or, best of all, rain water; third, to render the urine alkaline by means of one drachm of bicarbonate of soda, or, preferably, bicarbonate of potash four times a day; this may be given in lemonade, which converts it into effervescing citrate of potash, and a very pleasant beverage. This is also a pretext for giving the patient four tumblers of water out of the eight which are necessary. Fourth, if there is retroversion of the uterus, rectify the displacement by means of packing with boroglyceride tampons, introduced while the patient is in the knee chest position with her corsets off. Retroversion causes irritation of the neck of the bladder, first, by mechanical pressure of the cervix, and second by obstructing the circulation of blood in the vesical veins.

Radical Relief of Uterine Flexions.—Dr. Nourse of Alexandria, Ind. (*American Journal Obstetrics*, January, 1896), calls attention to a new method of curing retroflexion of the uterus by splitting up the cervix and then pushing up the posterior lip, and sewing it in this new position. Although the idea is ingenious, we cannot agree with the author in thinking that anything you can do to the cervix will push up a fundus, which is always retroverted when it is retroflexed. Our experience with Alexander's operation, when there are no adhesions, and with ventrofixation when there are

adhesions, has been so satisfactory, and the operations themselves are so rational, that we should be loth to resort to any other method of curing retro-deformities or displacements.

Necessity of early Operation in Mammary Cancer.—(*American Journal Obstetrics*, January, 1896). Dr. Van Rensselaer of Washington has done good work in calling attention to the great importance of early operations for cancer of the breasts. In spite of all that has been written on the subject, it is still rare for us to see these patients immediately after the tumor has been discovered, which is the only period at which they can be operated with a good prospect of cure. He says: "Every induration in the breast of an elderly woman should be regarded with suspicion. Modern histological researches show that growths in this tissue manifest a marked tendency to change their nature, so that a pure fibroma may become by lapse of time of a malignant character." He continues: "Family physicians are sometimes to a degree reprehensible in that the true state of the case may be lightly treated, with the hope that further manifestations may be lacking. Many patients are timid about submitting to operation at the very time when it offers the best prospects of success, and many lives are sacrificed which might have been saved had the growth been seen in its incipiency." The result is satisfactory in cases in which the gland is extirpated before the lymphatics have become involved. In 22 cases reported by Bull, more than half were still perfectly well three years afterwards. Halsted has recently reported 53 cases with only 3 relapses at the end of three years. It is necessary, however, to perform the operation in a radical manner; we must remove the breast entire with fat, axillary glands, clavicular glands and portions of pectoral muscles all in one piece, so as not to infect the cut edges of adjacent tissues.

Stricture of Urethra in a Woman.—Dr. St. Clair Bowen, of Washington, reported a case of this disease in a woman forty-two years of age, who had three normal labors, last one eleven years ago. Five years ago she began suffering with dysuria, one year later she passed pus with urine, and this continued from time to time during one year. Since two years she has been passing only two ounces of urine, with much difficulty and pain, consuming half an hour in passing that amount. Each time the straining efforts to urinate produce cystitis. She had been under the care of a number of physicians in that city, including the speaker, without deriving much benefit. He asked for suggestions for her relief. He did not state whether the urine was high colored or intensely acid and irritating, but we should think that it was, and would suggest the same treatment as outlined above, *viz.*: to increase the quantity of liquids, principally water, so that the patient may be made to pass forty or fifty ounces of weak, non-irritating urine. Secondly, give her alkalies sufficient to render the urine slightly alkaline. Much of the spasm and straining above referred to are due to irritation of the neck of the bladder, and when this is removed

very few of the symptoms of stricture will be left; if, however, the stream is small and tortuous, graduated bougies, or Hegar's dilators, may be passed, painlessly almost, after the reflex irritability of the urethra has been allayed by the means indicated alone or with the addition of hyoscyamus or morphine.

Retained Pessary Requiring Cutting Operation for Removal.—We have often expressed our dissatisfaction with the pessary treatment of displacements, the principal cause of it being that as long as the patient wears it, she is tied to the doctor's office, and can only leave it on parole. If she forgets or neglects to return periodically for examination, she is exposed to dire consequences. Dr. Nash, of Washington, reported such a case, in which the pessary had eaten by ulceration a passage through the vagina, and had to be removed by the aid of the knife. In a similar case which has come under our notice, this ulceration had become malignant, presenting a hopeless condition of cancer. By ventrofixation, combined with plastic operations on the cervix and perineum, the patient is entirely cured there and then.

Ovarian Tumor.—Dr. Skene Keeth, in the *Lancet* of November, reports a successful removal of an ovarian tumor weighing over one hundred pounds, seventy-five pounds of which were removed by the aspirator the day previous to operation, the remaining twenty-five pounds he removed by abdominal section. We pointed out some years ago the vital importance of following this method when we reported a similar case, also successful, owing to the enormous pressure on the abdominal nerves and veins being removed gradually. As the sudden removal of these large tumors allows a tremendous rush of blood into the abdominal veins, the patient frequently dies of hemorrhage, without one ounce of blood being lost.

Dr. Hundlay, in the *Maryland Medical Journal* of November 30th, calls attention to the *importance of leaving an ample cervical canal and external os* for the purpose of free drainage, as there is always associated more or less endometritis. We think his warning is well timed, as we are every now and then consulted by women who are suffering considerably from the results of cervix operations, either done too much or not done enough. That is to say, in some cases all the cervical mucous membrane is removed, and the uterus is left stenosed with a pin hole os preventing either drainage or menstruation; on the other hand, many inexperienced operators may remove the mucous membrane, but leave cystic glands and scar tissue in the angles of the tear, with a result that they are closed in under still greater pressure when the lips are sewed together. The reflex symptoms are of course greatly aggravated, and the hundred or so of people who are acquainted with the case become firm opponents not only of Emmet's operation, but of gynæcological operations in general. It would be much better if these cases, especially those in which there is much induration and cicatricial tissue should be sent to the more experienced operator.

Medical Society Proceedings.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, 13th December, 1895.

A. D. BLACKADER, M.D., President, in the Chair.

Dr. R. de L. Harwood, of St. Lambert, was elected an ordinary member.

DISCUSSION ON CANCER.

DR. J. G. ADAMI introduced the general pathology of the subject, speaking chiefly on the habit of growth.

He stated that the point of greatest practical interest was the causation of cancer. In regard to the parasitology, bodies were occasionally found which might be of the nature of sporozoa or endogenous cell degeneration, but were doubtful. If a parasite, it does not spread directly through lymph or blood vessels, but is conveyed through them by tissue cells.

If parasites bear an aetiological relation to cancer, why do they induce certain cells of the body to take on a functionless and heterogenous growth? They may originate aberrant vital processes, but such also occurs where no parasite is suspected, as in certain benign growths, examples of fibromata papillomata exostosis produced by irritation were mentioned.

We must, then, logically admit that functionless and heterotopic cell hyperplasia can be induced without parasitic association; and inasmuch as the benign may pass imperceptibly into malignant growths, and inasmuch as we can, for example, come across lipomata showing transition into sarcomata, or fibromyomata doing exactly the same, as again we can, in thyroid, encounter what are certainly benign growths—adenomata (the so-called foetal adenoma)—possessing all the histological characters of carcinomata, the only conclusion to be reached is that a study of the presumed parasite is calculated to lead us only a very little distance.

We must seek deeper than these supposititious parasites if we wish to discover what lies at the bottom of all malignant tumor growth,—aye, of all functionless cell proliferation.

Now, that I may prepare you for the train of reasoning upon which I am about to embark, and that you may throughout the ensuing argument see whither it is tending, let me here state the conclusion at which I have thus far arrived from a study of neoplasms, and not a little consideration concerning their characters and relationships. Briefly, I cannot but hold that the one fundamental phenomenon underlying the development of cancerous and other neoplasms is the assumption of a habit of growth, a habit of rapid cell division independent of external stimulus on the part of certain cells in one or other region of the body.

Multiplication and regeneration are naturally inherent in cells, and the habit of growth mentioned is an exaggeration of this latent capacity. In lower animals, as the hydra, any portion containing a cell if cut away will reproduce the animal. This power is restricted as we rise in the scale,

until in man only the cells of certain relatively simple tissue possess to any marked degree the power of complete reproduction.

The most prominent characteristic of a nerve or muscle fibre present in the attempt at recovery after injury is the multiplication of the nuclei of each unit, a multiplication often regarded and spoken of as a degeneration, and indeed not unfrequently such multiplication precedes the actual disintegration of the unit. This multiplication, which I have elsewhere spoken of as "reversionary degeneration," is, I hold, an indication of a reversion to a more primitive type of cell, and indeed in the case of muscle Metchnikoff and others have shown that the individual nuclei resulting from this nuclear division may surround themselves with protoplasm and may pass away as simple embryonic cells, so that the whole muscle fibre becomes completely disintegrated. The process here is one of what may be also termed vital disintegration. The same principle that is shown here is to be seen at work in glandular structures. Take, for example, a case of parenchymatous nephritis. If this be acute, the cells of the tubules swell up, show vacuolation and other signs of acute degeneration of the cell substance, with failure of the nuclei to stain properly (or, to put it in other words, diminution of the chromatin of their nuclei), and the cells are cast off. With a lesser degree of inflammation the process is very different; we find here that the cells proliferate, but at the same time these new cells do not show the full adult character, their nuclei, it is true, stain intensely, but their bodies are small and cubical, their characters become more nearly allied to those of the cells in the developing kidney.

In regeneration of the liver and lungs the same tendency to revert to embryonic conditions is seen, so that it is sometimes impossible for the pathologist to distinguish between chronic inflammatory and malignant tissue.

And sometimes this development of embryonal or sub-adult gland tissue passes on imperceptibly into cancer. Many cases of chronic irritation and long-continued inflammation of moderate intensity affecting epithelial and glandular tissues merge into carcinomatous manifestations. The difference between the two is that in chronic inflammation the abnormal growth ceases when the cause of irritation is removed, in cancer the cells have gained the habit of unrestrained growth.

It may be also that the vessels going to the region from long dilatation remain distended or have acquired persistent distension; so that even when the primary irritant is removed the part continues to receive nourishment in excess of physiological needs. This, together with paralyzed nerve control, may well be factors leading to the first mentioned condition; but before all, it seems to me, that there is to be recognized this assumption of the habit of growth, so that once fully started upon the road of proliferation the cells continue to multiply, utterly irrespective of the needs of the organism.

Other instances were mentioned where the cells of the body acquired habits as the tolerance for drugs and immunity from disease. Cancer cells are embryonic in appearance, and, like the latter, possess the power of frequent multiplications, and both have an excessive amount of nuclear chromatin, and like embryonic cells those of cancer have intense vitality. The cambium layer in plants has special activity. The stratum malpighii in the skin is constantly undergoing cell divisions, and can be transplanted and will grow if placed in normal environment; the cancer cells have this power still more marked, and will grow in widely different regions of the host from the primary seat of growth. Parasites may be

one cause of the chronic irritation, but must be found in all to be regarded as the cause.

The theory held that a weakened basement membrane led to the cancer cell growth. That of a seminum started by Virchow and elaborated by Creighton and others, and Cohnheim's theory of embryonal cell vestiges were considered and shown not to explain cancerous growth as well as his theory of the assumption of a habit of tenacious and incontinent growth. He showed that irritation was often the cause of external cancer, but sometimes there was no such history. A dilatation of the blood vessels is usually found, caused mostly by central irritation rather than by increased demand, and leads to over-nutrition, and may not other forms of increased blood supply lead to neoplastic growth?

At the climacteric it was possible, he said, that with the retrogressive changes in some tissues, others may receive a greater amount of nourishment; or from being injured may assume a subadult cell growth, especially as at this period the tissue changes are reversionary in character. The subject of modified nerve control over tissue was referred to as possibly having some connection with excessive cell growth.

To return now to the substance of my opening remarks. If the suggestions (and I hardly like to venture to call them more than suggestions) which I have thrown out have any solid basis, then it would appear probable that the advance in interference with cancer must proceed directly along the lines that it is at present taking in the hands of the surgeons, namely, the duty of the surgeon must be to recognize the existence of new cell growths at the very earliest moment; and more, now that operation is so robbed of its previous terrors, and that parts can be removed with so little disfigurement and so little danger of sequelæ, it becomes the duty of the wise surgeon to remove every neoplasm, benign as well as malignant, at the first opportunity. There is no valid reason for retention, there is the possibility, even if it be but distant, that the benign growth may assume malignant properties. Destruction of the cancerous tissue at the earliest moment, whether by the knife or by the administration of substances which excite a specific action upon the cells,—this alone, I cannot but hold, is what we have to recognize as the procedure at which to aim.

In discussing the parasitic theory of cancer, DR. MARTIN spoke as follows: We cannot repudiate the theory without careful consideration, for among its adherents are two scientists whose names stand foremost in bacteriology and pathology—Metchnikoff, after examining the specimens prepared by English and European investigators, emphatically pronounced in favor of the presence of parasites in cancerous tumors; while Virchow is so strongly imbued with the same idea that he is withholding his final volume on tumors, trusting that the near future may bring increased light on the etiology of malignant growths.

The amoeba of dysentery is generally accepted as being the causative factor of the tropical malady, yet the absolute proof is entirely wanting. Few scientists to-day will deny the relation between typhoid fever and Eberth's bacillus, or of the plasmodium malarix to the disease with which it is associated, yet in neither instance are we positively enabled to fulfill the requirements necessary to establish satisfactorily the etiological relationship. As in these diseases, so too in carcinoma, where our knowledge is likewise very limited so far as the true cause is concerned, we are scarcely justified in discarding the theory of a parasitic origin till definite proofs to the contrary are established.

There are few pathologists to-day who ascribe the formation of

malignant tumors to an overgrowth of embryonic cell remains, as suggested by Cohnheim for the origin of benign tumors, and the reason is obvious. When a tissue in its overgrowth ceases to remain local, ceases to retain its simple structure, but tends to be distributed throughout distant portions of the body, there is at once suggested some unusual cause for such an irregular mode of procedure and extension of cells.

The cause can hardly be identical with that for other more benign tumors, else one would surely get at some time or other an extension by metastases of lipomata, fibromata, etc. This, however, never does occur with the same invasive propensities, and there is at no time a paramount tendency to extension even locally. Some would explain this by the greater regenerative and proliferative power of epithelial cells over any other kind of tissue. While, however, such is the case, it is but a poor explanation of the atypical character of the growths in malignant tumors. Rapidity of growth alone can certainly not explain it, for whenever the epithelial growths extend rapidly, it is because they find paths of small resistance, *i.e.*, the looser tissues and the surfaces, forming thus cauliflower excrescences, and so forth. It is rather where their growth is slow that they invade denser tissues and infiltrate. Fibromata and other benign tumors may remain untreated for years and their tendency to invasion of other tissues is never manifest. They remain nearly always localized, encapsulated, and cause injury only by mechanical pressure.

Why then do we get metastases in one and not in the other?

The explanation cannot be offered that the nature of the individual cells of benign growths unfits them for transmission by vessels, for when the varied nature and sizes of cancer and sarcoma cells be considered, it is not to be supposed that cells of other tumors find greater difficulty in passing through the vessels. Again, the mere fact that emboli of fat globules can be distributed over the body after fractures, etc., and be found in the smallest capillaries of the lungs, would show that in one kind of tumor at least there is no mechanical obstruction to the passage of its elements by vessels.

To examine into the nature of malignant neoplasms it is in the first degree necessary that we should see if in other parasitic diseases we have any evidence of new growths—if, in other words, parasites can induce cell proliferations in any way analogous to cancers. Of this I think we have abundant proof, and it will be of interest to institute a few comparisons between cancerous disease and those maladies where multiple new growths occur from the invasion of the parasite. Prof. Coats and others have asserted that an essential difference exists between the lesions found in parasitic diseases and those occurring in cancer, that in the former the results are always irritative, inflammatory and destructive, in the latter purely proliferative.

The bacilli once having found a resting place manifest their presence at once by a new growth of cells, the tubercle, and only subsequently do we get degenerative changes. It is practically the same in many other diseases, such as leprosy, where the earliest evidence of the presence of bacilli in the vessels is manifested not by an inflammation, but by a hyperplasia of the neighboring tissues. As a result of the hyperplasia, true tumors form chiefly in connection with nerve endings, while degenerative processes may be quite absent. But a yet more striking analogy between cancer and infective processes is seen in actinomycosis. It is true that here an irritation is set up by the advent of the fungus, but, on the other hand, so great is the proliferation of cells and bone formation in the jaw, that before its parasitic nature was understood, its

structure was looked on as being that of an osteo-sarcoma. From the primary seat metastases can spread to any part of the body, the first evidence of their presence in the newly-infected region being a multiplication of cells in the vicinity. But whereas it may be argued that in these instances the inflammatory conditions are primary, there are tumors formed by parasites where no sign of irritation exists. Such is the case in typhoid fever. The lymphomata sometimes found on the serous coats of the intestines, in the liver and elsewhere, are essentially neoplasms induced by the action of the typhoid germ.

Non-inflammatory neoplasms likewise occur in Hodgkin's disease; and in chronic malaria the almost constant result of the parasitic infection is to produce in the spleen an enormous overgrowth in its essential cells and the fibrous stroma surrounding them. It may, then, be asked with reason, if cancer be parasitic why the epithelium cannot equally well be selected as a cellular habitat by parasites just as the blood cells, etc., in other diseases.

Since the researches of Malassez, Delepine and others, it has been recognized that certain parasites (whose form and general character bear a striking resemblance to the supposed organism of cancer) often infest the alimentary tract of rabbits and make their way thence to the liver, where they invade the epithelial cells in the bile ducts. As a direct result, an extensive proliferation of the epithelial cells takes place, and also of the fibrous stroma about them, so much so that a luxuriant overgrowth occurs resembling very much a malignant adenoma of the rectum. (v. fig. F. and Nos. 1 to 7.)

From what has been said, then, it seems clear that, firstly, parasites are quite capable of producing cell proliferation independent of inflammatory conditions, *i.e.*, a proliferation analogous in general features to cancer; that, secondly, they produce metastases, as does cancer; that, in the third place, it is not uncommon to find parasites selecting special cell structures for their habitat; and that, finally, we can find in the lower animals an epithelial overgrowth and the formation of a fibrous stroma, all being induced by the invasion of a parasite.

The parasite is usually spherical or oval, with a more or less rounded nucleus, this latter occupying a relatively small area of the parasites' protoplasm. The cell body is homogeneous or mottled, sometimes radially striated. These striæ were supposed by some to be evidences of reproduction, such as is observed in malarial parasites. A capsule of double contour surrounds the organism, and seems to be intimately associated with the protoplasm of the cancer cell, as though secreted by the latter. Sometimes the organism seems to lie in a kind of cyst or vacuole, in this way resembling the bacilli of leprosy, where the same condition often occurs. The parasite may be single or multiple within the cell, and invades sometimes the nucleus, sometimes the protoplasm.

A few isolated cases have been recorded, where some of the lower animals have successfully been inoculated, and the transmitted portions have given rise to new growths with metastases. This, it may be argued, is a mere grafting from one animal to another; but inasmuch as the same organisms will be found in the metastases of the inoculated animals, it remains yet to be proven that there is not something else besides the simple transplantation of cells. It is quite as possible that the experimenters, without being aware of it, overcame in some way the obstacles that ordinarily prevent successful inoculations. Within the last few months a melanotic sarcoma was readily transmitted to a rabbit, and in a few weeks had given rise to metastases throughout the body.

At all events we are too little familiar as yet with all the conditions necessary to produce successful inoculations. How many people have already ingested myriads of cholera vibrios by way of experiment, and have subsequently felt no ill effects? Our methods at the present day are in many respects imperfect, and failures do not necessarily render the general underlying principles fallible.

On much that has been written on the contagiousness of cancer and its frequent occurrence in people who live much together, I cannot touch, nor of the plausibility of the so-called "cancer-houses," which are marked as being contaminated. I would merely conclude by suggesting that until some other reasonable explanation is afforded we are not in a position to despise the parasitic theory of cancer formations.

It has been so often urged, and with apparently great emphasis, that in the majority of cancerous growths there is associated some chronic irritation, it may be a slight and persistent one, that I cannot close without referring for one moment to this theory. Whereas it is true that in a great number of cases some irritant is associated with the development of carcinomata, yet in the vast majority of instances the self-same irritant may be at work in just the same mild chronic and intermittent way, and yet never induce a cancer. Of the number of men who use clay pipes there is surely but a small minority in whom cancer develops on the lip, while in the cases of cholelithiasis how rarely do we find cancerous conditions of the gall-bladder? It is true that with almost every case of cancer of that organ gall-stones are associated, but the mere presence of the cancer, implying as it does some destruction of the epithelium, etc., will supply a most ready nucleus around which concretions can form.

It would seem that irritation alone, then, cannot explain the formation of cancerous tumors, that to the mere activity of epithelial cells alone cannot be accredited the formation of cancers, and it would seem that our only resource is to examine for some deeper cause, to search for the original stimulus which brings to the cells the power to proliferate. It has been shown how characteristic are new growths as the result of parasitic invasion, and how scarce are evidences of similar growths in diseases that are proven to be non-parasitic. So that placing together all our facts, we feel that, for the present at least, there still remains a hope that in the near future something more may be discovered to account for the similarity of malignant processes to those in the infective diseases.

DR. SHEPHERD spoke in regard to the clinical character and treatment of cancer of the lip, tongue, throat and œsophagus. He believed all cancers to be local, that by early and wide removal recurrence may be prevented, and should be early. Vulnerability was, he thought, hereditary, and the exciting cause is local irritation, examples of which he mentioned as in smokers and chimney sweepers.

In cancer of lip, epithelioma is the most common variety, chiefly in males about 45, grows slowly and glands in submaxillary regions not early involved.

The disease first appears as a fissure, a warty growth, an excavation or an ulcer, which will not heal. It may first appear as a tubercle covered with a scab, which when picked off soon forms again. In whatever way the growth commences, sooner or later ulceration sets in. This ulceration is deep, with hard edges and a hard infiltrated base, and although not painful, causes discomfort, especially when eating. After a time the glands in the submaxillary region become enlarged and infiltrated, and after the other glands in the neck become involved, and the case becomes

hopeless. Chancre of the lip is the only affection which might be mistaken for epithelioma. In chancre the glands are early involved. As I said before, involvement of the glands in cancer of the lip is a late symptom. Early incision is the only form of treatment which is of any use. Every sore on the lip which is difficult or slow to heal in an individual past middle life should be regarded with suspicion and should be freely removed. Caustics should be avoided. Early removal before the glands become involved will, in most cases, result in a permanent cure. No cleaning out of the submaxillary space will be needed; but if the sore has lasted for any length of time, then even if no distinct enlargement of the glands can be felt through the mouth, the lymphatic tissue in the submaxillary region should be cleaned out, as the axilla is in the cancer of the breast. It is my custom when there is enlargement of the submaxillary glands, first to operate on the lip, and a week or two later in the submaxillary region, waiting till the inflammatory conditions about here subside, and one can tell how much tissue to remove. In most cases it will be found necessary to remove the submaxillary salivary glands, for in them are imbedded lymphatic glands which lie concealed and may contain cancerous elements.

In the jaw, cancer is more unfavorable. It occurs sometimes in the comparatively young. Commences in gums and spreads to jaw. Early removal is the only treatment, but it usually recurs. In the tongue, epithelioma begins as a fissure nodule or ulcer, more common in men, 247 to 46, leucoma, scars, and fissures, predispose. Operation to be successful must be early.

Diagnosis.—(1) Tubercular ulceration; (2) syphilitic disease, primary or tertiary; (3) simple ulcer.

Tubercular.—More at tip; age not diagnostic; lymphatic glands involved in both; history and microscopic examination the only tests of value.

Syphilitic ulcers if primary, glands are early involved, history helps in tertiary syphilis, ulceration is usually preceded by induration. In cancer this follows the ulcer. Ulcers may be multiple in syphilis.

Simple ulcers have rarely much induration. Any ulcer in a man past 40 which does not heal readily must be excised. In a doubtful case excise a portion for microscopical examination. He preferred Whitehead's operation with scissors, to Kocher's, where a preliminary tracheotomy was performed. He ties the arteries as cut. Feeds with a tube the day after. Careful asepsis and attention required.

In operating for cancer of the tongue the following points are important:

1. Remove all the disease. And here I might say that I do not believe in partial extirpation of the tongue, but prefer always to remove the whole tongue.

2. Prevent hæmorrhage.

3. Avoid entrance of blood into the air passages. This may easily be done in Whitehead's operation by never allowing the patient to be too completely narcotized. In these cases I always keep the patient in a semi-recumbent position, and as soon as the tongue is excised allow him to recover and sit up, and the arteries which have been secured by forceps are now tied at one's leisure.

4. The presence of an aseptic condition of mouth should be preserved until healing is complete. This may be accomplished by the use of antiseptic paints and the frequent irrigation with an antiseptic solution.

DR. ARMSTRONG spoke of cancer in the gastro-intestinal tract. Statistics showed that the shortest period of survival after gastrostomy was $3\frac{1}{2}$ weeks, and the longest twelve months. It saves from the agonizing form of death by starvation—the normal termination. The average duration of life after gastro enterostomy for carcinoma of pylorus was $9\frac{1}{2}$ months. After pylorotomy, average duration of life was $16\frac{1}{4}$ months, and is therefore the best procedure. If no tumor can be felt, and cancer suspected, he advised an exploratory incision, as early operation only gives hope of permanent cure.

Resection of stomach he thought had no future.

Carcinoma of rectum runs a chronic course. The mortality from operations is high. The difficulties are access, hæmorrhage and sepsis.

Kraske reached rectum by chiseling away left border of sacrum,— a safe and simple operation.

In 1889, Billroth made a V-shaped incision, one leg of the V crossing the sacrum below the level of the third sacral foramen, and the other passing down along the left border of the sacrum and coccyx. The sacrum was then divided on a level with the third sacral vertebra and the osteo-integumental flap turned to the right. This operation was afterwards claimed by Rehn, of Frankfort, and by Rydygier. This method gives a very ready access, and is not so likely to be followed by prolapse. The right lateral blood supply is not interfered with, and the bone is found to unite well, even in those cases where primary union of the external wound is not obtained. Borelius, of Karlsbroma, modified this method with a view of still further avoiding injury to the nerve supply of the levator ani and sphincter. He made a median incision from the middle of the sacrum down over the coccyx, and then along the border of the right gluteus maximus muscle, and cut through its fibrous insertion. The margins of the wound were then dissected back, and the sacrum chiselled through obliquely from the lower margin of the left to the lower margin of the right sacral foramen, and the lower end of sacrum was then turned down to the left.

Heinecke made a T-shaped incision, the transverse incision corresponding to the level of the third sacral vertebra. The bone incision corresponded to the superficial one, and the two osteo-plastic flaps were turned out, and at the end of the operation replaced and sutured. This is practically the method employed by Gussenbauer, and its results are said to be very satisfactory.

Rehn has approached the rectum in woman by the vagina, making longitudinal median incisions through the raphe of the perineum to the sphincter ani. The rectum is then separated from the posterior vaginal wall and from the sacrum, and brought down, the portion diseased resected, the ends of the gut sutured, and the wound closed.

These latter operations do not divide the tubero-sacral and spinoso-sacral ligaments, and thus weaken the pelvic floor.

To save sphincter, Willems, Rydygier and Witzel proposed to utilize a portion of the gluteus maximus muscle for a sphincter, and brought the upper end of the rectum out between the lower fibres of the muscle.

Gersuny proposed torsion of upper end of gut on its own axis and fixing to skin. The next step in advance was the opening of the peritoneum; several weeks' preparatory treatment is required to cleanse the intestinal tract, and growth is curetted and cauterized. Must avoid injuring the mesenteric vessels so as not to cut off the nutrition of rectum. It has been found difficult to secure union of upper and lower segment

of rectum. Schede has proposed a preliminary colotomy which is closed after union of segments.

Another sequelæ of proctorrhaphy is stricture. Dr. Armstrong suggests extirpating the rectum, completely establishing a permanent artificial anus in groin.

Mikulicz, to lessen shock, gives an intravenous injection of Koch's saline solution before operation. An Australian surgeon, Dr. Maunsell, proposes to invaginate the rectum together with the neoplasm, and then to remove it.

DR. BELL in discussing "Carcinoma" spoke as follows :

There is probably no organ of the body which is subject to cancer in which the disease produces greater distress and suffering, both mental and physical, and ultimately a higher rate of mortality than the female breast. Moreover, it is frequently attacked at a comparatively early age, and valuable lives are lost while yet in their prime. In this connection I wish to point out that although the rudimentary mammary gland of the male is sometimes the seat of cancer, it is nearly always the mammary gland of the female which we are called upon to treat. And in the early stages of cancer of the breast, when it is most important that a diagnosis should be made, and there is still an opportunity to effect a radical cure, it is most difficult to recognize, and, as a matter of fact, is rarely recognized. There are, moreover, benign tumors of the breast, which it is practically impossible to diagnose from carcinomata, except by the microscope. I think the surgeon's rule should be that except in the case of those distinctly innocent growths, which are comparatively common in young women, it is safer to act upon the assumption that they are malignant. I mean that unless he can be practically certain that the growth is a benign one, he should treat it as if he were certain that it was a carcinoma.

The surgical treatment of cancer is based upon a recognition of the following facts, which may be said to be generally accepted by both pathologists and surgeons :

1. That cancer is primarily always, and generally for a considerable period of time, a local disease.
2. That it extends (*a*) by infiltration of adjacent tissues, and (*b*) by being carried along the lymphatic vessels to the nearest group of lymphatic glands.
3. That Metastasis to remote organs occurs only, as a rule, much later.

The obvious inference is that removal should be early, and should include not only the tissues for a considerable distance around and beneath the mass, but also the nearest group of lymphatic glands, and also the tissues intervening between them and the mass. When I speak of removal, I mean by a cutting operation, and I wish here to express my opinion in the most emphatic manner that the use of caustic applications for the cure of cancer is in the highest degree unscientific, and that in most cases it can do nothing but harm. I speak thus plainly, because even in comparatively recent text-books and monographs upon malignant disease, we find the statement that there are cases in which escharotics are curative and are to be recommended. With this teaching I have no sympathy whatever. I admit that as a palliative measure in incurable or inoperable cases the use of caustics or partial operations, such as curetting, etc., may be indicated, but I contend that their ultimate effect is always to stimulate the growth of the original disease. In my opinion,

clinical experience all goes to show that local irritation is a very prominent factor in the production of cancer and in increasing the rapidity of its development when it is already established. Now, with regard to operations for the removal of cancer of the breast, the methods of operating have within the last few years been so greatly extended and modified that they are now quite different from what they were ten or fifteen years ago. We recognize that, quite apart from the necessity or the possibility of closing the wound, the whole breast gland must always be sacrificed, and the tissues for a considerable distance beyond what seems to be the limit of the disease, because there can be no doubt but that infiltration always extends much further than we can recognize it by either the sense of sight or the sense of touch. The tissues should also be removed deeply, down to the wall of the chest in the lower part, and always including the pectoral fascia, and, when necessary, a part or the whole of one or both pectoral muscles, quite apart from the consideration of the subsequent usefulness of the arm. (And it is surprising to observe how little these extensive dissections interfere with the functions of the arm.) In all cases the whole of the axillary lymphatic and areolar tissue must be removed. It must be removed whether we can recognize any glandular infiltration before operating or not. Speaking now, from memory only, I do not think that I have ever removed a carcinomatous breast and dissected the axilla in which I have not found cancerous glands, although it was in many cases impossible to detect them before operation.

With regard to the statistics of the operative treatment of cancer of the breast, I do not think that there are any that can be relied upon, for the reason that it is only within the last few years that anything like radical measures for the removal of all the disease have been adopted, and the statistics of the older methods show uniformly bad results. If I am not mistaken, the statistics available, say ten or fifteen years hence, will show very good results,—at least everything seems to point that way at the present time. I have not attempted to trace the subsequent histories of my own cases for this discussion, and I can only at the moment speak positively of one very satisfactory case in which perfect health has been maintained for any length of time. The case is that of an elderly lady, 65 years of age, operated upon in 1889, now six and a half years ago. The disease was extensive, distinctly involving the glands of the axilla. The operation effected a very wide removal of tissue and a very thorough dissection of the axilla, and, according to my information received quite recently, this patient is still quite well and free from any sign of recurrence.

In cancer of the male genital organs, the same general principles must be applied, and in removal of the penis, whether the disease be extensive or not, and whether the superficial inguinal glands show any sign of infiltration or not, the contents of these spaces should be thoroughly removed by dissection.

In dealing with malignant growths of the testicles, it is practically impossible, except, sometimes, at a very late period, to distinguish between cancer and sarcoma, or those mixed growths which are so commonly found in the testicle. In any case, it is to be borne in mind that the lymphatic extension here is to the retroperitoneal glands, which, of course, are quite inaccessible to operation. It is only in the later stages of cancer of the testicle, when the tunica vaginalis and superficial parts have become involved, that extension to the superficial inguinal glands occurs.

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Editorial.

THE GUARD PIER AT MONTREAL.

We observe, by our exchanges, that this question has been brought up by Sir William Hingston, and has been animadverted upon by him in the Senate—and none too soon. When conservative bodies as the Medico-Chirurgical Society, the Provincial Board of Health, and the City Health Board, are agreed as to the noxious influence of an obstruction to the free flowing of the St. Lawrence to wash away the city's sewage, and the offensive discharges from the vessels which line our harbor, it is time, we think, for our wise Harbor Commissioners to halt for a moment, and to ask themselves: are not the advantages of increased accommodation, and the possible protection from an occasional ice-shove, most dearly purchased by the erection of this standing menace to the health of the citizens of Montreal? Anyone visiting certain parts of the harbor will recollect the offensive smells, the foul odors which they received into their nostrils last summer. That these were as hurtful as they were disagreeable is evidenced by the facts mentioned in the report of the inspector of the Provincial Board of Health—Mr. Beaudry—that many cases of fever were the result. We quote a few lines from that report: "The odors emanating from this basin (the one near the Custom House square is here spoken of) seriously incommode the employees who have to work in the neighborhood; several among them have already been obliged to leave work through sickness, some being now at the hospital, and

others at their home sick with low fever, in all probability caused by sewer gas poisoning." All through the report of the inspector for the Provincial Health Board, there are evidences of alarm at the possible results of cutting off the free circulation of water, and of making our port a back water basin—fetid and noisome from the washing of the city's putridity and rottenness. With a rapidly running river draining half a continent flowing past the City of Montreal, it is difficult to conceive any project to find favor which does not embrace the securing to it the advantages it enjoyed, by nature, of an abundant and constantly changing supply of pure water. We should be glad to see this question seriously considered by the proper authorities where the *sanitary* aspects of the question would be taken fully into account. We do not object to the guard pier, *per se*. What we do object to is that provision was not made for a sufficient supply of water being received from the river above the pier, instead of forcing our harbor and its shipping to trust to the inadequate quantity afforded by the canal—inadequate we do not hesitate to say at all times, and liable to be cut off at anytime.

But as the guard pier is there, and looks, in its huge bulk, as if it were to stay, it becomes the imperative duty of the City Council, in order that the upper harbor may not become a place to be avoided rather than to be selected for the purposes of receiving and discharging freight, to at once devise means for remedying the evil which, if it has not been created by the council, most certainly exists. To us, unlearned we admit in the mysteries of engineering skill, there appear to be several methods, either of which might be followed with advantage, and, if combined, with entire success.

The question of expense should not obtrude itself too much where the sanitary condition of our harbor is concerned, and where the advantages it affords for the purposes of commerce, and for the pleasure of travel, may be made to harmonize, most easily, with the best interests of public health.

GOLD AS A SPECIFIC IN INEBRIETY.

Dr. Oliver C. Edwards of Ottawa read a paper before a large gathering of the Medico-Chirurgical Society of Montreal on 10th January, 1896, "On the Treatment of Inebriety as a Disease." The paper records original investigation, and throws some light upon a subject that hitherto has been one of difficulty to

the medical profession. "The drunkard," he said, "has been in the past the one for whom the profession could do very little. We could send him to one of the homes at Quebec or Guelph, and shut him away from temptation for six months or a year, and give him tonics; but when he was allowed to return to his friends, in the great majority of cases he simply went back to his old habits. The craving was there, and soon asserted itself. If we tried to do anything for him ourselves it resolved itself into some tonic preparation and some good advice, and that was all. We said: 'For God's sake, man, behave yourself,' and the poor man answered: 'I will, doctor, I will behave myself. I'll never touch another drop,' and inside of ten minutes, or as quick as his feet could take him, he was standing at a bar drinking as he had for years." Dr. Edwards endeavours to show that this overmastering appetite can be quickly and effectually subdued by hypodermic injections of chloride of gold and sodium; that gold has a potency simply astonishing in subduing this diseased condition, and that it will remain subdued as long as the drunkard may wish,—that is, if he ever drinks again after taking the treatment, it will not be *in the first place* from any inducement from within but from inducement from without. The paper presents us facts of the deepest interest, and these facts have been carefully tabulated by Dr. Edwards, who has made this subject a matter of almost daily study since 16th November, 1893. He has given in that time over 4000 hypodermic injections of gold, and his experiences and close observation becomes now a matter of deep interest to the profession generally. The paper was read a second time in Ottawa on January 24th. The facts and conclusions and evidence of Dr. Edwards will soon be put to the test, and if his teaching on this subject meets the endorsement of the profession generally, a blessing will have been conferred upon the world, the magnitude of which is not easily estimated. We sincerely hope it may be so, and it will be a source of pleasure and gratification if from the ranks of the Canadian profession a man has been chosen to throw light upon a subject hitherto shrouded in the deepest darkness. But as other methods have given apparently as brilliant results as claimed by Dr. Edwards, we must await the verdict of time and further experience before concluding that inebriety, which is always a manifestation of reduced nervous centres, can be cured by any drug.

VISITING LISTS AS EVIDENCE.

The *Journal of Medicine and Science* states that Judge John Stewart, of the Franklin County (Pennsylvania) Court, recently handed down an opinion of more than usual interest to the members of the medical and legal professions. It seems that a physician of Shippensburg attended his aunt, a lady of Green Village, who was also his stepmother. After her death he presented a claim of nearly \$400 against her estate for medical attendance upon her. Payment was refused upon several points, one of which was that the book presented by the physician as evidence was not a book of original entry. The book was one of the Standard Physician's Visiting Lists, in which the calls are marked down under dates by a stroke, and then extended to the margin. Judge Stewart disallowed the claim, and said that the book was not one of original entries, but merely a book of memoranda. As the great majority of physicians use these lists, the decision is one of great moment to all in the profession who make no other debit charges against their patients.

The New York School of Clinical Medicine has succeeded in introducing a modified form of the European manner of personal instruction, suited to the needs of busy American practitioners, who need brushing up in the specialties, but who can afford only a few weeks' time for the purpose. The method consists essentially in limiting the class to a very few students, and having them act as assistants in attendance upon the vast clinical material at the school's disposal. As soon as qualified, the matriculants examine, treat and operate on patients themselves, the teachers acting as assistants.

The school itself as well as the hospital and dispensaries at which its teaching is done are fitted with everything to meet the requirements of modern science.

Massey's Magazine, published by the Massey Press, Toronto, at one dollar a year, is a new Canadian illustrated monthly periodical; it compares favorably with similar publications from across the border; the printing and illustrations are exceedingly creditable, as is the tastefully gotten up cover. Canadians should see

that this venture is liberally supported, as its continued success is of moment as affording to the world some of the evidence of our capacity for producing high class literature. It will doubtless be popular beyond our borders, as it represents so much of strictly Canadian habits, history, industries, sports, and literary and art productions. The publishers hope to have a circulation within twelve months of fifty thousand; the March number, which is No. 3, was sent to twenty-two thousand subscribers. Our sincere congratulations and wishes for success are extended to this laudable enterprise.

The directors of the Post Graduate & Medical School and Hospital, New York, have named one of their wards in memory of the late Dr. Charles Carroll Lee, who was for many years a Professor in the Institution. They have placed a tablet in the ward, giving the names of those who combined to contribute the ten thousand dollars, which was given for the purpose of the memorial. These names are as follows: Dr. Robert Abbe, Dr. L. Bolton Bangs, Mrs. James Beales, Dr. Stephen S. Burt, Miss Caldwell, Dr. Charles L. Dana, Dr. Bache McE. Emmet, Dr. George H. Fox, "A Friend," Dr. Horace T. Hanks, Mr. and Mrs. Eugene Kelly Mr. and Mrs. Henry J. Lamarche, Dr. Daniel Lewis, Mr. and Mrs. William Lummis, Mr. and Mrs. Frank A. Otis, Dr. Clarence C. Rice, Mr. Eli K. Robinson, Mr. Nelson Robinson, Dr. D. B. St. John Roosa, Mrs. Eliza M. Sloan, Dr. Andrew H. Smith, Mrs. M. E. Sparks, Dr. Reynold W. Wilcox. It will be seen that the Faculty of the Institution participated largely in the memorial gift.

INTERNATIONAL CONGRESS OF DERMATOLOGY.

The Third International Congress of Dermatology will be held in London, August 4th to 8th, 1896.

PROGRAMME.

Tuesday, August 4th.—Preliminary business. 12.00—Presidential address. Dermatology; Syphilis. 3 p.m. Subject:—"Prurigo." 1. Dr. Besnier (Paris). 2. Prof. Kaposi (Vienna). 3. Dr. J. C. White (Boston). 4. Dr. Payne (London).

Wednesday, August 5th.—9.00 a.m.—Clinical Demonstration of Cases. 10.30 a.m. Subject:—"The Etiology and Varieties of Keratosis." 1. Dr. Unna (Hamburg). 2. Dr. H. G. Brooke

(Manchester). 3. Prof. V. Mibelli (Parma). 4. Dr. W. Dubreuilh (Bordeaux). 3 p.m. Papers. 10.30 a.m. Subject:—"Syphilitic Re-Infection." 1. Prof. Fournier (Paris). 2. Prof. Lang (Vienna). 3. Mr. Alfred Cooper (London). 4. Dr. Fitzgibbon (Dublin).

Thursday, August 6th.—9 a.m.—Clinical Demonstration of Cases. 10.30 a.m. Subject:—"The Connection of Tuberculosis with Diseases of the Skin other than Lupus Vulgaris." 1. Dr. J. Nevins Hyde (Chicago). 2. Dr. Hallopeau (Paris). 3. Dr. Radcliffe Crocker (London). 4. Dr. G. Riehl (Vienna). 10.30 a.m. Subject:—"The Duration of the Period of Contagion of Syphilis." 1. Mr. Hutchison (London). 2. Prof. Campana (Rome). 3. Prof. Lassar (Berlin). 4. Dr. Feulard (Paris). 2 p.m.—Subject. "Ringworm and the Tricophytons." 1. Dr. Sabouraud (Paris). 2. Prof. Rosenbach (Göttingen). 3. Mr. Malcolm Morris (London). Many contributions to this Debate promised.

Friday, August 7th.—9 a.m.—Clinical Demonstration of Cases. 10.30 a.m. Subject:—"The Nature and Relations of the Erythema Multiforme Group." 1. Prof. de Amicis (Naples). 2. Dr. T. H. Veiel (Stuttgart). 3. Dr. P. A. Morrow (New York). 4. Dr. Stephen Mackenzie (London). 3 p.m. Papers. 10.30 a.m. Subject:—"Malignant Syphilis." 1. Prof. Handlung (Copenhagen). 2. Prof. Neisser (Breslau). 3. Prof. Tarnovsky (St. Petersburg). 2 p.m. Clinical Demonstration of Cases. 3 p.m. Papers.

Saturday, August 8th.—9 a.m. Clinical Demonstration of Cases, followed by Papers.

NOTE.—The Congress has been fortunate enough to secure for its use the building known as Examination Hall, on the Victoria Embankment. This will afford every facility for all kinds of demonstrations: cases, pictures, museum, etc. Special efforts are being made to have large clinical demonstrations of cases, and all who have been in London know how rich is the material there.

It is of the greatest importance that those intending to join the Congress should notify the Secretary, Dr. J. J. Pringle, 23 Lower Seymour st. W., London, of their intention as soon as possible. The membership fee is \$5.00, which should be sent in the form of a one pound sterling draft on London, or P. O. order to the same amount.

GEO. THOS. JACKSON,
14 East 31st St., New York,
Secretary for the United States.

Book Reviews.

Consumption, its Nature, Causes, and Prevention, with an outline of the principles of treatment for all classes of readers. By Edward Playter, M.D., Toronto. Published by William Briggs, Toronto.

This is a neatly bound book of 350 pages, published for all classes of readers, although sufficiently comprehensive to be of interest and instructive to members of the medical profession. Knowledge of a disease which makes such inroads on humanity, and constitutes such a large proportion of the mortality list, cannot be too widely disseminated among all classes of people, more especially as such knowledge will undoubtedly tend to enlightenment as to methods of prevention, which is at present the chief avenue of hope for lessening its ravages; and a book of this kind which gives a vast amount of information on the subject and matters cognate to it, if widely read, will become a fruitful means of education in regard to methods for the prevention of consumption and of fortifying the system generally, and securing natural physical development, and thus favoring a condition which gives more or less immunity from all diseases.

Dr. Playter opens with some preliminary remarks on nomenclature, prevalence, its communicability, causes and curability. Then a chapter is devoted to the lungs and their functions. The chapter on the causes is very full, the tubercle bacillus being fully discussed. He takes the ground that the most important point in regard to cause is the pretubercular condition, in which the vitality is lowered probably by ptomaines, produced in the body from the decomposition of the retarded debris of imperfect tissue change or wear, and combustion, consequent on imperfect respiration, and which excites the tubercle bacillus into pathogenic action. Many will dissent from this view, preferring to regard the condition as one in which a lowered vitality permits the bacillus to develop or one where a particularly virulent variety of the bacillus becomes implanted.

Heredity as a cause is then considered, phagocytes and blood serum, habits and conditions of life, source and dissemination of bacilli, etc.

Part II, on prevention, contains a great deal of useful information on such subjects as soil, ventilation, sunlight, dietary, bathing, respiratory exercises, food and climate, all tending to teach that by maintaining a high standard of health, and especially of the respiratory functions, is the best means of preventing the bacillus tuberculosis from exercising its destructive inroads. The book is worthy of a wide circulation, containing as it does information up to date, which it is well for the community to possess, as it is only by the general education of the public on the subjects considered so fully and clearly therein, and the practical application of the directions there given, that we can hope to stem the progress and finally stamp out the greatest physical foe of humanity.

A Guide to the Practical Examination of Urine, for the use of physicians and students. By James Tyson, M.D., Professor of Clinical Medicine in the University of Pennsylvania, and physician to the Hospital of the University, physician to the Philadelphia Hospital. Ninth edition, revised and corrected, with a colored plate and wood engravings. Price \$1.25. Published by P. Blakiston, Son & Co., 1012 Walnut street, Philadelphia.

No book is better known than "Practical Examination of Urine," Tyson. The present edition brings the subject quite up to date in regard to methods of qualitative and quantitative analysis and in regard to all the latest instruments used, cuts of which are given, such as Purdy's electric centrifuge, the Daland centrifuge, Squibb's urinometer and jar, the Laurent-Shadow polarizing saccharimeter, Marshall's & Doremus' ureometers, etc. The book contains Vogel's scale of urine tints and 48 woodcuts, and it is needless to say that the subject matter, although terse, is complete, and forms a trustworthy guide in this important department of clinical work. Corrections have been made and recent points of advancement added, while some unimportant paragraphs have been omitted, so that the book is of the same compact size and appearance of former editions.

Practical Urinalysis and Urinary Diagnosis : A manual for the use of physicians, surgeons and students. By Charles W. Purdy, M.D., Queen's University ; Fellow of the Royal College of Physicians & Surgeons, Kingston ; Professor of Urology and Urinary Diagnosis at the Chicago Post Graduate Medical School. Author of "Bright's Disease and Allied Affections of the Kidneys," also of "Diabetes : Its Causes, Symptoms and Treatment." Second revised edition. With numerous illustrations, including photo-engravings and colored plates. In one crown octavo volume, 360 pages, in extra cloth, \$2.50 net. Philadelphia : The F. A. Davis Co., publishers, 1914 and 1916 Cherry street,

The appearance of this second edition within ten months of the first is ample evidence of the worth of the book, and shows how quickly the members of the profession recognize true merit in medical literature, and promptly appropriate that which enables them to become more proficient in the management of disease. It is imperative now that both physician and surgeon should be thoroughly acquainted with the methods of analyzing and fully examining the secretions of the kidneys, and this is undoubtedly one of the most complete works now published on this important branch for their guidance. In this edition all discovered errors have been corrected, which considerably enhances its value. We were much puzzled by the description on page 9 of the first edition of the application of Vogel's scale of colors, but it is rectified in the present edition, as are a number of other errors which are apt to appear in first editions, especially in a work of this kind, where so much detail in figures, scientific names and descriptive words obtains.

Section 1 is taken up with general considerations, such as changes on standing, color, specific gravity, quantity, etc. Then follows a section on the normal composition of urine, each substance being fully described and its origin explained. Then the various accepted methods for its detection and the determination of its quantity. The same method is applied regarding the abnormal constituents. The author's percentage tubes are a distinct advance for the quick determination, by means of the centrifuge, of the percentage of chemical and anatomical sediments and chemical precipitates. They consist of glass tubes graduated in tenths of a cubic centimetre, the lower portions being drawn out in to a conical form. The author has designed an electric centrifuge which is capable of a maximum speed of over 6000 revolutions per minute, and with large tubes 1500 to 2000. The centrifugal force is 2000 times greater than that of gravity, hence a sediment can be obtained in two minutes with this apparatus, which by

gravity requires 24 hours. The author asserts in regard to the convenience and saving of time of centrifugal methods, that "complete qualitative and quantitative examinations of the urine, including microscopical search, are duly made in his laboratory in twenty minutes.

Section 8 considers fully gravel and calculus. Part II, urinary diagnosis, gives the anatomy of the urinary organs and methods of physical examination. Then the condition of the urine in the various diseases of the kidneys and affections in which changes in the urine occur, giving also the prominent clinical features of each. An appendix on the examination of the urine for life insurance is a valuable guide in this branch of medical work, affording numerous valuable suggestions.

The book altogether cannot be praised too highly, representing as it does in a succinct, clear and readable manner all the essential points and methods now known, culled from the extensive literature of this subject, together with the twenty-five years personal observations and experiments of the author.

General Hygiene of the Skin and Scalp. By Dr. Henri Fournier. Published by the Société d'Éditions Scientifiques, Paris.

This is a small volume of 154 pages, one of thirty manuals on kindred subjects forming the *Petite Encyclopédie Médicale*, and designed for the use of the public as much as medical men. It is written in a clear, plain style, and contains a deal of sound advice both as to what to do and what not to do. It indicates the dangers attending the use of hair dyes and cosmetics, etc., and gives simple, plain rules for the proper care of the skin and hair.

The Up-to-Date Primer: A First Book of Lessons for Little Political Economists. By J. W. Bengough, 12mo, limp cloth, 75 pp. Illustrated, 25 cents. New York, London, and Toronto: Funk & Wagnalls Company.

"Wit can often pierce where graver counsel fails." Assuming the truth of this old saw, we discern a very effective weapon for social reformers in general, and single taxers in particular, in this little book, *The Up-to-Date Primer*. It consists of 70 separate "lessons" in words of one syllable, each illustrated with very cleverly executed cartoons. Each lesson is preceded by nine words, after the fashion of the child's primer, these words combining in themselves caption to the cartoon and introduction to the lesson. The author, J. W. Bengough, former editor of the Canadian comic paper, *Grip*, is well known for his bright, witty caricatures on political and economic subjects.

An American Text-Book of Surgery, for Practitioners and Students. By Charles H. Burnett, M.D., Phineas S. Conner, M.D., Frederic S. Dennis, M.D., William W. Keen, M.D., Charles B. Nancrede, M.D., Roswell Park, M.D., Lewis L. Pilcher, M.D., Nicholas Senn, M.D., Francis J. Shepherd, M. D., Lewis A. Stimson, M.D., William Thompson, M.D., J. Collins Warren, M.D., and J. William White, M.D. Edited by William W. Keen, M.D., LL.D., and J. William White, M.D., Ph.D. Second edition carefully revised. Publisher, W. B. Saunders, 925 Walnut street, Philadelphia.

The science and art of surgery in all its departments has made rapid strides during the past decade, fostered by our increased knowledge in physiology and pathology, and more especially by the immense progress made in bacteriology, which has made clear methods necessary for asepsis

and antiseptics, and thus led to operative measures being applied to almost every organ of the body, and to parts until recently considered inaccessible to the surgeon's knife. Hence the necessity for frequent editions of our surgical text-books, in order that the advances made may be condensed from the general literature of the subject and put into concrete form for the convenience of practitioner and student.

The first edition of the present work appeared in 1892, and met with a phenomenal sale in the United States and Canada, and abroad, and has been adopted by over sixty teaching bodies as a text-book. The book is in one massive volume of some 1250 pages, well printed, strongly and neatly bound, and the ease with which the book remains open at any part overcomes any objections one might have to its size, and this is still further made excusable when the numerous half and full page cuts are examined, many of which are new in this work, and are extremely well executed. The writers are all well known teachers and authorities, and each subject has been submitted to and approved of by each editor, so that it represents in each subject the views of the whole staff, which may be considered to fairly represent American surgery. Many corrections and additions have been made to the text throughout the book. Among the latter are: "The effect of modern small arms in military surgery; a new section on acromegaly; the Hartley Krause method of removing the Gasserian ganglion; the osteo plastic method of resection of the skull, with a number of additions to operations and methods in endocranial and spinal surgery; in the surgery of the chest a description of Schede's operation; in the surgery of the digestive tract, Witzel's methods for gastrotomy; the use of Murphy's button in intestinal anastomosis; the consideration of retrô-peritoneal tumors and of castration for enlarged prostate; a chapter on symphysiotomy; Macewen's method of compressing the aorta in amputation at the hip joint. The sections dealing with fractures and dislocations, appendicitis, the radical cure of hernia, amputations of the breast, are enlarged. Displacements of the uterus have been also regrouped, and the chapter largely rewritten.

The contents are considered under the heads of general, special, regional and operative surgery. Among the articles which are well treated and fully illustrated are those on aneurism, surgery of the joints, diseases and injuries of the head, in which is found fully considered the position of the motor areas, and the technique of cerebral operations as worked out by Horsley, Chiene, Keen, and others. Operations on the intestines, intestinal anastomosis, the use of decalcified bone plates, the rings of Abbe, and Murphy's button. Appendicitis is fully considered. medicinal treatment is recommended in the early stage, surgical if it does not rapidly yield, which is the condition in the large majority of cases. We find here an epitome of the work done in this important affection, by Willard Parker, McBurney, Treves, Senn, Kummell and others. A good résumé is given of the surgery of the female generative organs, as well as of the surgery of the eye and ear. The section on the ligation of arteries is fully illustrated by a number of full page colored illustrations. The book ends with a chapter on minor surgery, in which are found twenty-four original cuts illustrating all the varieties of bandaging.

This book is certainly a credit to American surgery, the authors and publishers, and deserves a wide circulation among general practitioners, and is a most suitable college text-book for students, embodying as it does a comprehensive representation of modern surgery, having sufficient detail without being cyclopædic.

The Year Book of Treatment, for 1896. A critical review for practitioners of medicine and surgery. Price \$1.50. Published by Lea Brothers & Co., Philadelphia.

The various departments of medicine, surgery, etc., in this the 12th issue of this valuable book are in charge of the following eminent contributors: Diseases of the Heart and Circulation, Sidney Coupland, M.D., F.R.C.P. Lungs and Organs of Respiration, E. Markham Skerritt, B.A., M.D., F.R.C.P. Lond. The Treatment of Nervous and Mental Diseases, Ernest S. Reynolds, M.D., M.R.C.P. Lond. Diseases of the Stomach, Intestines and Liver, W. Hale White, M.D., M.R.C.P. Lond. Kidneys, Diabetes, etc., Charles Henry Ralfe, M.A., M.D. Cantab, F.R.C.P. Lond. Gout, Rheumatism and Rheumatoid Arthritis, Archibald E. Garrod, M.A., M.D., F.R.C.P. Infectious Fevers, Sydney Phillips, M.D., F.R.C.P. Lond. Medical Diseases of Children, Dawson Williams, M.D., F.R.C.P. Lond. Anæsthetics, Dudley W. Buxton, M.D., B.S., M.R.C.P. General Surgery, William Ross, M.B., B.S., F.R.C.S., and Albert Carlross, M.S. Lond. Orthopædic Surgery, W. J. Walsham, F.R.C.S. Surgical Diseases of Children, Edmund Owen, M.B., F.R.C.S. Genito-urinary system, Reginald Harrison, F.R.C.S. Rectum, Alfred Cooper, F.R.C.S. Venereal, J. Ernest Lane, F.R.C.S. Diseases of Women, G. Ernest Horman, M.B., F.R.C.P. Lond. Midwifery, M. Handfield Jones, M.D. Lond. Skin Diseases, Malcolm Morris, F.R.C.S. Ed. Eye, Henry Power, M.B., F.R.C.S. Ear, George P. Field, M.R.C.S. Throat and Nose, Barclay J. Baron, M.B. Ed. Tropical Diseases, Patrick Manson, M.D. Public Health and Hygiene, B. Arthur Whitelegge, M.D.

A review of this list of names is sufficiently suggestive as to the high character of this resumé of advances made in the treatment of disease during the past year. Every department of medicine and surgery, including all the specialties, is covered in its 275 pages.

In the different departments the diseases are taken up one after another, and all new suggestions for treatment, culled from the writings of the most distinguished authorities in the medical journals of all countries, are given, many practical notes being added by the editors. To particularize is out of the question, as every page contains something of interest to the practitioner in practical therapeutics. As the aim of the physician and surgeon is to relieve suffering and rectify abnormal conditions, and as he is esteemed by his clientèle in proportion as he succeeds in accomplishing this end, the wisdom of being armed with every known method for alleviating human ills is apparent, and we know of no better means to this end than by possessing this annual and assimilating its contents. The book is well printed, neatly bound, and compact in its arrangements, and of such size that it can be slipped into one's pocket and referred to at odd moments. The price is exceedingly reasonable, and every general practitioner who studies it carefully should be able to keep himself so well posted that it will not be necessary for him to so continually be referring his patients to the specialist.

Syphilis in the Middle Ages and in Modern Times. By Dr. F. Buret, Paris, France. Translated from the French, with notes, by A. H. Ohmann-Dumesnil, M.D., Professor of Dermatology and Syphilology in the Marion Sims College of Medicine; Consulting Dermatologist to the St. Louis City Hospital, to the St. Louis Female Hospital; Physician for Cutaneous Diseases to the Alexian

Brothers' Hospital; Dermatologist to Pius Hospital, to the Rebekah Hospital, to the St. Louis Polyclinic and Emergency Hospital, etc., etc. Being Volumes II and III of "Syphilis To-Day and Among the Ancients," complete in three volumes. 12mo, 300 pages. Extra cloth, \$1.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry street.

These two volumes, bound together, complete Dr. Buret's work on syphilis to-day and among the ancients, volume I, syphilis in ancient and prehistoric times, having appeared some time ago, and demonstrated the existence of syphilis, not only in the most ancient historic epochs, but also in prehistoric remains. The second volume gives the history of the disease during the Middle Ages, from the fall of the Roman empire up to the end of the fifteenth century, and in doing so makes an exhaustive examination of the literature of this period. Brief extracts are given from the scientific, historical and literary documents of numerous writers, bearing upon venereal diseases described under a number of different titles. He passes under review the writings of the principal masters who were inspired by the doctrines of Hypocrates and Galen, next the Arabists, the school of Salernum, and various authors of the 14th and 15th centuries. Chapter 3rd treats of the great epidemics of the Middle Ages, the worship of Venus in the monasteries of the tenth century.

Then follows an account of the great epidemic of Naples, in which other contagious diseases than syphilis are included; the identity of the leprosy of the Middle Ages and syphilis is discussed, followed by chapters on the origin and nomenclature of venereal diseases, and the pretended American origin of syphilis. The latter describes how this legend of the American origin was born. Guaiac was obtained from the new world, and was said to be a specific, and as they held that Providence always places the remedy next the disease, the new world was proclaimed to be the cradle of the pox, and it was concluded that the disease had been brought to Europe by the crews of Christopher Columbus. The author in this work completely dispels this delusion, which has been generally endorsed until recent times in the present century.

The third volume gives an account of syphilis from the 15th century to the present time; it depicts the vice which reigned in ecclesiastical institutions among popes, cardinals, bishops, clergy and women in convents. The name syphilis had its origin in a poem by Francaster, a physician of Verona, in 1530. The use of mercury in the 15th century was adopted from the empirics. A history of its use is given, and also of guaiac, smilax and sarsaparilla. Chapters 2 and 3 gives venereal pathology as it was understood in the 17th and 18th centuries. In the latter we learn that the speculum was used in the 6th century by Paulus Aegineta, and that one was found in the ruins of Pompeii (destroyed in 79). Hunter's work in 1786 is noted. Chapter 4 describes the work on syphilis during the 19th century. The schools of the identists and unicists are referred to, and the work of Ricord, the most distinguished syphilographer of the century. The concluding chapter reviews the procedures employed in venereal therapeutics from the most remote times to the present day. This classical book makes most interesting and instructive reading, carrying the reader over the history of the world from the most remote times, and showing that this scourge of sexual indulgence has manifested itself in all countries, and from prehistoric times down through the ages.

Pamphlets Received.

- Sanitation in Street Pavement.** By Henry A. Marcy, A.M., M.D., LL.D.
American Medical Association Press, Chicago.
- Personal Service as the Especial Exponent of a Great Profession.**
By Henry A. Marcy, A.M., M.D., LL.D. Damrell & Upham, publishers,
Boston.
- Five Cases of Pyosalpingitis.** By A. Laphorn Smith, B.A., M.D., M.R.C.
S.E. Wm. Wood & Co, Philadelphia.
- Treatment of Uterine Retro-displacements by Vagino Fixation.** By
Frederick Holme Wiggin, M.D. Reprinted from the *New England Medical
Monthly*.
- Traumatic Separation (Compound) of the Lower Epiphysis of the
Femur.** By A. H. Meisenbach, M.D. From Directory Printing & Bookbind-
ing Co., New York.
- Removal of Ingrowing Toe-Nail.** By the same author. A simplified operation
by means of a new instrument.
- Auscultatory Percussion and Allied Methods of Physical Diagnosis.**
By A. L. Benedict, A.M., M.D., Buffalo.
- Report of the Board of Health of the Province of Quebec.**
- What has Sewer Gas got to do with Bad Results in Obstetrics and Gy-
naecology.** By A. Laphorn Smith, B.A., M.D., M.R. C.S.E., Montreal.
- Clinical Notes on Psoriasis,** with especial reference to its prognosis and treat-
ment. By L. Duncan Buckley, A.M., M.D., New York.
- Urethroscopy in Chronic Urethritis.** By Ferd. C. Valentine, M.D., New York.
- Practical Urethroscopy.** By G. H. R. Wossidlo, M.D., Berlin, Germany.
- The Technics of Maunsell's Method of Intestinal Anastomosis.** By Fre-
derick Holme Wiggin, M.D.
- Supplementary Report on the Success of Electrolysis in the Treatment
of Urethral Strictures.** By Robert Newman, M.D., New York.
- Electricity in the Treatment of Exophthalmic Goitre.** By Robert Newman,
M.D., New York.
- Burns of the Cornea,** Electric Light, Explosion, causing temporary blindness;
traumatic injuries to the eyes. Hypopyon. By L. Webster Fox, M.D., Phila-
delphia.
- Evacuation of the Eyeball.** By same author.
- Sleep in its Relations to Diseases of the Skin.** By L. Duncan Buckley, A.M.,
M.D., New York.
- Transactions of the College of Physicians of Philadelphia for 1895.**
- A Consideration of Certain Doubtful Points in the Management of
Abortion.** By Chas. P. Noble, M.D., Philadelphia.
- Nephritis of the Newly Born.** By A. Jacobi, M.D., New York.
- Criminal Abortion.** By Mary A. Dixon-Jones, M.D., Brooklyn, N. Y.
- Carcinoma on the floor of the Pelvis.** By same author.
- Sterility in Women,** by same author.
- Colpo-Hysterectomy for Malignant Disease.** By the same author.
- A Case of Dermoid Tumor of both Ovaries,** complicated by a deposit of bone
upon each side of the true pelvis, having no connection with the tumors.
By Chas. P. Noble, M.D., Philadelphia.
- Movable Kidney.** By Chas. P. Noble, M.D., Philadelphia.
- Technique of Emptying the Uterus in Inevitable Abortion.** By Chas. P.
Noble, M.D., Philadelphia.

Some of the Newer Problems in Abdominal and Pelvic Surgery in Women. By Chas. P. Noble, M.D., Philadelphia.

Diagnosis and some of the Clinical Aspects of Cyroma and Endothelioma of the Ovary. By Mary A. Dixon-Jones, Brooklyn, N. Y.

The Sensory Nervous System in Diagnosis. By Chas. P. Hughes, M.D., St. Louis, Mo.

The Necessity of Complete Extirpation of Tumors, and the importance of rapid cicatrization of the wound. By Frederick Holme Wiggan, M.D., New York.

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