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CANADA
MEDICAL RECORD

MAY, 1899.

Original Communications.

HERNIA FOLLOWING ABDOMINAL OPERATIONS, ITS PREVENTION AND CURE.*

By A. LAPTHORN SMITH, B.A., M.D., M.R.C.S., Eng.
Fellow of the British and American Gynecological Societies; Professor of Clinical Gynecology in Bishop's University; Gynecologist to the Montreal Dispensary; Surgeon-in-Chief of the Samaritan Free Hospital for Women; Surgeon to the Western Hospital, Montreal.

Although hernia following abdominal operations is in the writer's opinion quite preventable, there is no denying the fact that it occurs with sufficient frequency to render it a bugbear more or less to every physician who advises a patient to submit to abdominal section. Rarely does a discussion take place at any of our great society meetings in which laparotomy as a method of cure is recommended, without some speaker, generally on the opposition side, making the objection that the opening of the abdomen may be followed by hernia. And his objection is a very tenable one, for at the great New York Hospital for the ruptured and crippled, the surgeons report an appalling number of patients applying to them, in whom this accident has happened after coeliotomy. There may not be so many of these cases in Great Britain and Ireland, but even there one has only to read the journals for a month or two to learn that it is rather a frequent occurrence. When it does happen it gives rise to disturbances, discomforts and dangers which are sometimes far greater than those of the disease for which the abdominal incision was made. Many of those who came under the writer's care were suffering from strangula-

* Read before British Gynecological Society, 15th April, 1899.

tion of the omentum or bowel and were only saved by immediate operation; while others had reflex disturbances of distant organs such as the heart and brain, which while not dangerous to life yet caused sufficient misery to require the patients to be constantly under medical treatment. And although, as will be presently shown, the hernia can easily be cured, yet the general welfare of abdominal surgery demands that every precaution should be taken to prevent the necessity of doing a second operation. It may have been the experience of many of you, as it has been the writer's, that patients who need an abdominal operation frequently demur and object to the operation simply on the ground that once a woman has one operation she will have to have a second and perhaps a third. This erroneous idea has been traced more than once to a single instance of some friend whose primary operation for the removal of an ovary has been followed by a second one for the removal of the other one and a third for the cure of hernia. In fact, this has actually happened in the writer's own experience.

No argument, however, is necessary to prove either the frequency of ventral hernia, nor the great desirability of reducing its occurrence to a minimum. Before taking up the question of its prevention let us for a moment glance at the causes of the accident. Although they are many, they may all be included in one category; anything which prevents primary union of the cut surfaces of the middle layer of the abdominal wall, or which allows the newly united surfaces to be drawn apart before the union has been sufficiently well organized to hold the edges together. By the middle layer is meant the recti muscles and the fascia of the linea alba; by the inner layer is meant the peritoneum and by the outer layer is meant the fat and skin. One cause which is not generally recognized is the drawing of the peritoneum up between the edges of the middle layer so that they are prevented from approximating. This is caused by taking too much of the peritoneum into the bite of the stitches so that when they are tightened up the peritoneum is squeezed in between the raw surfaces, thus preventing them from adhering to each other. By taking in only an eighth or a quarter of an inch of peritoneum this cause could be avoided. It

would probably be better not to include the peritoneum at all, as it unites very quickly, simply by falling together.

Another cause which, however, is well recognized is failing to take in the bight of the stitches sufficient of the middle layer. This is due to the retraction of the middle layer back between the outer and inner layers. In order to avoid this mishap the skin should be pushed back above and the peritonium below so that the muscles will be the most prominent part instead of the most retracted.

The drainage tube is the greatest cause of hernia because it most effectually prevents primary union of the raw surfaces. Not only does it prevent the surfaces from coming in contact at that point, but it very often infects them, causing suppuration and closure by granulation. Ten years ago the writer drained with a glass tube all pus cases and those in which there were many adhesions, even if there were no pus, but he abandoned this procedure some three years ago with the result that no hernia has occurred among his cases since then.

If drainage must be used it would be much better to drain by gravity through an opening in Douglas' cul de sac, through which a T shaped rubber tube has been passed, into the aseptic vagina. But the most common cause of ventral hernia is the custom of removing the stitches far too early Ten years ago when the writer succeeded the late Professor Trenholme in the chair of Gynecology, it was the practice to remove the stitches on the sixth day, and this was the usual custom throughout America. Whether this was also the practice in Great Britain and Ireland at that time the writer is not sure, but judging from the recent book of Dr. Webster, of Montreal, in which he advises the removal of the stitches on the ninth day, and as Dr. Webster was until recently, Assistant to the Professor of Gynecology at Edinburgh, it would appear that such was the time at which it was customary to remove them in Scotland. Six days or even nine days the author of this paper considers far too early a date on which to remove them.

In a paper read before the American Gynecological Society in 1893 the author expressed his views on this point in the following terms: "When the edges of the abdominal

incision are brought together clean and not bruised and with corresponding layers of tissue in exact apposition. we obtain primary union. Under this term we may include all cases of union in which there is no suppuration or granulation, although it does not necessarily follow that there is no exudation of plastic lymph. The ideal union by first intention is of course one in which the cut openings of vessels and the cut fibres of other tissues exactly correspond and unite, but this probably never occurs after an abdominal section. The union is rather due to the exudation of plastic lymph from the opposite surfaces, which forms a gelatinous glue, and which eventually becomes organized into white fibrous tissue. We can obtain a good idea of this process by observing what takes place when the tendo Achillis is cut by the orthopedic surgeon for the cure of talipes equinus. After the subcutaneous division of the tendon the foot is kept for days in its former faulty position until the ends of the divided tendon shall have become joined again by the exudation of plastic lymph. When a sufficient quantity of this has exuded, and while it is still in a soft and stretchable condition, the surgeon gradually brings the foot to a right angle with the leg, when there is perhaps a space of two inches between the cut ends of the tendon, which are united, however, by this band of soft plastic lymph. The foot is then left in position until this material has become thoroughly organized, when the patient will be found to have the full use of the part. The same thing, I take it, occurs after an abdominal section; and it is owing to the too early removal of the suture while the plastic lymph is still soft and stretchable, and before it has become organized into white fibrous tissue, that we owe the great frequency of ventral hernia. By leaving in the supporting silk worm gut sutures for one month after the operation, we can avoid not only the risk of ventral hernia, but we are also saved the anxiety of the incision being torn open during a fit of coughing or other effort, and the intestines escaping out of the abdomen, as has occured in several recorded cases. If the silk worm gut sutures are left in for a month, as I have done in my last fifteen or eighteen cases, they can do no harm, and this accident is absolutely prevented from happening. Although I am not in a position to state

the exact time at which the plastic lymph becomes organized into white fibrous tissue, yet I will be in favor of leaving in the sutures at least until the process has had time to be completed. In my last few cases I have been introducing a few buried silk worm gut sutures through the cut edges of the abdominal fascia, which of course remain during the whole of the patient's life, and which, therefore, render the occurrence of ventral hernia impossible. These were introduced after the through and through suture had been placed in position and before the latter were tied.

The above was written six years ago and seems to have had some influence upon the practice of the abdominal surgeons of America, for since then the time for the removal of the suture has been greatly extended. After six years further experience the writer may say that he has left in the through and through sutures one month in several hundred cases, and with the most satisfactory results.

During the last year he has crystalized his procedure into the following formula : When the abdominal wall is not more than one inch in thickness he employs through and through silk worm gut stitches half an inch apart, which he leaves in one month ; but when the abdominal wall measures over one and under two inches in thickness he brings the peritoneum and muscles and fascia together with buried silk worm gut to remain forever, and the skin is closed with a subcutaneous silk worm gut stitch which is removed in ten days. When the abdominal wall is over two inches thick then in addition the fat is brought together with fine catgut after having tied the buried sutures.

An interesting question is, what becomes of the buried sutures ? Are they absorbed ? Or do they remain indefinitely as they were first placed ? In what percentage of cases do they suppurate ? The first question may be surely answered in the negative. The writer has found these stitches while performing laparotomy for the removal of the second ovary more than four years after they were first introduced, and they were as clean and smooth as on the day they were buried. He believes that they remain indefinitely so. The answer to the third question varies a little, according to the operator and the rigorousness of his asepsis. Dr.

Noble of Philadelphia reported at the meeting of the American Gynecological Society, held at Boston last May, 472 cases with 10 suppurations, or less than two per cent. The writer has had three per cent., in nearly 300 cases, consisting of 102 Alexanders, 120 ventrofixations, about 20 ventral and umbilical hernias, and about sixty ordinary abdominal sections.

Would any other material do as well as silk worm gut ? There are three alternative materials, namely, silver wire, silk and chromacized catgut. Silver wire has been used a good deal by Kelly, but it has no advantages over silk worm gut. It is harder, takes longer to tie, and is no easier to disinfect than silk worm gut, and suppuration follows in about the same number of cases. It is possibly more permanent, but then if silk worm gut lasts four years, of which the writer is positive, that is quite as long as is necessary. If silk could be prepared so as not to suppurate any oftener than silk worm gut it would have the great advantage of being softer instead of having hard and sharp ends. In about fifty of his own one hundred and twenty ventrofixations the author attached the uterus to the abdominal wall with Chinese silk which had been boiled and then dipped in a saturated solution of iodoform in ether. It was then kept in sublimate alcohol until required for use. In only one case out of forty did one of these stitches have to be removed, and that was in a case complicated with pus tubes, which burst and infected the incision. The writer thinks that the pores of the silk being filled with minute particles of iodoform, the capiliarity of the silk is destroyed and bacteria are also inhibited from growing in it. In passing it might be mentioned that there is nothing so good as a crochet hook for removing a buried stitch, which can be done in a moment and with very little trouble. Chromacized catgut has a great advantage over all these materials, in that we are not only able to throughly disinfect it, but we are also able to make it last as long or as short a time as we like. The author prepares it as follows: The catgut is bought from Keller of Nassau Street, New York; soaked for a month in ether, then for a month in sublimate alcohol one in five hundred; it is then placed in a water saturated solution of bichromate of potash for a longer

or shorter time. One hour's immersion will make it last a fortnight, two hours, a month, one day, three months, and so on. The author however has been so well satisfied with silk worm gut that he has only a few times used chromacized catgut in the abdominal incision, although he has used it extensively in plastic work, and he is therefore unable to state from actual experience the length of time it requires for the above mentioned catgut to be absorbed in the abdominal incision.

Another factor in preventing ventral hernia is the keeping of the patients in bed one month after their operations, and the wearing of an abdominal supporter for one year. Both of these precautions are unnecessary in cases in which the middle layer is closed with permanent sutures; the writer frequently allows these cases to be up in from ten to twenty days and to go home in from twenty to thirty. There is absolutely nothing that the patient could do that could cause the incision to open; and as the sutures are as strong at the end of a year as they were at the beginning, there is no need to wear a band at all. This is quite a boon, as many patients complain a good deal of the annoyance of having to wear an abdominal belt. When through sutures are used and they are left in a month, the period during which it is necessary to keep the patients in bed is very much lessened. One of the writer's patients against his will left his private hospital twelve days after an abdominal section for tubal pregnancy, because her children were stricken with an epidemic disease. This lady was none the worse for her indiscretion, and she walked into his office three weeks later to have the stitches removed. Many others for various reasons have gone home in two weeks and come back at the end of thirty days to have their stitches removed. All these patients who have temporary stitches, although they have no need to wear a bandage while the sutures are in, are all carefully enjoined to wear one from the time that they are removed.

If after what the writer has said any one will still persist in removing through and through stitches in from five to ten days, then he should be most careful not only to keep his patients in bed for one month and firmly bandaged, but

after the stitches are removed the patients should be carefully dieted, so as to keep the intra-abdominal pressure to a minimum, as hernia can hardly fail to follow the so early removal of the stitches while the uniting material is soft and extensible.

In order to obtain primary union and to avoid stitch hole abscesses two things are desirable: first, not to bruise the edges of the incision by putting powerful clamps on every oozing spot, until, as the writer has seen, as many as a dozen of them are crushing the tissues. Large vessels should be tied individualy with fine catgut, while finer ones should be immediately twisted. Oozing can be stopped by the pressure of very hot sponges.

2nd. The silk worm should not be tied so tightly as to cut or strangulate the tissues; such force is quite unnecessary; it only requires that the recti muscles which naturally fall together should be held there by a very moderately tight circle of silk worm gut. The writer has devised two little improvements in technique in order to insure that the margins of the incision will not be distorted by introducing the sutures at unequal distances on the two sides. First, a rubber stamp having a straight line in the centre and a scale on each side marked off into centimetres from one to thirty is sterilized by heat, and just before the operation and after the abdomen has been washed up, it is stamped from the pubis to above the umbilicus in the middle line. When we come to close the incision we have only to introduce the needle at one number on one side and bring it out at the corresponding number on the other side, in order to obtain a very accurate approximation. We are greatly facilitated and expedited by hooking up the top of the incision and raising the whole abdominal wall away from the bowels, and at the same time keeping them on the stretch. With a sharp Poean needle mounted on a handle we can pass the sutures through almost quicker than an assistant can thread them. From four to six stitches can thus be passed in a minute, a great saving of time on some other methods, and it makes a much neater result. Of course the Trendelenburg posture is a great help in doing this quick work, because it keeps the bowels out of the way of the needle. How the wound is dressed has little if

anything to do with hernia. The writer covers the incision with sterilized boracic acid.

We now come to the cure of ventral hernia. If the hernia is a small one, the ring not measuring as much as an inch in diameter, it may be cured by the following simple method which the writer employs in small umbilical hernia, namely by means of a single buried purse string suture of silk worm gut, passed in the substance of the ring and about a quarter of an inch back from the edge. The latter will have been freshened by the removal of the sac down to the peritoneal surface of the ring, so that when the single stitch is drawn tight it puckers up the ring until the opening is completely obliterated. It is then tied and the ends cut short. The relaxed skin should not be removed, but carefully brought together. It is surprising how its redundancy will disappear in a few days. If the hernia is a long one a different method must be employed. The following case in the writer's practice well serves to describe his method. The patient was one of the first cases of abdominal section performed in Montreal by one of our oldest operators but it was in pioneer times, and the stitches were removed in six days, with the result that there was an enormous protrusion of the bowels through an opening at least ten inches in length and six inches wide. As the skin was exceedingly thin and the bowels laid almost next to it, an incision one-sixteenth of an inch deep from without inwards would have gone into the intestine. To avoid this a director was introduced through a small nick in the skin above the hernia, and the skin was cut all the way down from within outwards on the director. The intestines were adherent to the whole length of the fascia which had originally united the edges of the incision, but which had spread out into a thin membrane after the stitches had been removed. As it was impossible to remove this without injuring the bowels, it was cut off the abdominal wall and the intestines were dropped into the abdomen with this part of the abdominal wall attached to them. The edge of the recti muscles were then sought for and found with some difficulty, and the fascia covering them was split up on each side and twenty-five buried silk worm gut sutures then brought the muscular surfaces in contact, as well as the peritoneum and fascia, leaving a thick line of union.

The peritoneum of the sac was carefully removed from the skin and the latter was brought together without removing any of its redundancy by a subcutaneous suture. Primary union was obtained throughout without one drop of moisture on the dressing, and the patient has been heard from at intervals during the three years which have elapsed and has never had the slightest discomfort from the large number of buried stitches.

To sum up the paper; 1st. Hernia is a frequent complication of abdominal section. 2nd. When it occurs it prevents other women from undergoing a needed laparotomy. 3rd. It is quite preventable: (*a*) By leaving in the stitches for one month if the woman is thin enough to allow us to use through and through sutures, or (*b*) By using non-absorbable buried ligatures when the woman is fat enough to require two layers of sutures. The writer prepares his silk worm gut by placing it in sealed glass tubes and boiling it. A cut with a file is made in the middle and just when it is required for use the tube is snapped across. (*c*) By discarding the abdominal drainage tube and when drainage is necessary, which it rarely is, draining by the vagina. (*d*) By securing accurate coaptation of the cut edges by marking the places where the stitches are to go before the incision is made. (*e*) By taking care that no peritoneum is curved up so as to come between the muscle and fascia. 4th. Hernia is easily cured in small cases with a single buried silk worm gut purse string suture; and in larger cases by splitting the edges of the ring until the recti muscles are exposed from top to bottom and suturing them with buried silk worm gut. 5th. Patients with buried silk worm gut stitches do not need to stay in bed more than two weeks, and in some cases less; and they do not need to wear an abdominal belt. 6th. Patients with through and through silk worm gut stitches left in for a month can in case of necessity go home in twelve or fifteen days and return at the end of four weeks to have their stitches removed. They do not need to wear a supporter until the stitches are removed, and even then it is much less necessary than in patients whose stitches have been removed too early.

250 Bishop Street, Montreal.

Clinical Lecture.

MONTREAL GENERAL HOSPITAL.

Clinic of Dr. F. W. CAMPBELL,
Professor of Medicine University of Bishop's College.

CONDYLOMATA.

The two little children now before you, aged respectively two and four years, presented themselves at the Clinic for the first time about ten days ago. Those then present may remember that their mother said they had piles. I expressed great doubt as to the correctness of the diagnosis. Examination proved that I was correct, and I then stated they were suffering from condylomata or mucous patches, a disease which is very rare in children. I handed them over to my clinical assistant to get as much of their history as was possible, especially as to the possibility of hereditary syphilis. This has been obtained and there seems to be absolutely no evidence of either father or mother having ever had specific disease. I placed them both on hydrarg. cum cretæ, and ordered the parts to be dusted twice daily with equal parts of calomel and bismuth. They already show a decided improvement. Its comparative rarity in children has induced me to make the following observations :--

Condylomata is described by French writers as mucous tubercles. It very often arises as a result of venereal contamination. The disease consists in the development of excrescences of various sizes, having a flat or rather broad appearance. It is difficult to assign to this affection its exact rank in the order of syphilitic phenomena, or even to say positively that it is always of syphilitic origin. Some eminent surgeons assert positively that condylomata may be produced by the contact of gonorrhœal matter or by acrid vaginal and other secretions, not in any way specific. On the other hand many authorities assert that they have known them to follow chancre, secondary, and then tertiary syphilis. The late Dr. Gross of Philadelphia said he "regarded them as of a consti-

tutional character, and belonging in part rather to the third order of phenomena than to the second, and under no circumstances to the first." These excrescences are sometimes the result of hereditary syphilis, but this is rare, although one author mentions that five cases occurred in his practice. The most common situation for condylomata is the anus, scrotum, perineum, vulva and buttocks. Rarely they are met with on the penis, folds of the thighs, axilla and in the ear. They seem to have a strong predilection for parts which are constantly hot and moist. In shape and size they vary much. Usually, however, their shape is flat, but at times owing to the free portion being greater than the attached they look pedunculated. They are usually longest about the arms, perineum and vulva, parts which are constantly in contact, and undergoing friction, which with heat and moisture greatly conduce to their development. In these localities the patches are always humid, exhaling a thin muco-purulent fluid, which is often very abundant and excessively fœtid. When they appear in parts which are more exposed to the air they are dry, insensible or feebly so to pain, darkish in color, and partly covered with scabs. Condylomata often coexist with other evidences of a syphilitic taint, especially affections of the bone, rupial sores and scaly eruptions. Their course is very variable, sometimes making rapid progress, and sometimes stationary, sometimes they even retrocede, but never spontaneously get well. Exercise and friction cause great irritation, making them sore, and sometimes exquisitely tender as to prevent the patient walking. The discharge furnished by these patches is believed by the majority of authorities to be capable of producing by inoculation a similar disease ; a few entertain a contrary opinion. The diagnosis of this disease is very easy. Their situation, their peculiar shape, color and appearance, their chronic character, as well as their fœtid secretion give them a distinctive character. The treatment of condylomata must be general as well as local. Although under local treatment alone they will disappear, yet their return is certain unless constitutional remedies be used. The most efficient remedy is iodide of potassium combined with the bi-chloride of mercury. If desired, though I do not consider the remedies as

effectual as the iodide of potassium, you may combine it with the iodide of sodium or iodide of ammonium. If the bichloride of mercury disagrees, then try the effect of hydrarg. cum cretæ or grey powder. In grown up persons the proto-iodid of mercury in ¼ grain doses night and morning may be used. The constitutional treatmeut in a diminished dose must be continued for some time after the local disease has disappeared or else it will recur. As regards local treatment cleanliness is of the first importance. Tepid water impregnated with chlorinated soda should be applied freely, either by means of a sponge or a syringe. Perfect rest must be enjoined and the parts kept completely apart. To repress the growth chromic acid applied once in twenty-four hours will be found very useful. In a few days, as a rule, the patches shrivel up. The solid stock of nitrate of silver, nitric acid, liq. ferri perchlor. and the acid nitrate of mercury are all recommended as local applications. They are, however, all very severe and somewhat uncertain. No matter what application you may use in the interval, the excrescences must be dusted with some dessicating substance as calomel, cretæ, preperatæ or carbonate or oxide of zinc, iodol, aristol, nosophene or iodoform. A piece of dry lint should separate the patches, and this may be kept in place by a T bandage.

ARCUS SENILIS.

I have repeatedly of late drawn the attention of the Clinic to the presence, among many of the patients, of the condition in the eye known as arcus senilis. This is caused by fatty degeneration of the corneal tissue just within its margin. As a rule it first appears beneath the upper lid and then beneath the lower lid, forming two narrow white or yellowish crescents, the horns of which finally meet at the side of the cornea. It is met with in advanced age, very often about the age of fifty, and is looked upon as being indicative of fatty degeneration in distant parts, as for instance in the heart, also in the muscles and bloodvessels of the eye.

SYCOSIS.

We have lately had two cases of sycosis before the Clinic, one of whom is here to-day. This is sometimes called sycosis menti or barbae, or more commonly barber's itch. It takes the latter name because it is by some believed to follow the use of an unclean razor or towel. The use of a dull razor is said to cause it. The truth is, I believe, we do not know its cause, and my experience is that it is met with as much if not more among those who do not shave. The disease is an eruption on the hairy parts, generally on the side of the face or chin. It is attended with the formation of pustules, and accompanied by infiltrations. At the commencement there is a small tumor the size of a millet seed to that of a pea. These develop into pustules which dry and form crusts. The pustules may coalesce and on drying form large scabs. Each pustule is pierced by a hair; when the hair is withdrawn the root is found to be swollen and saturated with pus. The neighboring skin is swollen and oedematous. When the disease has lasted some time, the submaxillary glands become swoollen. The disease may be taken for eczema or a syphilide. If we remember that sycosis only attacks bearded men, and that there is absence of the moisure and itching so characteristic of eczema, we may be able to avoid making a mistake in diagnosis. It is a very troublesome disease to cure, yet if the physician and the patient persevere, in the large majority of instances a cure will result. The treatment generally recommended is purely local, but I must confess, I believe I have seen much good follow the use internally of Fowler's solution. In persons of a strumous habit I also have seen I am satisfied benefit follow the administration of the syrup of the iodide of iron. Remove the crusts with a hot poultice or warm oil. With a pair of broad bladed forceps, take out the hairs (epilate) one by one. This is painful, so only do a small part each day, then cover with ungt. zinc oxyd. Benz. spread on linen and change morning and evening. Ungt. sulph. biniodid. and Hg. nit. dil. are advised. Hebra insists on the patient shaving every day.

Clinical Notes.

MONTREAL GENERAL HOSPITAL.

NOTES FROM THE CLINIC OF DR. FRANCIS W. CAMPBELL, PROFESSOR OF MEDICINE, UNIVERSITY OF BISHOP'S COLLEGE.

Ligation of the cord too far from the umbilicus delays shriveling and separation. It also favors secondary hæmorrhage. I invariably place two ligatures round the cord. I advise always using a twisted cord, made from the strongest linen thread. This is done by twisting the thread and then reversing the twist.

Treat herpes zoster with alternating hot and cold water applications. The hot water increases the itching, while the cold relieves it for several hours. Apply four times a day; a few days will produce a cure.

Hot water applied simultaneously to the back of the neck and feet almost always relieves headache.

The Oil of Eucalyptus frequently applied by a camel's hair pencil over the surface of chilblains relieves the pain and soon cures them.

When you have fever, coryza, conjunctivitis and cough, look out for measles.

The local anesthetic effect of cocaine is much more rapid when the solution is heated.

The rectal injection of 20 grains of chloral hydrate is beneficial in the vomiting of pregnancy. A 20 per cent. solution of menthol in olive oil, in doses of 10 drops 3 times a day, is highly spoken of.

Chromic acid, gr. 100, to ℥i of water applied five or six times a day with a quill tooth pick will remove small warts.

The white skin which covers an egg is a useful application for a boil.

A good local anesthetic for spraying abscesses before lancing is made with half a drachm of chloroform to ℥i of ether.

Turpentine is recommended as a deoderant for the hands and instruments after iodoform has been used.

A tablespoonful of cream before meals is recommended for congenital constipation.

Ten drops of a 6 per cent. solution of cocaine injected into a carbuncle at the incipient stage will often abort it.

When albumen is present during pregnancy, put the patient on milk diet, see that the bowels are kept open and give a warm bath every three or four days.

Examine the urine for sugar in all cases of carbuncle and eczema—especially eczema of the genitals.

A Burgundy Pitch plaster is often of service to females who complain of weakness and pain in the lumbar region. It stimulates the surface, excites a pleasant glow and gives mechanical support.

Nitrate of silver stains can be removed from the skin by painting them with iodine, and then applying liq. ammonia B. P. or even spts. ammon. aromat.

Inunctions of cod liver oil, or even olive oil, are beneficial in the wasting diseases of children.

It is said that the beneficial result in goitre from the use of the thyroid extract is due to the iodine which is in it, and that the disease results from a deficiency of iodine in the system, and that the drug alone is as good as the extract.

A little water may be safely administered to an infant to quench thirst, as mother's milk does not do it. Infant often cry simply from thirst.

In collapse a hypodermic injection of a ¼ gr. of Morph. with the $\frac{1}{200}$ of a grain of Atropine is an excellent stimulant.

Spirits of camphor applied to a carbolic acid burn will arrest the pain in a few seconds.

Pepto-Mangan (Gude) is used largely by Dr. F. W. Campbell in cases of Anemia and he says it seldom fails to give very excellent results.

Progress of Medical Science.

MEDICINE.

SPECIAL HOSPITALS FOR CONSUMPTIVES OF LIMITED MEANS.

James M. Anders, in the *Therapeutic Gazette* of December 15, 1898, treats of the value of sanatoria and special hospitals for the treatment of poor consumptives. The statistics and facts which he advances point to the following conclusions:

1. That pulmonary tuberculosis is proportionately far more common, as well as more inauspicious, among the lower than among the higher classes.

2. The lack of proper facilities for the treatment of the poor afflicted with pulmonary tuberculosis is a potent factor in maintaining the enormous death-rate from this disease.

3. Special hospitals in which every hygienic detail can be arranged with precision are far superior to separate wards in general hospitals for the treatment of cases of pulmonary phthisis.

4. The admission to, and care of such patients in, the wards of general hospitals with those suffering from other forms of illness, as is the custom still in some and to a limited extent in many institutions, is to be energetically deprecated. There is serious danger of transmitting the disease under these circumstances, particularly when the breaking down or suppurative stage is reached.

5. The mortality figures show a reduction of nearly 50 per cent. in consequence of the creation and continued operation of special hospitals for consumptives.

6. Sanatoria near large cities afford better advantages

than so-called special hospitals in densely populated centres, whilst climatic sanatoria, if properly situated, properly officered, and well equipped, show results that surpass those of all other known methods of treatment in the earlier or incipient stages of the disease.

whole question to careful discussion. Cases may be found at intervals where albumin is temporarily absent. Conceptions have been broadened concerning the significance of hyaline casts, now regarded as occurring in urine apparently normal. Granular and epithelial casts probably always point to degenerative or inflammatory lesions. The diagnosis of latent, atypical, non-albuminuric nephritis, important in itself, becomes more difficult when nephritis is associated with other diseases. Carefully repeated routine chemical and microscopical examination of the urine every twenty-four hours usually, but not invariably, detects acute and chronic nephritis. The diagnosis of nephritis, with or without albuminuria, is much aided by the examination for such conditions as cardio-vascular alterations and retinal involvement. Visceral or somatic changes usually present in nephritis may be lacking in concrete instances, or be capable of other or diverse interpretation, as polyuria, atheroma, etc. Acute nephritis, chronic parenchymatous nephritis, and chronic interstitial nephritis may each exceptionally occur without albuminuria. Casts should always be searched for; they are more constantly found than is albumin, yet they seem in certain instances to be a token of renal degeneration rather than inflammation. Non-albuminuric nephritis is of especial importance in life insurance and kindred examinations as well as in practice, since prophylactic measures may be instituted and the prognosis obviously influenced.—*The American Journal of the Medical Sciences*, Oct., 1898; *The Medical Chronicle.*

THE TREATMENT OF PRURITUS.

The *Revue de Thérapeutique Médico-Chirurgical* of Sept. 15, 1898, contains an article by Lavallee upon this topic. After discussing the various causes of pruritus, he speaks of the internal treatment and suggests the use of antinervines, such as valerian, the bromides, and asafetida, the tincture of

belladonna and the tincture of aconite, and sometimes the use of the tincture of gelsemium. Of the other remedies which have been administered internally in pruritus he mentions hamamelis, digitalis, ergotin, and even quinine and pilocarpine. Opium and chloral are not to be forgotten in severe cases. The external treatment consists in the use of baths at home or at natural springs, particularly the use of those waters which are mildly alkaline, and the application of cold douches or very hot douches prolonged through a sufficient period and making distinct influence upon the peripheral nervous system. In other instances a wash of dilute alcohol or vinegar or the application of hot compresses to the itching part will be of value, the hot compress being covered with rubber dam to maintain heat and moisture. In senile pruritus the following prescription may be used :

℞ Bromide of potassium, 2 drachms ;
Iodide of sodium, 1 drachm ;
Salicylate of sodium, 2 drachms ;
Acetate of sodium, 1 drachm ;
Infusion of gentian, 4 ounces.

Two teaspoonfuls in water after each meal.

At night hot lotions may be applied to the body in the form of a 1 : 2000 solution of corrosive sublimate, carbolic acid in the strength of 1 : 20, or the salicylate of bismuth with ten to twenty per cent of powdered starch ; or the following ointments may be advised :

℞ Menthol, 5 grains ;
Guaiacol, 1½ drachms ;
Salicylic acid, 30 grains ;
Lanolin, 1 ounce.

Or,

℞ Carbolic acid, 1 drachm ;
Hyposulphite of sodium, 1 ounce ;
Glycerin, ½ ounce ;
Distilled water, 10 ounces.

Or,

℞ Vinegar water, 1 drachm ;
Ichthyol, 1 drachm ;
Glycerin (with or without menthol), 1 drachm.

In some cases a two per cent. solution of permanganate of potassium is useful, followed by an application of oxide of zinc. Where the pruritus is limited to a small area we may use menthol 30 grains, alcohol 6 drachms, and ether 6 drachms, or menthol may be used in chlorofom to the point of saturation. In other cases we may give :

℞ Cherry-laurel water, 2 ounces;
Chamomile water, 1 ounce;
Alcohol, 1 ounce;
Chloroform, 5 drops;
Corrosive sublimate, 3 to 4 grains.

Or,

℞ Cocaine hydrochlorate, 45 grains;
Chloral, 1 drachm;
Cherry-laurel water, 2 drachms;
Distilled water, 1 pt.

For pruritus of the anus laxatives may be used or rectal injections of very hot or very cold water may be employed, and just before retiring a one-per-cent. chrysobarin suppository may be introduced into the bowel. In other cases relief is obtained by making a local application of nitrate of silver, in the strength of 1 to 20, every three days.

For the treatment of pruritus of the scrotum a very hot solution of corrosive sublimate, or carbolic acid, may be applied on a compress and this enveloped in rubber dam. For pruritus of the vulva the following may be used:

℞ Hydrate of chloral, 1 drachm;
Rose water, 3 ounces;
Distilled water, 4 ounces;

Or,

℞ Morphine hydrochlorate, 6 grains;
Cherry-laurel water, 1 drachm;
Borate of sodium, 2 drachms;
Chloroform water, 1 pint.

Or the following ointment may be used:

℞ Bromide of potassium, 30 grains;
Salicylic acid, 7 grains;
Calomel, 7 grains;
Glycerole starch, 6 drachms.

Before retiring for the night it is well to apply and maintain in contact with the vulva hot poultices of linseed which has been moistened with boric acid water. In other cases a strong solution of nitrate of silver is to be applied:

℞ Nitrate of silver, 15 grains;
Distilled water, 2 drachms.

Internally in pruritus vulvæ, if it be associated with a neurosis, sleep is to be obtained by a mixture of bromide of ammonium, chloral, and syrup of orange flowers, or by the use of sulphonal and antipyrin. Injections of lysol and corrosive sublimate are also of value to prevent vaginal discharges from irritating the vulva. Pruritus of the palm of the hand is to be relieved by remedies similar to that applied to the scrotum.—*Therapeutic Gazette.*

TAPPING AND VENESECTION IN NEPHRITIS AND UREMIA.

At the recent meeting of the British Medical Association, Ewald, of Berlin, contributed to the Section on Pharmacology and Therapeutics a practical paper on this subject. After pointing out that it is a well-known fact that the question as to how diuretics act in kidney diseases is not yet settled, and that some still believe that their action is due to increased blood-pressure or to some relief of the circulation through the kidneys, most authorities at the present time are of the opinion that they act by direct irritation of the secretory elements of the kidneys. However this may be, this much is certain, that the effect of the heightened diuresis or the diversion of fluid to the intestinal canal, provided of course it succeeds by internal medication, is to cause but very slow absorption of fluid in edematous tissues or in the peritoneal cavity or other serous spaces. On the other hand, practical experience teaches us that diuresis always increases as the decrease of fluid in the subcutaneous tissues and in the serous cavities progresses.

Physicians have always tried to dispose of these transudates by mechanical means. From the various serous cavities the fluid is withdrawn as much as possible by puncture. From the subcutaneous tissue it is withdrawn by means of diaphoresis, by hot baths, by scarification, and by puncture with small needles (Southey, Gerhardt, Curschmann and others). In the writer's opinion, however, the treatment by none of these methods is carried out energetically enough, and the scarifications and removal by puncture with small needles are not complete enough ; and, secondly, they have too many inconveniences attached to them.

Puncture for ascites and pleurisy is done too seldom—that is, the physician waits until a considerable amount of fluid has collected. Several weeks is allowed to elapse between the punctures, and in the meantime the organism is exposed to all the dangers, local and general, that a collection of fluid in a serous cavity brings with it. The spontaneous resorption of the fluid is rendered extremely difficult by the pressure exerted upon the blood and lymph vessels of the pleura and peritoneum by the presence of the fluid. The endothelium of the serous membrane suffers in time in its nutrition. The organs contained in these cavities are more and more compressed and their function is disturbed.

These are sufficient grounds to justify the making of punctures in such cases as often as the slightest indication presents itself. To this it is objected that experience shows that transudates removed by puncture are renewed very

rapidly, and some have even believed that their removal of itself constituted an irritation sufficient to lead to their rapid renewal. It has been thought, too, that the removal of a transudate deprived the organism of an important amount of albumen. Neither of these objections holds. The albumen in such cases is in a form in which it cannot be of use for organic metabolism, and it is in such small quantities that its loss, as the author showed years ago, cannot be of the slightest importance. As to the renewal of the fluid, that is due to the course of the disease, not to the puncture for its removal. When the affection grows better the repeated punctures cease, and they have had an important influence for good.

In such cases the author punctures and withdraws the fluid that has collected as often as enough has accumulated to make puncture fruitful—that is, under some circumstances every third or fourth day—and with excellent results. He is convinced that he has by this means, and the proper treatment of the edema, brought about the cure of nephritis in a number of cases.

The drainage of the edema the author effects by means of long needles such as are used for tapping the pleura. They are inserted into the subcutaneous tissue, as far as possible parallel to the skin, and the part that projects is covered with a layer of salicylic cotton and iodoform collodion. To the end of the cannula a rubber tube is attached that hangs down alongside the bed, in a vessel placed to receive the fluid that trickles through the tube. By means of a safety-pin the rubber tube is fixed on the mattress and not allowed to pull upon the needle persistently. Into each leg one or more needles are inserted, and it is thus possible to withdraw three to five liters of a clear, amber-colored fluid in a day. As the subcutaneous areolar tissue is everywhere freely in communication with other parts, the fluid is withdrawn not alone from the legs but from the abdominal walls and the scrotum as well. As because of the edema the limbs are heavy and difficult to move, it is not difficult to keep the patients quiet in that position best calculated to favor the outflow of the fluid.

Of course, these manipulations must be carried out under the strictest antiseptic precautions. Erysipelas, gangrene, or any other serious accident, the author has never seen except in one case. Erythematous conditions sometimes set in, but disappear promptly under an alcohol bandage. This procedure has these advantages over scarification: it is much more cleanly, does not cause the skin to be soaked with edema fluid for long periods, and much larger quantities of

fluid are removed with less inconvenience. In this way he has in a single case of chronic nephritis, from Sepember 10 to December 3, 1896, removed 22,500 cubic centimetres of fluid, and during the period from October 6, 1896, to March 13, 1897, 140,000 cubic centimetres of ascitic fluid in forty punctures. During December and January a puncture was made about every third day. Four punctures of the pleural cavity were made and fifteen liters of fluid removed. The result was complete disappearance of the anasarca and complete recovery of the patient.

Ewald remarks in concluding that repeated careful estimations of the albumen in the ascitic fluid showed that it was between 0.6 and 0.75 per cent., and the amount of albumen thus removed then was equal to about 3136 grammes of meat.

The symptoms of uremic intoxication present, as is well known, a most varied picture. They may occur in acute or chronic form, from slight headache and nausea (gastric catarrh) to uncontrollable vomiting and diarrhœa, from nervous unrest and a feeling of anxiety to the severest epileptiform attacks, from the lowest grade of benumbed sensation up to deepest coma. They may present themselves in varying forms. They may appear under the form of chronic insanity, or of periodic attacks of confusional insanity, or as light attacks of delirium, or may simulate asthma, angina, pectoris or cardiac asthma ; they may be complicated by hemiplegia or monoplegia, anesthesia, slight paresis, attacks of vertigo, nose-bleeding, or disturbances of sight or hearing, etc.

There is manifestly always question of an autointoxication, that is of a toxic effect of products in the circulation which should have been excreted by the kidneys. May not these products give a direct irritation or act indirectly by augmentation of the blood pressure ? Nothing would seem more feasible and more likely to be of benefit than to withdraw a portion of the blood and so decrease the absolute amount of toxin and make the blood more watery, especially if the physician infuses, as does von Leube, after the venesection a certain quantity of physiological salt water. Medical men have, in the author's opinion, in recent times neglected venesection too much in such cases. Long ago, Archibald Pitcairn (1713) recommended venesection.

Bartels got excellent results from venesection in cutting short acute attacks of uremia. Kronig and Senator have recommended it after personal experience in recent years. The author is far from saying that venesection ought to be done in every case. But when the strength of the patient will permit it, and where the conditions of the heart do not

prevent it, as soon as the other well-known remedies have no quick effect he should be treated without delay by plenteous blood-letting—that is, by the abstraction of 200 to 400 grammes of blood. In future he will combine with the bleeding an infusion of saline water, as von Leube recommends.

A few years ago Jacobi, of New York, introduced in medical literature the words of warning *Nil nocere* (be sure you do no harm), and they have met with universal approval. But by venesection under such circumstances we can never do harm. The proportion of permanent success of this method of treatment has, in the writer's cases, been equal to 62½ per cent. of the occasions on which it has been employed. That furnishes ground enough, to his mind, to justify him in recommending the employment of venesection in uremia.—*The Therapeutic Gazette.*

THE THERAPEUTICS OF ACUTE PNEUMONIA.

Thomas J. Mays, A.M., M.D., discusses this subject in *Merck's Archives*, May, 1899.

He does not believe that it is a self-limited disease, rather it is the result of the natural antagonism between health and disease, in which the organism overcomes the effects of the pathogenic invasion. There is a close association, he thinks, between the crisis of acute pneumonia and the fatty metamorphosis of the vesicular exudation, which is slow and protracted if the vital forces are wanting in vigour.

Fever is always a disintegrating process, with a special tendency to undermine the integrity of the nervous system, and this, he thinks, is the symptom which requires most attention, together with diminution of the volume of the blood in the lungs and support of the nervous system.

Ice applied to the head and chest meet these indications best. "This measure reduces the fever; it subdues the tendency to convulsions in children and allays the irritability of the nervous system in adults; it limits and checks the extension of the pneumonic process by contracting the pulmonary capillaries; it promotes resolution and disperses the products of exudation; it acts as a profound sedative to the circulatory and respiratory centers; it supports the function of the heart; it alleviates difficult breathing; it abates pain in the chest; and it gives general rest and comfort to the patient.

"Thei ce is applied in large flat rubber bags to the head and chest. It is usually found that the hottest part of the head in acute pneumonia is in the occipital region, and hence in severe cases one ice-bag should be applied to the neck, and

another one cover the front and top part of the head. This method of applying ice to the head is not out of place in the less severe cases. The number of ice-bags which are to be applied to the chest depends on the size of the area which is involved in the pneumonic process, and on the degree of fever. If the inflamed area is small and the fever not very high, one or two will answer. In infantile pneumonia the fever is usually very high, while at the same time the physical signs are poorly defined. In such cases one ice-bag on each side of the chest and two to the head will generally suffice. In the adult if the fever is high and the involved area in the lungs is large, the chest may be entirely covered with ice-bags. In one of the worst cases in the author's experience nine bags were applied to the chest and two to the head. The ice-bags may be wrapped in thin toweling, and if it is necessary to apply four or five or more, a broad, thin bandage is to be placed around the chest over the bags in order to keep them in place. This is of great importance when the patient is restless and tosses about in the bed. If the patient throws his head about a great deal, as is often experienced in severe cases of this disease, it is a good plan either to suspend the ice-bags, when applied to the top of the head, from or tie them to the top of the framework of the bed or cot, in such a way as to have them in constant contact with the head, without being wholly supported by the latter.

"If the inflammatory area begins at the base of one lung, as it usually does, and if it seems to show no tendency to spread, it is good policy to apply an ice-bag to the opposite and unaffected base in order to check invasion to this side, for which the disease often shows a strong predilection. In addition to this it is also good practice to apply an ice-bag above the infiltrated area, if this begins at the bottom of the lung, or below, if it begins at the top, so as to prevent the morbid process from either spreading upward or downward.

"The length of time during which the ice-bags are to be applied is largely determined by the amount of fever which is present. As long as this is high they must be constantly retained; if it falls to or near the normal point, and shows a tendency to remain there, they may be gradually removed. It is best, however, not to be in too great haste in withdrawing the cold, for frequently when this is done prematurely fever rises suddenly again, and then it is more difficult to bring the temperature down than it was the first time. Sometimes the temperature rises regardless of the ice being on or off the patient. This is not, however, due to the relighting of the disease in the old area, but because the inflammatory process has extended to another field of lung-tissue which should be promptly followed and covered with ice."

This treatment, which is paramount, may be aided by strichnine, $\frac{1}{30}$ gr. 4 times daily for an adult in the beginning, in addition to a hypodermic dose of $\frac{1}{20}$ gr. morning and evening until the limit of toleration is reached. Capsicum in doses of from 10 drops to a teaspoonful of the tincture every 3 or 4 hours is one of the most effective diffusible stimulants when there is low muttering delirium, a comatose tendency, picking at the bedclothes, dry tongue, and in alcoholic pneumonia. Sleep may be procured by $\frac{1}{4}$ gr. morphine hypodermically with a ten-grain suppository or asafetida, oxygen by inhalation, and more or less constantly where there is dyspnea and cyanosis. If this fails then venesection. The salicylate of cinchonidia and the salicylate of soda are of special value in pleuro-pneumonia and grip-pneumonia, or when pneumonia is accompanied with pain in the joints or when there is a rheumatic history. Nourishment should be plentiful, concentrated and easy of digestion, freshly expressed beef juice properly seasoned, 2 ounces every two hours, alternately with a glass of milk, containing a tablespoonful of whisky or brandy.

He records from 400 cases a death rate of 4¼ per cent. without cold it is 20 to 30 per cent., hence, he considers this treatment the most effective of any now applied.

THE COATED TONGUE.

W. H. H. Weaver, M.D., Chicago, gives the following short paper on the subject in the New York *Medical Journal*, May 13, 1899:

The fur on the dorsum of the tongune consists of epithelial cells, detached papillæ, considerable granular matter, organic and inorganic, all of which is kept in a state of fermentation by schizomycetous fungi.* Millions of these micro-organisms may be found in a small particle of the coating. These fungi consist of micro-cocci, sarcinæ, bacteria, spirilla, inocent or infectious, if an infectious disease exists in proximity. If one member of a family has tuberculous consumption, tubercle bacilli may be found in the coating of the tongues of the other members. The micro-organisms thus found growing on the tongue are constantly washed into the stomach at every meal; thence are carried into the blood, probably through the lacteals. In this manner the blood may be supplied with so many germs that infection sooner or later takes place.

From a clinical standpoint this coating plays still another rôle, and should be looked upon as a comparative

*Butlin. *St. Bartholomew Hospital Reports*, 1879, p. 37.

index to the purity or impurity of the blood. To say that it indicates or depends upon the condition of the stomach, or is simply of such and such a character in certain diseases, means nothing but the statement of a coincidence.

When the urine stands for a time in an unclean vessel, the solids, including both organic and inorganic constituents, are precipitated. The larger the amount of waste matter drawn from the blood and the denser the urine, the greater will be the amount of the precipitate. The same changes occur in all the other fluids, excretions and secretions of the body when their temperature and normal conditions vary.

The salivary secretion is composed of certain normal constituents. Besides these normal constituents, which vary within certain limits, there are undoubtedly some abnormal elements which are carried out through the glands from the blood when it is surcharged with impurities. Now, when this abnormal saliva is thrown into the mouth and subjected to the action of the numerous micro-organisms of fermentation, more or less of the solid matters are thrown down and constitute a salivary precipitate, which lodges on the teeth and on the dorsum of the tongue, also on the gums and lips, which, in cases of typhoid fever, is known as sordes. This salivary precipitate can be recognized on the teeth, as it roughens their surface. It is easily removed by the use of the toothbrush. It covers the teeth as a whitish deposit which microscopically shows the different forms of micrococci and bacilli. Upon the tongue it is allowed to remain until it becomes very offensive, unless it is systematically removed by scraping. It undergoes fermentation very readily, and is usually of the same character, consequently communicating an odor to the breath which is recognized as being the same whenever it occurs. In Bright's disease, in diabetes, and in almost any disease in which the nutrition and excretory organs are disordered, the coating becomes very foul, and the fouler the tongue the more serious the condition of the patient, the more sluggish his excretory organs, and the more heavily loaded his blood is with toxines. In some diseases the odor of the breath, as well as the color and character of the coating, is peculiar to the disease, depending upon the peculiar forms of toxines with which the blood is charged.

Besides the systemic germ infection, it is a question if the highly offensive odor, noticeable in any case in which the tongue is heavily coated, has not also a considerably depressant effect on the nervous system, if not on the nutrition, acting much like a gaseous poison, and all the inspired air is laden with it as well as the expired air.

It has been my custom, when consulted regarding a foul breath or coated tongue, to advise the patient to procure a tongue scraper and diligently clean the tongue every morning as a part of the morning toilet, using after it a disinfectant mouth wash on the tongue and as a dentifrice. This method will remove the foulest odors from the breath. The same deposit appears on the tongue every morning and must be removed as often.

Every surgeon who has a coated tongue and wishes to be aseptic should look to this possible source of infection, for in coughing, sneezing, or even speaking, it is known that the breath takes with it particles of moisture from the mouth and throat. And every patient who is to have an operation about the mouth or throat should have his tongue cleaned and disinfected. Every fever patient should have his tongue systematically cleaned to remove just that much self-infection. And every person who wishes to be agreeable in the society of others should remove the foul coating on the tongue and with it the offensive odor of the breath.

AN ANTISEPTIC AND CICATRIZING COLLODION.—The *Riforma Medica* for April 21st gives the following:

℞	Mastic in tears	45	Grains
	Dry balsam of Peru	15	"
	Narcotine	15	"
	Chloroform	75	"

M. This preparation is said to be useful on account of its antiseptic and cicatrizing qualities.

GUÉPIN'S VESICATING FLUID.—The *Progrès Médical* for April 8th gives the following:

℞	Concentrated ammonia	1	Part
	Camphorated oil	2	Parts

M. A pledget of cotton wool of the size of the intended blister is to be moistened with this oil and applied for fifteen minutes to the skin in the place desired. Vesication is rapid.

FOR FISSURES OF THE TONGUE.—The *Riforma Medica* for April 10th gives the following formula:

℞	Carbolic acid	22½	Grains
	Tincture of iodine	75	"
	Glycerin	225	"

M. For local application.

STATIC ELECTRICITY FOR SPRAINS.

BY CHARLES O. FILES, M. D.,

Portland, Maine, Fellow of the American Electro-Therapeutic Association.

In the discussion of sprains hitherto, directions have been given for four methods of treatment, following each other or combined, according to the judgment of the surgeon. These methods are rest, the application of cold, massage, and passive followed by active movements. Of all external applications my own experience favors the copious inunction of very hot lard, or lard oil, used every frequently. The use of electrical massage is, however, so far superior to all other forms of treatment that we may safely discard their consideration except as adjuvants to the electricity.

A sprain is usually a laceration of capsular or lateral ligaments, with or without ruptured tendons, torn muscles, contusion or laceration of the synovial membrane. We know now, thoroughly, that repair of the injured tissues occurs as the result of internal rather than external forces. We use external applications for the purpose of stimulating the circulation, thus bringing an extra amount of blood to the parts and hastening its departure after it has accomplished its laudable object. Rest is also a useful ally, although we can now accomplish good results with less absolute rest than was formerly considered necessary. Electrical massage with the static roller meets all the indications for the successful treatment of these injuries more perfectly than all other means combined.

In proof of this statement, very brief notes of two cases are here given, selected almost at random from a large number of similar histories in my private practice. The use of electricity in sprains had never occurred to me until an experience of more than fifteen years with hot and cold applications, bandaging and rest had fully demonstrated the inutility of these methods.

Case I.—A policeman, weighing two hundred and fifty pounds, started to run toward a house from which cries of "murder" were coming. He stepped on something which turned his ankle, but his impetus was so great that he was obliged to run twenty or thirty steps before he could stop. With the greatest difficulty, supported by a cane, he came to

my office. On account of his great weight and the extreme

and the static massage roller was used as strongly as he could bear it for fifteen minutes on the foot, ankle and leg. The patient was seated on a stool on the floor, not on the insulated platform. The roller was attached by the chain to the positive pole of the static machine. This same treatment was followed for five days in succession. At the end of one week he resumed his duties as police officer.

Case II.—A man, aged fifty, who weighs two hundred and thirty pounds, jumped over a fence five feet high. When he struck the ground on the other side of the fence one foot was turned over and the whole weight came down on the bent ankle. The pain was so intense that he fainted away. The accident happened in the immediate vicinity of my office, and the man was assisted there, and the same treatment was given as in the previous case. He attended to his business every day, and in two weeks could scarcely tell which ankle had suffered the injury.

There is no doubt but that in this class of cases the length of confinement to the house may be shortened very considerably by the use of electricity. For commercial travellers, often obliged to stay at hotels at very great expense, the length of time of enforced absolute rest is an important consideration. Accident-insurance companies are especially interested in the length of time during which they must pay weekly indemnities. It is very much for their interest to have the patients in these cases get well quickly. In saying that these patients will recover, when electrical massage is thoroughly used, in half the time required by other forms of treatment, a very conservative estimate is made.—*New York Medical Journal*, Feb., 1899.

THE SURGICAL TREATMENT OF PERICARDITIS

Dr. Brentano has made a study of the cases of pericarditis in the surgical department of the City Hospital at Urban in Berlin, under the directorship of Dr. Korte. He believes (*Deutsche med. Wochenschrift*, No. 82, 1898) that operative interference is indicated only in exudative pericarditis, and here only when the life of the patient is threatened or a purulent inflammation is suspected. He classifies the methods of operation as follows: (1) Puncture; (2) incision through an intercostal space; (3) incision preceded by resection of a rib. There is no point at which puncture can be made with positive safety to the heart. As regards the

position of the heart in pericarditis with effusion, experience in the Urban City Hospital has shown that in a pericardial sac filled with fluid the heart assumes a position against the anterior chest wall unless held in some other position by adhesions. The coronary arteries are therefore in danger of being injured during puncture, but much more frequently the pleura is threatened; in fact, in the majority of cases pericardial paracentesis is made through the healty pleura. This under certain conditions may lead to pleural effusion. Moreover, a pericardial exudate can rarely be entirely removed through a single puncture. Dr. Brentano has therefore totally discarded this procedure, as well as the operation by simple incision, because in the latter the internal mammary artery and the pleura are apt to be injured, it is difficult to obtain a clear view of the deeper structures, and adhesions cannot be adequately surveyed. On the other hand, the opening of the pericardial sac after resection of a rib is such a simple operation that it may often be attempted without narcosis and carried to completion under local anæsthesia alone. The fifth left costal cartilage is the proper one to be resected, and after being stripped of its intercostal muscles should be separated close to the sternum and at its junction with the rib. The mammary vessels crossing the body of the triangularis sterni muscle are to be doubly ligated and divided. The fibres of the muscle are then separated by blunt dissection, the overlapping pleura is retracted, and an incision made in the whitish, glistening, pericardial membrane. The fluid escapes in spurts, because the heart shows a tendency to close the opening. In purulent exudation, irrigation with sterilized water is recommended. The incised edges of the pericardium should be sutured to the skin incision, and the cavity drained by strips of iodoform gauze. In purulent cases the sac is irrigated daily with sterilized water. According to Brentano, in cases operated upon by this radical method intrapericardial adhesions are less apt to occur. In the five cases thus operated upon, only one recovered, but the others were markedly relieved by the operation and death resulted from the causative disease, and not from pericarditis. Pericardiotomy with resection of the fifth rib in two cases of purulent pericarditis, due to osteomyelitis, did not prevent a lethal termination.—*Medical Record*, Jan. 14th, 1899.

SWALLOWED A PROBANG.

Dr. Gillette, of Toledo, Ohio, reports in the *New York Medical Journal* for March 25, 1899, a case in which a doctor, while swabbbing his own throat, accidentally swallowed a brass wire six inches in length on which he had wound cotton for a swab.

Dr. Gillette saw the patient and advised that nothing be done unless the wire caused trouble, and none followed for three months, when a pain in the epigastrium was experienced, and a little later a sharp pain in the cardiac end of the stomach. In a day after this pain the end of the wire was found protruding under the skin in the ninth intercostal space, and was removed by a forceps.

NEURASTHENIA.

Physicians should be carefnl about telling unmarried females that they are affected by "neurasthenia." A prominent authority (Freund) in the Wiener Klinische Wocnenschrift—it's of foreign origin and therefore must be so!—declares that every case of neurasthenia depends upon some abnormal occurrence or occurrences in the sexual life of the patient at the present time or since puberty. He scouts the idea that mental overwork or excess of household cares can alone induce neurasthenia, altho' any depressing factor may affect its development. He even insists that absorbing occupations, especially intellectual, protect against the evolution of neurasthenic affections. He divides them into: (1) Neurasthenia proper, which he claims can always be traced to excessive masturbation, unnatural sexual intercourse, etc. (2) "Anxiety neurasthenia," distinguished by dread, restlessness, agoraphobia, vertigo in walking, sleeplessness, etc. The latter form, he states, can also invariably be traced to sexual influences in the nature of unsatisfied impulses, coitus interruptus, abstinence with inflamed desires, etc. He protests against the prevailing hypocrisy in regard to sexual matters and urges the physician to assume that abnormal sexual life is of chief import in the etiology of neurasthenia, as this alone will help him to treat it rationally, after winning his patient's confidence. In cases absolutely impossible to trace to any abnormal sexual occurrences, he decides that the affection is not neurasthenia; and by eliminating this conception he has discovered unsuspected local affections, in one instance a latent suppuration in one of the accessory nasal cavities, which had only produced neurasthenic symptoms, entirely cured by an operation. In all of which there is probably a great deal of truth, after all.—*American Journal of Surgery and Gynecology*, October 7th, 1898.

Apropos to the craze for removal of the stomach, Atlantic Medical Monthly prints an original poem written in "James Whitecomb Riley English:"

I dunno what we're comin' to, it does beat all, ter see
What things these doctor fellers do; it's got so now, by gee,
They take a feller's liver'n lights and all his innerds out

And dust 'em off and scour 'em up and put 'em back about
As good as what they ever was. Why, I read t'other day,
They took a woman's stomach out and hove it clean away.
And hicht on some 'f her other works, and now she's up and 'round
And eatin' much as ever, with her stomach under ground!
Now, don't that beat the Dutch? Why, say, b'gosh, I tell yer what!
I thought my stomach was the most important thing I'd got.
And now these fellers chuck 'em 'round as if they didn't mount
To nothin' more'n a worn out tooth, just simply no account.
If I'd no stomach I could eat a slice er hot mince pie
And not be groanin' all night long as if I's goin' ter die,
And Jed could chaw green apples, too, and not be doubled up
And keep his ma a-pourin' down pain killer by the cup;
There'd be no more dyspepsy and the babies wouldn't squall
An hour or two with colic; so, jest take it all in all,
'Twould be a sorter blessin' and I hain't so sure, by jing,
But what I may have mine taken out some time this comin' spring.

Medical Times gives the following as the latest formula for gonorrhea: Oil gaultheria, 15 drops; bismuth subnit., 5 drs.; vaseline liq., 4 ounces. Mix. Inject into the urethra three times a day after urinating and retain as long as possible.

Philadelphia Medical Journal says that the aseptic sponge, which had its origin in the fertile brain of Dr. A. C. Bernays, professor of Anatomy and Clinical Surgery in the Marion-Sims College of Medicine, St. Louis (and known as the "Bernays Aseptic Sponge,") an artificial product composed of cotton fiber subject to many hundred pounds pressure, has certain characteristics that make it especially fit for use in the nose and nasopharynx. The sponge may be rendered absolutely aseptic, and as its power of absorption continues, it becomes much increased in size, thus being able to exert pressure limited only by the limitations of the cavity in which it may be placed. For these reasons it is efficient in the control of hemorrhage in the anterior or posterior nares, either following operations or in severe forms of epistaxis; it serves as an excellent splint in the latter stage of the Asch operation, or in the treatment of fractures of the nasal bones. Finally, it may be used for conveying medication to various portions of the nose, or for producing irritation and moisture in cases of atrophic rhinitis.

Selections.

THE TONGUE IN DISEASE.

1. The elongated and pointed tongue indicates irritation and determination of blood to the stomach and intestines; the extremities are often cold; is also associated

with excitation of the nerve centers. Found more especially among children. The indications are to allay irritation and divert the blood from the stomach and bowels. 2. The pinched and shrunken tongue indicates atony of the digestive organs, often found in dyspepsia. etc. Treatment is plain. 3. The coating (saburra) or fur should be well studied. It may be greater or less in thickness, dry or moist, or clammy, more accumulated at the posterior portion. The liver is said to be at fault when the tongue is heavily coated at the base, with a yellow coat. This is not always the ease. White-coated tongue has been observed in jaundice, etc. 4. The dry tongue has a very important significance. When we have patients who are suffering from some form of fever, pneumonia or other acute disease, with such a tongue, they are in danger, and require close attention. In such cases nutrition and assimilation are suspended, and food cannot be assimilated. When given it should be in fluid form, and always above the temperature of 100 degrees, and of a character nutritive and digestible. The digestive organs can do but little work, yet proper food, given at intervals, does good; but these organs need all the rest they can get until the disease has subsided. Dryness of the tongue is also associated with vascular excitement, and particularly with excitation of the ganglionic nerve centers. Hence the arrest of secretion and this dryness. Here we readily read the state of the nervous system. In many cases the sympathetic nerve is not only excited and irritated, but there is involuntary contraction of muscular tissue, thus suspending the secretions of the several organs. The indications are, proper sedatives for the vascular excitement, and diaphoretics for contractions or excitement of the nerves, associated with other treatment. By this course we shall soon see our patient with a moist tongue, and some of the secretions re-established. 5. Often the tongue changes in the disease from the dryness above referred to, to a brown or black color, with sordes about the teeth. The common idea is that the system is in a typhoid condition. This is true, yet it undoubtedly means, also, that the blood is in a septic condition —a very important fact for us to know. Then our best antiseptics should be given with stimulants and tonics. Thus we can readily read, from the appearance of the tongue, the condition of the digestive organs, the functions of nutrition and assimilation, the condition of the nervous system and the state of the blood. Of course, we must take all other symptoms into consideration. Yet the appearance of the tongue, as pointed, seldom fails in giving us, at a glance, valuable information as to the true condition of the system.

—HENNING.

BLOODLETTING, BLISTERS, AND EMETICS.

A. ROBIN (*Bull. de l'Acad. de Méd.*, No. 4, 1898), after remarking on the almost total neglect of some of the older methods of treatment, gives his investigations into their action. (I) Bleeding has been almost abandoned, since its action is supposed to be mechanical in modifying the blood pressure or getting rid of some poison contained in the blood evacuated, and therefore too temporary to be of much good. When one considers its action on nutrition, however, new indications for its use are found. (*a*) Action on nutrition. The author and Binet find that a moderate bleeding (150 to 250 g.) in an acute disease such as pneumonia increases nitrogenous metabolism, favors the formation of its end products by oxidation, and stimulates the chemical changes which take place in the nervous system. The same effects are seen in bleeding for uræmia or morbus cordis, and in pathological hæmorrhages such as hæmatemesis. (*b*) On respiration. Bloodletting (and menstruation) increases the respiratory changes in every detail to a certain extent in proportion to the amount of blood lost. The oxygen absorbed, urea, and the coefficient of nitrogenous oxidation, are all increased. The indications for its use are therefore: (1) For its temporary effect on the blood pressure, in cardiac syncope, acute œdema of the lungs; and cerebral hæmorrhage; (2) where nutritive action is insufficient, as shown by a lowering of the respiratory changes, the percentage of urea and coefficients of oxidation. (3) In some infective diseases when the symptoms are caused by bacterial toxins which can be got rid of in two ways, either by excretion or by oxidation, which latter converts them into harmless soluble products. (4) In some auto-intoxications, such as uræmia, venesection acts not so much be subtracting a certain quantity of the poison with blood as by oxidising the poison into a harmless soluble product. (II) Emetics. The author finds that besides clearing the bronchi, emetics, like venesection, increase oxidation. The gaseous changes in respiration are increased in every detail, this action being partly mechanical, a larger quantity of air passing in and out, and partly vital, there being a greater amount of oxygen absorbed and more CO_2 given out per volume of expired air. Emetics are of the same value in infective bronchitis as purgatives in intestinal infections, while there are few contraindications. (III) Blisters are useful for their revulsive and derivative properties, and because they increase phagocytosis. Besides this, Robin finds that they increase the amount of air passing through the lungs in a given time ("pulmonary ventilation") to such an extent that the oxygen absorbed may be doubled. There are contra-indications, such as albuminuria; otherwise blisters are of great value in acute or chronic pulmonary complaints.

THE
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Editorial.

After a rest of over ten years from active editorial work on a medical journal, the undersigned has been induced once more to assume editorial control of the Canada *Medical Record.* This journal was founded by me in the year 1872, and for eighteen years I was its proprietor and editor. It then seemed to me that its interests would be better served by my disposing of my proprietary rights and leaving its control in other hands. This was done, and although my name has ever since appeared on its cover as one of the associate editors—beyond contributing an occasional paper, clinical lecture or review—I neither exercised control or wrote editorals. The proprietary rights still remain in other hands. Those thus interested have asked me to once more take the helm, and, after much thought, I have acceded to their request. Those subscribers who took the *Record* during my editorial regime, and who may still be on the list, will, I hope, recognize before many months that the old hand has not forgot its cunning, and that its power has not been diminished. To the many new subscribers whose acquaintance I am about to make, I promise them a journal whose monthly visits will be gladly welcomed. It will be my endeavor to give them a practical, up-to-date medical periodical, and in doing so I will have the assistance of those collaborators of special departments, who, for some years, have been in constant evidence on its pages. Two or three other departments will, in a short time, be added.

FRANCIS W. CAMPBELL.

THE MEDICAL SERVICE OF THE UNITED STATES.

With the report of General Miles, Commander-in-Chief, on the condition of the United States forces during the late war, also appears a report by the Surgeon-General of the Army on the same subject. In these reports there is no attempt to gloss over or conceal the deplorably inefficient condition of the suddenly assembled forces; but a frank avowal is made of the shortcomings, which might have been disastrous had the enemy to be met been more formidable. The Surgeon-General states that the number of medical officers allowed in the army, namely 102, is "inadequate even in times of peace;" and it was consequently necessary to employ a staff of 650 "contract surgeons" by forced selection in a hurried call for their services. Medical men inexperienced in military matters were assigned responsible positions and afterwards unfairly charged with incapacity. The demand for trained nurses likewise far exeeeded the very limited supply from the trained hospital corps, nor was it possible to get suitable hands from regiments or from outside sources.

There were abundant medical supplies, but it was out of the question to obtain adequate or timely transports for them. The prevalence of so much sickness is frankly ascribed to imperfect sanitation, together with want of experience in the medical officers in charge, rather than to badly chosen sites for camps.

Among the troops themselves it is stated a leading factor in the development of disease was the reduction of the age limit in recruits from 21 to 18 years; pronounced to have been "a fatal misjudgment." This is not by any means the first time that placing boys directly on active war service has been found a fatal mistake. During the Napoleonic campaigns of 1813-14, Napoleon in his despatches said: 'I must have grown men; boys only serve to encumber the hospitals and road sides." In his earlier campaign the youngest soldier was 22, and the sick were few. Another mistake was the formation of camps near large cities, which led to drunkenness and dissipation.

There is here an object lesson, not alone to the Ameri-

cans but to ourselves in Canada. The former have dis-discovered that no amount of raw material to draw upon constitutes real military strength; that an improvised army is a broken reed; that, like all other effective organizations, the military machine to be effieient in war must be perfected in peace; that a mere mob of "men with muskets," without sufficient officers and non-commissioned officers and supply services, is not an army in the modern sense.

The moral we would especially draw for our own Militia Department is to enforce effectually the medical regulations for camps which were issued some two years ago. There is too great a tendency to fill the ranks of our battalions when going into camp with young lads below the prescribed age, stature and chest measurement. Ample provision must be made as rapidly as possible for a medical militia corps, and for the required number of bearer companies. Major-General Hutton, the G.O.C. the militia, is, we believe, fully alive to our medical necessities. With the Minister of Militia, a Surgeon Lieut-Col. who, we feel sure, also recognizes the situation, they ought to be able to get the required funds from the hard-headed but, we hope, not hard-hearted Finance Minister.

A RESUSCITATION.

A recent number of the British *Medical Journal* gives an account of a case recorded by Dr. Gimbert, of Cannes, which is noteworthy in several respects. The patient had had disastrous *post-partum* hæmorrhage, and to all outward appearance died therefrom. No circuumstance is more likely to unnerve the obstetrician than a death from such a cause; but Dr. Gimbert, with a courage and perseverance that do him infinite credit, refused to fold his hands and stand idly by. Having employed without effect the usual means of stimulation, such as rhythmical traction of the tongue, direct insufflation of air from mouth to mouth, and hot applications to the precordium, he made a 1 per cent. saline solution, and injected a syringeful (20 cubic centimetres) into the thigh. This was repeated. After the third dose the patient uttered a little sound, but there were no heart signs; after the fourth, signs of reviving were noted,

such as a faint fluttering in the radial arteries, some facial movement and a conjunctival reflex. He remained five hours still with his patient, and had the satisfaction of seeing her make an ultimately complete recovery. It is very noteworthy that only 80 c.cm. in all were injected, equivalent to 2.8 fluid ounces. If intravenous transfusion were employed, it would be considered necessary to inject at least a quart, and the first question raised is whether 3 fluid ounces injected under the skin are as effective as 2 pints introduced into the veins. Dr. Gimbert holds the view that hypodermic injection is better in two respects: First, the salt solution, in its passage through the capillaries into the veins, becomes mixed with blood before reaching the heart, instead of arriving there merely as salt solution; secondly, there is a danger, when a large quantity of saline fluid is suddenly thrown into the veins, of disabling the heart altogether by inducing a too sudden reaction. These points, if true, are of the highest importance. Transfusion can boast of many triumphs, but most practitioners have had instances of its failure under parallel circumstances; and its failure, as a last resource, means the most tragic experience that can befall the family and the practitioner. A woman enters on her confinement in good health; her husband leaves her to go to his business in a spirit of cheerful anticipation, and it may be that in a few hours she is lying dead. Happily, this calamity is rare; but one such case in a lifetime is one too many, so that any additional means of warding it off that is offered demands the most careful consideration. It is a question that could probably be settled in large measure by experimental research. In the case under notice there is doubt whether transfusion would have succeeded even had circumstances allowed of its performances. Did the hypodermic injection of 3 ounces of salt solution effect what a quart in the veins would have failed to achieve? That is the point to be answered.

PARALDEHYDE IN ASTHMA.

Dr. Macgregor say in the London *Lancet* of February 11, 1899, that as far as he has been able to find out, Dr. Mackie, of Elgin, was the first to suggest the use of, and to use, paraldehyde for the relief of asthma. "The fact that

paraldehyde is a sedative largely eliminated by the breath" led him to try its effect in the spasm of idiopathic asthma. He administered it in a number of cases with uniformly successful results, and found that it speedily relieved the spasm and induced sleep. Dr. Macgregor's attention was drawn anew to this a few months ago, and since then he has given the drug in a fairly large number of cases of idiopathic asthma and other forms of spasmodic dyspnea, and his experience confirms that of Dr. Mackie. Dr. Macgregor says that no drug in his hands has given such satisfactory results. In the treatment of hospital out-patients suffering from asthma, morphine hypodermically is out of the question, and it is not usually advisable to prescribe chloral in such cases. Paraldehyde is absolutely safe. It not only relieves the spasm, but it induces tranquil, refreshing sleep, without any objectionable after-effects. Besides, no evil results follow a prolonged use of paraldehyde; it does not give rise to a habit, and on this account it is a much more desirable drug than morphine or chloral. That it has hitherto not been much used in the treatment of asthma one may safely conclude from the fact that neither in Allbutt's "System of Medicine" nor in "Twentieth Century Practice of Medicine" is it mentioned among the drugs given as useful in the treatment of the disease.

THE HANDWRITING OF MEDICAL MEN.

A recent number of an English Journal draws attention to the difficulty there is very often in deciphering the handwriting of medical men of Britain. There is no question this is a grievance of a sometimes serious character. We have known Canadians who consulted medical men in the British Metropolis, who have had difficulty in getting their prescriptions, owing to the writing, made up in this country. Canadian Doctors are not by any means blameless in this respect. Much of it is due, we are satisfied, to carelessness. This is no excuse for this shortcoming. A physician who consulted a lawyer, would hardly accept with good grace an opinion so written that its contents were hardly readable. That English-speaking physicians are not alone blameable in this respect, is proved by an article in the *Médecine Moderne*.

After sympathising with the pharmacists, whose difficult task it is to decipher those illegible documents, the writer adds that the matter has attracted the attention of no less a person than the Dean of the Medical Faculty of Paris. Professor Brouardel is concerned as to the dangers to the public likely to be caused by the execrable handwriting of many physicians. In a recent interview he is reported to have stated that he would take the earliest opportunity of bringing the matter to the notice of the professors of the Faculty.

We might add that it seems to us that the greater the professional status, the more execrable is the handwriting.

THE INVENTION OF SPECTACLES.

The British Medical Journal asks "who first invented spectacles? These aids to vision appear to have come into use about the fourteenth century. The earliest reference to them is in the work of Bernard Gordon, Professor at Montpellier, who speaks of a collyrium devised by him which allowed a person to read without spectacles. In 1360 Guy de Chauliac in his treatise on surgery refers to the use of lenses. The invention of spectacles is sometimes attributed to Roger Bacon, who died in 1294. Further research, however, has shown that in 1285 Savino degli Armati, a Florentine, worked glass into the form of a lense as a help to vision. For him, therefore, may justly be claimed the honour of having invented spectacles. He died at Florence in 1317, and was buried in the Church of Santa Maria Maggiore. On his stone is the following inscription :

QUI GLACE
SAVINO DEGLI ARMATI
DI FIRENZE
INVENTORE DEGLI OCCHIALI
DIO GLI PERDONI LE PECCATA
ANNO D MCCCXVII.

(Here lies Savino degli Armati, of Florence, inventor of spectacles. May God forgive him his sins! A.D. 1317.)"

RAILWAY ACCIDENTS IN AMERICA.

From statistics furnished by the Interstate Commission it appears that the total number of casualties to persons on account of railway accidents in the United States for the year ending June 30, 1897, was 43,168. Of these casualties, 6,437 resulted in deaths, and 36,731 in injuries of varying character. Of railway employees, 1,693 were killed and 27,667 were injured during the year. The total number of passengers killed during the year under review was 222, injured 2,795; 93 passengers were killed and 1,011 injured in consequenee of collisions and derailments. Other than employees and passengers the total number of persons killed was 4,522, injured 6,269. Included in these figures are casulties to persons classed as trespassers, of whom 3,919 were killed and 4,732 were injured. From summaries showing the ratio of casualties it appears that 1 out of every 486 employees were killed, and 1 out of every 30 employees was injured during the year. One passenger was killed for every 2,204,708 carried, and 1 injured for every 175,115 carried. Basing ratios upon the number of miles travelled, it appears that 55,211,440 passenger miles were accomplished for each passenger injured.

THE INFECTION PROBLEM OF CANCER.

The New York *Medical Record*, May 20, reviewing the probable cause of cancer infection, says : "The present aspect of the cancer problem, as presented by Sanfelice, Roncali, Bra and Plimmer, seems to have by analogy something more of truth than what has gone before. That the germ of infection is a vegetable parasite of the class known as yeasts or moulds, in a wider sense, may be possible, for the nature of the irritative process following infection is analagous to certain forms of new growths that are prevalent throughout the vegetable kingdom. There is a large class of fungoid parasitic disease in plants that have tumorous excrescences developed. These are known to be caused by abnormal develop ment of adjacent tissues, and slowly affect the life process o the plant. The organisms that are the exciting cause of these diseases are of the same general class of fungi that are now being held to be the cause of carcinoma, and the gradual impairment of nutrition and spread of the growths are strikingly similar in both classes.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.

The ninth annual meeting of the American Electro-Therapeutic Association will be held in Washington, D.C., on September 19th, 20th, and 21st, 1899, under the presidency of Dr. F. B. Bishop of Washington.

Quite a number of papers of great scientific value have been promised and the Committee of Arrangements insures the members a very entertaining and pleasurable meeting Aside from the sessions of the Association, the Committee has completed arrangements for a trip to Mt. Vernon, one to Arlington, and several other social features.

The headquarters of the Association will be at Willard's Hotel, were special rates will be given to members and their families during the meeting.

THE ROYAL ARMY MEDICAL CORPS.

The *London Lancet* says that it was recently announced in the House of Commons that owing to the redress of the long standing grievances of the army medical officers by the creation last year of the Royal Army Medical Corps on a self-sustaining and self-administering regimental footing, the lack of medical officers, which has for a number of years prevailed in the army, is now overcome, there being now two candidates for every vacancy in the corps. This is certainly very satisfactory.

Dr. Morris, of Denver, Col., publishes in the *Medical World*, a case of pneumonia treated by the hypodermic injection of Edson's Aseptolin, where the symptoms were of a most serious character. The patient was a female 65 years of age, and had been under other care, and the prognosis bad. The disease was confined to the left lung, the temperature 105½ and the patient delirious. Two injections of 1000 minims were given the first day—and three subsequent days—on the fifth day the temperature was normal. The convalescence was slow but perfect.

Notes.

Hyoscine in the dose of $\frac{1}{100}$ of a grain is said to be of great value in the treatment of nocturnal emissions.

Bleeding is of excellent service in uremic convulsions. In the feeble it should not be used.

Styes may sometimes be aborted by an inunction of the yellow oxide of mercury, or by the application of a saturated solution of boracic acid. Hot compresses relieve the pain. When styes appear at frequent intervals, the internal use of sulphuret of calcium is recommended.

In treating intertrigo, so common in fat infants during warm weather, keep the affected parts clean or dusted with boracic acid. The following lotion is also very useful. Powdered calamine and oxide of zinc one drachm each. Glycerine 30 minims, alcohol two drachms. Water half a pint.

Since the introduction of *Eucaine Hydrochlorate* into the Out-patient Surgical Department of the Jefferson Hospital, cocaine has been placed on the shelf. At one time this department used cocaine quite extensively as the means of inducing local anesthesia; but alarming symptoms from its use in some of the cases caused its banishment, and not a drop of cocaine solution has been used in this department for about a year. Prof. Brinton admires eucaine hydrochlorate because it is rapid in action, safe, produces positive and prolonged anesthesia, and causes no serious after-effects. He never misses a chance to use it in minor surgical operations before the class. In minor operations, such as the removal of a toenail or small tumors, the amputation of a finger or a toe, the extraction of a splinter, etc., he recommends the use of from one to two drachms of a five per cent. solution hypodermically, and insists on waiting five minutes after the injection is made for complete anesthesia.

Dr. Leffmann finds chloroform the most satisfactory of the various agents suggested for preserving specimens of urine. About six or eight drops are added to each fluid ounce, and the mixture well shaken. The excess of chloroform

soon collects at the bottom of the bottle. Samples so treated will keep for a long time, even in the hottest weather. Chloroform promptly reduces Fehling's solution. If, therefore, it be desired to test for sugar, the chloroform must be removed by boiling the liquid; or, better, the bismuth or phenylhydrazin test must be used. Chloroform does not interfere with these nor simulate sugar.

Rosenbury advises before administering chloroform spraying the nose with cocaine solution. By this means the reflex action on the heart is prevented and anæsthesia more readily produced.

Balfour says that persons with weak hearts should have their principal meal in the middle of the day, and with as little fluid as possible.

A good point to bear in mind in diagnosing a case of Chancre is that you will never find chancres on the walls of the vagina, they always appear on its outlet.

Blood stains which are so often with difficulty removed from the hands of surgeons, especially around the finger nails, may be made to disappear readily by the use of tartaric acid.

Dr. Armstrong in the *N. Y. Med. Record* gives the following hints for the use of alcohol in fevers: 1. If the tongue becomes dry discontinue; if moister, continue. 2. If the pulse becomes quicker it does harm; if slower, good. If the skin becomes moister, good is being done. If the breathing becomes easier continue its administration.

It is said on excellent authority that walking backwards for ten minutes will cure any nervous headache.

In apoplexy elevate the head and shoulders; if pulse is moderately strong and the brain congested, bleed from the arm freely, sixteen ounces or more; elaterine (one-sixth grain), or croton-oil, two drops in drachm of sweet oil or glycerine; cold to the head by means of an ice-bag.

The development of boils is due to dryness of the skin. The part attacked, if persistently rubbed with some fatty substance, additional boils will be prevented.

Strong coffee, without sugar or milk, is a good stimulant for uterine inertia.

Personal.

Dr. Bronstroph (M. D. Bishop's, 1884) is President of the Jamaica Branch of the British Medical Association.

Lord Lister has been elected a Foreign Associate of the Paris Academie de Medicine. The honour is the highest which it is in the power of the medical profession in France to bestow, and the election was unanimous.

Dr. J. C. Webster (M. B. Univ., Edin.) Assistant Gynecologist to the Royal Victoria Hospital, has accepted the Chair of Obstetrics and Gynecology in Rush Medical College, Chicago.

Dr. Allen (Bishop's, 1898), Dr. Jackson (Bishop's, 1899) and Dr. McLean (McGill, 1898) have been appointed House Surgeons to the Western Hospital for the year ending May 1, 1900.

Dr. George Hall (M. D. Bishop's, 1896), has returned to Montreal and commenced practice. He passed over two years in Europe, and took the triple qualification. He acted for a time as *locum tennens* for a physician in Scotland.

Dr. Ford (Bishop's, 1898) and Fortin (Bishop's, 1897), are still pursuing their studies in Europe, after having taken out the triple qualification.

Dr. N. C. Smillie (Bishop's, 1881) who has practiced ever since his graduation in Gaspé Basin, has gone to Europe for a special course of study, extending over seven or eight months. When completed Dr. Smillie will settle in Montreal, and devote his attention exclusively to Genito-Urinary diseases.

Dr. R. H. Meikle (Bishop's, 1897) has been in practice in Hartford, Vermont, for over a year and is rapidly getting an excellent *clientel.*

Correspondence.

Editor CANADA MEDICAL RECORD:

SIR.—Some ten years ago, I was appointed medical referee for Canada, for one of the large American companies doing business in the Dominion. In this capacity the medical reports come under my scrutiny, and as the business of the company is very large, several thousand of them come under my eye every year. I regret to say that in about fifty

per cent. the work is so imperfectly performed that dealing with the risk has to be suspended until the examining physician has been communicated with. Not only is it imperfectly done, but in many instances the report is incorrectly and even stupidly filled, and the plainest directions set at naught. A portion of the report consists of a form in which to enter the family history. A special column, with heading, is set apart for each kind of information desired. So plain is this form that any school boy of twelve years should be able to fill it correctly. Yet, will you believe it, this portion of the report is the one in which the greatest number of omissions occur. Others again seem to forget that this simple form becomes a complicated one when information neither needed or asked for is introduced. For instance, if opposite the word: "Father" and in the column "age if dead," there appears, say, the figures 60, it is clear, and to be seen at a glance, that he died at that age. What necessity is there then for the medical examiner to write in the column "age if living," the word "dead." Yet this is done in hundreds of cases and the same carried out through the whole form. Another very common omission is answering a question which consists of two portions A and B. The A portion reads: "*Are you* subject to it, etc., etc.," and is generally always answered. The "B" portion reads, *Have you* ever been subject to, etc., etc," and is nearly always *not* answered. Incorrect replies are also very common. In illustration, I beg to say that the question "Is there any indication of disease of the heart or blood vessels," is very often answered "yes," while the examiner sums up his report by calling the risk "*First class.*" It is necessary to ascertain which is correct, though of course, there is every chance that the examiner wrote "Yes" instead of "*No.*" But insurance companies will not take chances of that kind—hence again delay. The want of careful thought in filling a report is often noticeable in giving the ages of parents and brothers and sisters who may be alive. It is not uncommon for such figures to make these parents procreators at the early ages of 7 and 10 years. Again, grand-parents are often entered at advanced ages in the column age "if living," yet a glance at the ages of the parents living shows that they must be dead. This mistake does not delay the risk, but shows "carelessness." Again, I often meet with a report where the family history is good—but where applicant's weight is excessive, and yet the question, "If under or overweight, is this a family or an individual characteristic" is not answered. If the examiner had given to such cases the thought which he ought to have given before deciding upon its classification,

he would have recognized the importance of answering this question. His not answering it fails to put in our possession most important information. These are but illustrations of what I consider is gross carelessness in filling up the medical report by the medical examiner. But I might add that it is supplemented in the vast majority of cases by carelessness in writing. Many reports are most difficult to decipher, and this by medical men who can write decently. On my list, I have several hundred examiners, and of the whole lot not ten per cent. show care in writing, What is the cause of all this. As the business of life insurance has grown to enormous proportions in Canada during the last ten years, medical men seek for appointments as life examiners. In fact, to many it supplements, from a reliable paying source, an income which is often otherwise, somewhat precarious. If medical men were as careless in their medical work among patients as they are in life insurance work they could not hold their clientele. Insurance companies are awakening, and if medical men continue to be as careless in insurance work as they have been, others will be found to take their places. In the interest of the profession, I write this letter.

MEDICAL REFEREE.

PUBLISHERS DEPARTMENT.

LITERARY NOTES.

Andre Bellesort's "A Week in the Philippines," which *The Living Age* has translated from the *Revue des Deux Mondes*, is the more interesting because this sprightly Frenchman saw the islands in November, 1897, before they had assumed any interest to Americans, but while the Philipino insurrection against Spain was in progress. He writes of them graphically and with a Frenchman's characteristic lightness.

Ladies' clubs are so large a factor in American life that American women will turn with interest to the sketch of Ladies' Clubs in England, written by Eva Anstruther and published in *The Living Age* for May 27.

It is not surprising that Mrs. Arabella Kenealy's sharp article on the modern "Woman as an Athlete" should have called out a reply. The latter is from the pen of Mrs. Ormiston Chant and will appear in an early number of *The Living Age*.

"The Etchingham Letters" are concluded in *The Living Age* for June 3. The next serial attraction in that magazine will be "An Old House," a romance rom the Italian of "Neera."