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SUB-ACUTE AND CHRONIC CYSTITIS TREATED BY THE VESICAL BALLOON

By J. G. Clark, M.D.,

Resident Gynecologist, the Johns Hopkins Hospital.

The most frequent cause of cystitis is catheterization of the bladder without proper observance of aseptic details, in post-operative and obstetrical cases.

The highly concentrated urine excreted for the first few days after surgical operations, especially after the more serious abdominal sections, gives rise to irritability of the bladder and renders frequent catheterization necessary.

A series of observations made by Dr. Russell on the urinary excretion, in the first five days subsequent to cœliotomy shows a great diminution in the normal amount of fluids with an increase in the solids of the urine. If, in addition to this chemical irritant, infectious matter is introduced into the bladder by the catheter, the most favorable conditions are present for the production of a serious inflammation. The rigid technique in catheterization insisted upon by modern surgeons fortunately renders this complication comparatively rare, and the chronic forms of cystitis as a rule date the onset of the attack to a specific infection or a badly conducted puerperium.

The acute forms of cystitis usually yield to treatment if taken in hand at once, by mild vesical irrigations and diuretics, as it is only necessary to eliminate the cause of irritation, which is readily reached by these means, to cause a subsidence in the inflammation.

The method of treatment which I am about to describe is not advised in these simple acute cases; but in the sub-acute or chronic cases it finds its field of usefulness. The unsatisfactory results of treatment of these obstinate ailments by the usual therapeutic remedies are universally acknowledged by all physicians and surgeons.

The late Professor Goodell, of the University of Pennsylvania, in his remarks preceding the details of treatment in chronic cystitis, usually spoke of the extreme persistence of the inflammation and the difficulty of curing it, a statement fully confirmed by the large number of remedies which he afterwards suggested for its treatment.

The one symptom common to all forms of cystitis is frequent and painful micturition, due to expulsive efforts of an inflamed bladder, excited either by a slight distension of the bladder or by the presence of irritant salts in the urine.

If the acute inflammation is not soon relieved the bladder remains contracted, the mucous membrane becomes congested and thickened, new connective tissue is formed in the vesical walls, the rugæ are much more prominent than normal, and the intervening

sulci conceal septic matter which cannot be reached by irrigations, as the moment the fluid begins to distend the bladder such acute pain is produced that the bladder contracts with great force and prevents its even coming in contact with the deeper parts, much less washing away or rendering innocuous the concealed pus. As evidence of this, one can see almost immediately after the most thorough vesical irrigation with a two-way catheter, small quantities of urine voided, highly charged with pus, desquamated epithelium and other degeneration products.

It is to overcome this difficulty in reaching the source of infection that the vesical balloon is especially valuable.

At one of Dr. Kelley's clinics given during the meeting of the American Medical Association, in May, 1895, I exhibited an improvised apparatus, made by attaching a toy balloon to an English catheter, and demonstrated its method of application. Since then special balloons have been made which have proved in every way satisfactory.

FIGURE 1.

By means of this apparatus the bladder is distended, the rugæ smoothed out and all of the inflamed and infected areas are brought in contact with the vesical balloon, which is employed as the carrier of therapeutic remedies.

Rubber balloons have been introduced into the bladder and inflated preceding the repair of vesical fistulæ, to facilitate the operation, but so far as I am able to glean from medical literature, this is the first employment of such an apparatus for the treatment of cystitis.

THE VESICAL BALLOON.

The apparatus consists of a small balloon made of thin rubber, 6 cm. in diameter when collapsed, connected with a thicker rubber tube 26 cm. in length, with a small cut-off valve or clip to retain the air when the bag is inflated. These balloons can be distended to about the size of a well-filled normal bladder.

We have employed the surgical aspirator as the most convenient means for inflating the balloon, but the small rubber bulbs connected with nasal atomizers, or a cheap air pump like the bicycle-pump, are equally satisfactory.

The balloons are made of delicate rubber tissue, and if not carefully preserved are soon destroyed. They should be washed in warm water immediately after use, and then slightly inflated and allowed to dry thoroughly, in order to prevent the walls of the collapsed balloon from adhering together.

When the apparatus was in its experimental stage we used the oleaginous ointments, which where quickly found to decompose the rubber, and at the suggestion of Mr. Waltz, pharmacist to the Johns Hopkins Hospital, gelatine was used, which at once proved an ideal vehicle for remedies.

Gelatine possesses the advantages of melting at the body temperature and not injuring the rubber, and when brought in contact with the bladder it is quickly absorbed.

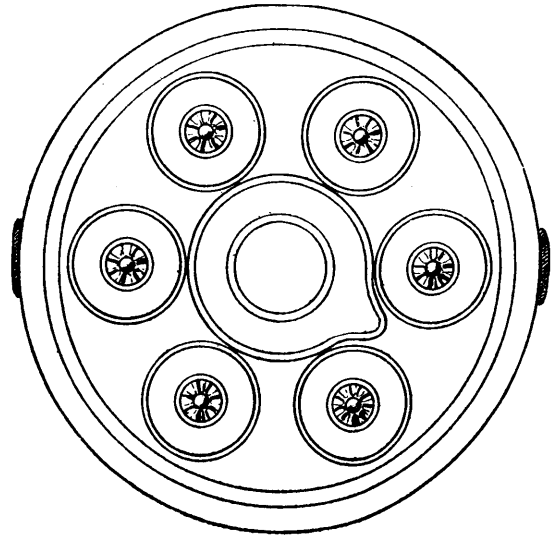
Up to the present time we have found a ten per cent. ichthyol gelatine very satisfactory. In addition to this we have had made up a bismuth, zinc, salicylic acid and bichloride gelatine, but so far have had no occasion to use them.

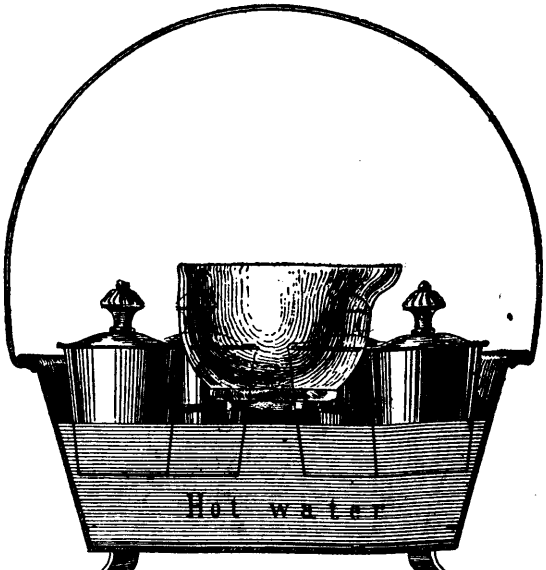
METHOD OF APPLYING THE VESICAL BALLOON.

Before using the balloon it should be boiled and placed in a boric acid solution or sterilized water. The capacity of the balloon should always be accurately determined previous to its use, by inflating it to the size

desired, and counting the number of cylinders or bulbs of air required to fill it.

By observing this precaution there is no danger of over-distending the bladder, as the exact degree of distension is determined by the number of cylinders of air introduced.





FIGURES 2 AND 3.

The external urethral orifice and surrounding parts are cleansed with soap and water and bichloride solution (1 to 1000) by the nurse, after which the bladder is catheterized and the patient placed in the knee-breast posture, carefully protected by a sheet.

The patient should lie with chest flat on the table and her arms hanging over the sides, in order to make the bladder distend perfectly when the speculum is introduced.

A small pledget of cotton saturated with a twenty-per cent. solution of cocaine is inserted into the urethra and allowed to remain for 3 minutes, when the number ten vesical speculum can be introduced without giving the patient great pain. Frequently the patient complains of no discomfort until the end of the speculum impinges upon the inflamed mucous membrane.

Before the patient is placed in position, the gelatine, which has been previously sterilized, is immersed in a water bath and melted. For ordinary use in private practice or in a limited hospital service it is not necessary to have the elaborate apparatus here figured, but a small metallic ointment box is sufficient for all practical purposes.

The temperature of the water bath should be only sufficient to reduce the gelatine to the consistency of cold olive oil, as in this state it will adhere better to the balloon, which can be more easily rolled into the form of a suppository.

Before preparing the balloon for introduction into the bladder the hands should be disinfected. The bag is rolled between the thumb and forefingers in the same way as a hand-made cigarette. Into the concavity which naturally forms when the balloon is completely collapsed the gelatine is poured to overflowing, and the balloon slowly rolled, more gelatine being added until it assumes the form of a suppository well covered with the semi-fluid gelatine. It is now clasped with a long, slender crane's bill forceps, Fig. 4, and inserted into the bladder and released.

Before beginning the inflation it is best to tell the patient that she will experience painful sensations. As the distension progresses the patient suffers considerable pain and an urgent desire to void her urine. By forwarning her of these attendant symptoms she will be able to withstand the pain, and the inflation can be carried up to the desired degree in 3 to 5 minutes.

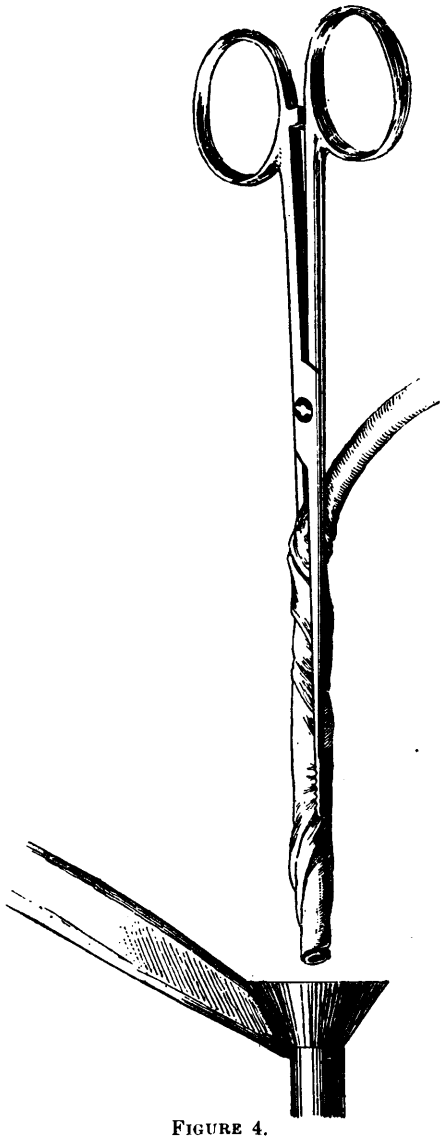


FIGURE 4.

The pain in chronic cystitis is usually severe during the first two or tree applications, but the patient as a rule experiences so much relief subsequently that she is willing to persevere in the treatment.

A rectal suppository of 1 grain of opium, introduced immediately after the treatment, is of great service in alleviating the subsequent suffering. Having inflated the bag up to the required size, the clip on the rubber tube is closed, and the patient then assumes the dorsal or lateral posture.

Our rule is to leave the balloon in place 15 to 20 minutes, beyond which time it does not appear safe, as the ureters are blocked by it. In removing the balloon the clip is opened, when all but a small amount of air escapes; the rest is then aspirated with the air-pump bulb, when the collapsed rubber bag is easily pulled out through the urethra without causing pain.

We have treated at least ten cases with success by this apparatus. A history of one case, of a severe type of chronic cystitis of 13 months standing, well represents the efficiency of the vesical balloon.

CASE OF CHRONIC CYSTITIS.

M. J., admitted 21, 10, 95, colored, aged 35 years, married 10 years, no children, no miscarriage.

Complaint.—Frequent and painful micturition. Hematuria.

Menstrual History.—Menses appeared first at 16 years always irregular, sometimes not occurring for two months. When she was about 27 years old she had a slight discharge every three months.

For the last 7 or 8 years the menstrual flow has ceased and there is no history of vicarious menstruation. She has suffered no inconvenience on this account, and says she is perfectly well with the exception of her present complaint.

Family History.—Mother living and well, two sisters died of phthisis.

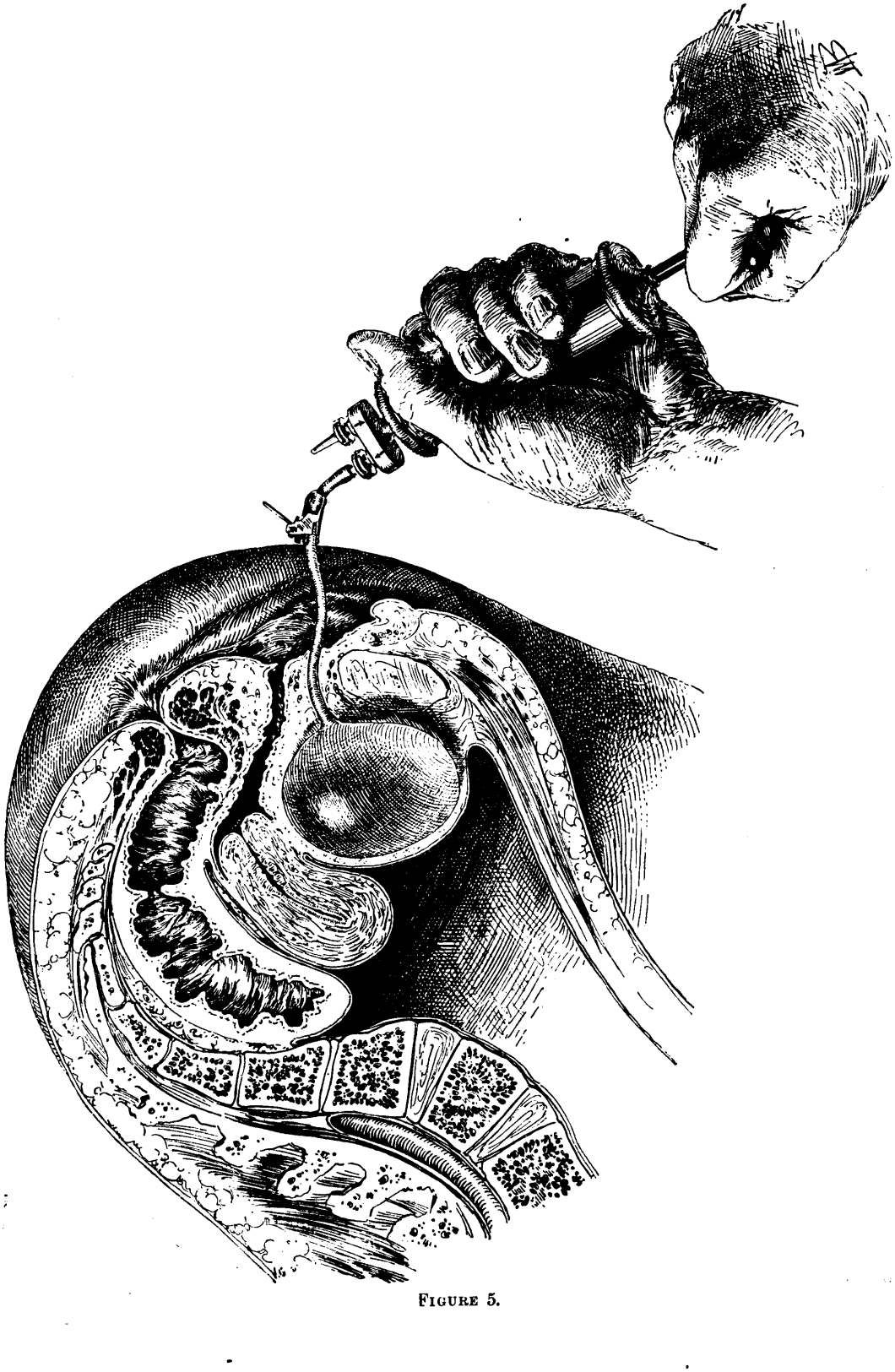


FIGURE 5.

Personal History.—Patient has always been "delicate," but has never had any prolonged spell of illness.

Present Ailment.—About thirteen months ago she began to have slight pain on urination, which grew rapidly worse, notwithstanding the remedies given by her physician. For the last five months blood has frequently appeared in the urine.

The frequency of urination is much greater at night, when she is often compelled to get up 8 or 10 times. She does not think the pain is increased by exertion, but says one week ago when coming to the hospital she had agonizing pain and several blood clots were passed.

There is a constant dull pain over the bladder, which becomes sharp and cutting during micturition. About the time the patient began to experience painful urination she noticed a yellowish vaginal discharge, which was probably of gonorrhœal origin.

Present Condition.—Patient says she has lost considerable flesh since illness began. Defecation painful when bowels are constipated. Frequent and painful urination. When the paroxysms come on the patient has an expression of intense pain.

Examination of Bladder.—Urethra congested and reddened. The vesical trigone is intensely reddened, the rugæ stand out prominently, and over the surface of the bladder are flakes of pus and small blood clots. The area of intensest inflammation is in the inter-ureteric area and gradually shades off towards the fundus of the bladder.

In the areas of greatest inflammation the mucous membrane is of an angry red and bleeds when touched lightly with the ureteral searcher. The capillaries are indistinguishable in this portion of the bladder, and a careful search of the bladder fails to reveal the ureteral orifices. In the less congested areas above the trigone the capillaries are prominent, and at various points small, intensely red clumps or congeries of minute vessels are seen.

The anterior wall of the bladder in many places appears normal.

Treatment.—Application of ten per cent. ichthyol gelatine by means of vesical balloon. Patient experienced great pain at the time of application.

22, 10. Patient greatly relieved two hours after treatment, and still feels much better than before the treatment.

23, 10. Balloon again applied, still very painful; bladder appears less congested and the ureteral orifices are faintly visible. Marked improvement in symptoms; urination much less painful. Patient got up only three times last night.

10, 11. The bladder has been treated every third day since the last note was made, and now appears almost entirely well. The patient no longer experiences any pain between the treatments and thinks she is entirely well. Advised to remain one week longer

11, 16. Patient discharged to-day. The mucous membrane has assumed a perfectly healthy hue, except a slightly increased reddening around the ureteral orifices. No treatment since the last note. The pain is entirely relieved, and the patient got up but once last night to urinate.

NOTE.—Later experience in the treatment of cystitis has proved that the introduction of the fluid gelatine into the bladder by means of a long slender pipette, immediately before introducing, the balloon is of the greatest therapeutic value, as a greater quantity of the medicinal agent is in this way brought in contact with the inflamed areas.

Since the original report of this method of treatment before the Johns Hopkins Hospital Medical Society, a number of long standing cases of cystitis have been treated successfully.

When you have found pus in an exploratory puncture, *never* take out your needle, if the case is one for operation, until the pus cavity has been widely opened.

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

THE EXPLORATORY INCISION IN ABDOMINAL SURGERY: ITS INDICATIONS AND TECHNIQUE.

By J. H. Carstens, M.D.,

Chief of Staff and Gynæcologist to Harper Hospital; Professor of Obstetrics and Clinical Gynæcology in the Detroit College of Medicine; Ex-President American Association of Obstetricans and Gynæcologists, etc.

Your kind invitation to read a paper on the above subject brings to mind many reminiscences of the past. Many of us remember, or perhaps have taken part in abdominal operations a generation ago. While the surgeon was operating, a mob was waiting outside to lynch him for cutting open a woman's belly. I well remember my first case, nearly twenty years ago. It was a young woman who had severe hystero-epileptic attacks during the menstrual periods. She had been under treatment for a long time, but without benefit. I notified two old and able practitioners to be present at the operation, but when they came to the hospital and found out what it was they left in disgust and said they washed their hands of such operations.

My third case was done in a small city of the State, where I could get no physician to administer the anæsthetic. Only the young doctor who called me, a Methodist minister, with a neighbor woman were present and assisted. The doctors refused to have anything to do with it.

Well, that first case of mine was perfectly cured and I saw her only a short time ago, a healthy wife, and the happy mother of two step-children.

How it took years and years to wean, not only the laity, from the notion that it was a barbarous proceeding, but it also took years to educate the masses of the general profession to the idea, that not only was abdominal surgery necessary in many cases, in order to prevent suffering and prolong and save life, but in very many cases it was necessary, even to make an abdominal section for diagnostic purposes only.

How long it took to prove and have it established as a settled fact, that the average duration of a woman's life, with ovarian tumor, was 2½ years, and that an operation and removal of the growth was her only chance.

We remember that surgeons made mistakes in diagnosis, cut down upon a fibroid tumor and then closed the incision without removing it. But occasionally, one more courageous than his fellow surgeons, would remove a fibroid tumor, and eventually they would remove a bunch of fibroid tumors and a part of the womb by the clamp method. How gradually was the technique of abdominal hysterectomy improved, so that we have to-day, the modern, clean and radical operation of total extirpation.

We remember the abuse and calumny heaped upon the head of Lawson Tait, who asserted that there was no such thing as pelvic cellulitis and that it was a pustule, and could only be cured by removal.

But after more than twenty years, the profession recognizes the fact that so-called cellulitis and pelvic peritonitis are always caused by pustules due to an infection from without. That abscesses in the broad ligament only exist in puerperal cases, from lymphatic infection, caused by a lacerated cervix.

It took years to prove that gall-stones could exist without jaundice and still cause great distress and digestive disturbances.

It took decades to show that nervous reflex disturbances of all kinds can be produced by morbid conditions of various abdominal organs.

What a long struggle was it, and what a long struggle did the abdominal surgeon have, to educate the general practitioner to that point; and to prove to him that idiopatic peritonitis was always appendicitis, that is to say, 96 times out

of 100. And of the four per cent., where it is not caused by inflammation of the vermiform, it is caused by malignant growths, or perforation of the bowel, which require an abdominal section just as much as an inflammation of the appendix. Only recently has the profession recognized the fact that hernias, which often become strangulated, can be best treated by an operation and with almost no danger.

Only within the last few years have operations of colotomy for cancer of the rectum, or gastro-enterostomy for cancer of the stomach been employed, not for the purpose of curing the disease and saving the patient's life, but for the simple purpose of relieving suffering and prolonging life.

So have diseases of the kidney, and especially renal calculi, been attacked by the abdominal surgeon, nor has the latter failed occasionally to remove the diseased spleen or cut off a slice of the liver when occasion demanded it.

To-day, abdominal surgery is recognized as a specialty, and its claims that all pathological conditions in the abdomen are surgical as well as medical has been accepted by the mass of the profession—the moss backs and the fossils are always excepted. Many cases which formerly were treated by internal and external medication are now recognized to be purely surgical.

Furthermore, the sooner that surgical interference takes place the better it is for the patient, not only for his or her life, but for perfect cure and absolute recovery.

The wonderful success of abdominal surgery is due to modern aseptic and antiseptic surgery. With the frightful mortality of the past, success could never have been accomplished. The general practitioner would never tolerate surgical interference when the mortality was so frightful as it was in the past, and very justly so. It is the success of to-day, the death rate being reduced to 1 in 100, and not higher than 15 in 100, according to the class of cases.

Both the abdominal and the general practitioner have grown step by step. When the surgeon has proven to the general practitioner that he could operate safely, the general practitioner has asked for his assistance.

Abdominal surgery, with the success of the past, naturally plunges forward, and it is not satisfied simply with operating on cases where there is palpable morbid conditions, but insists that in complicated and obscure troubles, an abdominal section for diagnostic purposes only is indicated. In other words, that abdominal surgery should be used, like the thermometer or the stethoscope, for the purpose of diagnosing cases. Of course not those simple, ordinary, every-day cases, which can be correctly diagnosed and treated, but in all the complicated and obscure and sericus cases. By serious cases I mean those where the patient has some abdominal ailment and becomes anæmic, weak, and steadily grows worse in spite of treatment.

The vast majority of cases can be diagnosed with the ordinary methods generally employed, but occasionally we come across some abdominal trouble which causes the patient a great deal of distress, often threatens life by steady progress, and we cannot diagnose the case. Here, abdominal section is indicated. When the patient is subjected to an ordinary course of treatment, has been seen, and perhaps treated, by a number of able practitioners, without success, then an exploratory operation will clear up the diagnosis. Sometimes even, an operation can be performed at the same time and the patient be relieved. There is generally some particular point of severe pain where the seat of trouble is, and an incision should be made, as near to this point as possible.

I have now a young man, 17 years old, in Harper Hospital, operated on 10 days ago. He has been suffering for six years with abdominal pain to such an extent that he was often obliged to leave school; and since he has been learning a trade, he has frequently been obliged to stop work at any time during the day and go home. In a day or two he would be better and resume work, to be soon again disabled. For some months he has been unable to do any work; he lost flesh and became weaker. He has been treated by a number of able practitioners with only temporary benefit. A year ago he had an acute attack of jaundice, which, however, only lasted about ten days. The pain was principally noticed on the right side from the region of the liver down to the right inguinal region. What was it? I could not tell. It might

be disease of the appendix; it might be gall stones, perhaps only adhesions. I made an exploratory incision, cutting down on the right outer edge of the rectus. I started my incision from a line drawn from the umbilicus to the crest of the ilium, upwards for two inches. This enabled me to reach up to the liver, explore the gall bladder, the stomach, the kidney, and also downwards to the cæcum. There were no gall stones or any adhesion or abnormal condition of the stomach and intestines. The appendix, however, was twisted, adherent and strictured at its junction with the cæcum. I increased the incision downwards for half an inch and removed the appendix. He made an ideal recovery; all his symptoms have disappeared, and I am fully convinced that all his trouble originated from catarrhal appendicitis, although there was no McBurney's point or any marked pain in the region of the appendix.

Two months ago, a lady, aged 45, was sent to me from Lower Ontario, who had obscure abdominal trouble. She was suspected of having ovarian and tubal trouble, but on careful examination I could find no trouble of the generative organs. The trouble seemed to orignate from some point around the liver and duodenum. Her history strongly pointed to the possibility of gall stones. I made an exploratory operation and found extensive adhesion of the intestine to the liver and the abdominal wall; no organic trouble whatever, and no gall stones. These adhesions were carefully separated, sprinkled with aristol to prevent re-adhesion, and the abdominal incision closed with a tier of Kangaroo sutures. She made an ideal recovery, and the wonderful improvement in her condition was marked before she left the hospital. In this case I made an incision at the right outer edge of the rectus just below the ribs, the kind we ordinarily make when operating for gall stones.

Another case to illustrate this case was a patient who came to me from an interior town of the state, with stomach trouble. He had been to Southern France, the Engadine of Switzerland, and had drunk the waters of Carlsbad, all without benefit. He had a pain just below the ensiform cartilage, and more or less digestive troubles, sometimes vomiting. He had had his gastric juices examined and the stomach washed out, used electricity, and had taken gallons of medicine, but steadily became weaker. I carefully examined him, but could find absolutely nothing requiring surgical interference, so dismissed him. He took another trip to Europe, visiting various medical centers, and returned home, becoming rapidly worse, with vomiting, and died. Post mortem examination was made and revealed stricture of the pyloric end of the stomach. It was not malignant, I am informed, and I have no doubt if I had had the courage and proposed an operation he would gladly have accepted it. I could have made a re-section or a gastro-enterostomy, and I verily believe he would have been well and living to-day. We are all cowards sometimes and this case has taught me a good lesson. Hereafter such cases will be subject to exploratory celiotomy. Even if nothing is found, there is no loss and the patient at least has the assurance that there is no organic trouble.

Years ago an old friend of mine was ailing and was treated by many physicians and also called on me. I made the most careful, repeated examinations, but could not diagnose the trouble, and in those days the students called me a crank on differential diagnosis. His urine was repeatedly and carefully examined, but nothing could be found abnormal, although the normal constituents varied at different times. All his trouble was attributed to the stomach and the liver. After ten years he died. I made a postmortem and found in each kidney an immense stone shaped like the pelvis. That was the only thing that could be found. If I had such a case to-day I would make an exploratory abdominal section, and in a few minutes would know that he had no organic trouble of the stomach or liver, but had a stone in the kidney which could be removed.

These few cases I just relate as illustrations. I could increase the number, but there is no need of it, as I simply want to call your attention to the fact that there are many complicated, obscure abdominal troubles which do not yield to medical treatment, but which can be relieved by surgical means.

You ask me to give the indications. The above cases indicate the kind, I would say; all those

cases where the diagnosis cannot be made, where a number of physicians disagree, and treatment is of no benefit. To this belongs, especially class all cases of abdominal dropsy which are not due to diseases of the kidney or marked disease of the liver. Abdominal dropsy is frequently due to tubercular peritonitis, and 85 per cent. of cases of tubercular peritonitis are absolutely cured by surgical interference. But if cases of this kind are allowed to progress until a secondary deposit has taken place in the lung, tubercular peritonitis may be cured, but pulmonary tuberculosis will go on unchecked and then end in the death of the patient.

The signs and symptoms of diseases of the female generative organs, and our ability to make correct diagnosis by conjoined examination and palpation would virtually exclude pelvic diseases from this paper. I refer to that class where all the trouble is above the true pelvis.

If you ask me what the symptoms would be, I cannot tell, because the symptoms would vary with the trouble. It seems to me that the principle ones are the disturbances of the stomach, occasional spells of vomiting which increase in frequency, sharp coliky pains in a certain part of the bowels. If there is a stricture, or any other thing, causing a diminution in the size of the intestine, gas, when it reaches this spot, will generally cause an excessive distension of this part of the bowels, hence pain; and patients are very often able to localize it and will tell you that the gas rolls around, and when it reaches that spot then they have pain and distress. That, to me, is a very suspicious symptom.

Strictures in the descending colon can be generally diagnosed absolutely without an operation, although the latter may be necessary to relieve the trouble.

I have so far spoken only about chronic cases, as I think it hardly worth while mentioning that naturally, all acute cases of inflammation of the peritoneum, and all acute cases with symptoms of obstruction of the bowels, as indicated by constant vomiting, etc., require the most prompt surgical interference.

In the former as well as in the latter, class of cases, the thermometer is of no avail so far as I can see. I have seen cases of gangrenous appendicitis causing purulent peritonitis with a temperature of only 99 or a little over. It seems to me that the pulse is of more diagnostic importance than the temperature. If that becomes increasingly rapid and feeble, it indicates serious trouble. I assume, of course, that common, simple ailments, acute attacks of indigestion or chronic colic (except lead colic, which sometimes requires an operation) neuralgia, muscular rheumatism, etc., are excluded from the class of cases to which I refer.

You want me to write about the technique. In the present state of our knowledge this has not been settled. I do not know of anything having been written particularly on this question, but from my own experience, I have made it a rule to cut down as near as possible on the place where I think the trouble is located. I will stretch a point and cut down in the median line because there is less hæmorrhage there and better chance for union. If the trouble seems to be on either side, I cut down on the outer edge of the rectus, as I do in operations for appendicitis. I do not like to cut through the rectus muscle or transversely across the oblique muscles; first, because there is constant oozing from the injured muscle; second, the lacerated tissue is soft and is more liable to infection than fibrous tissue.

Whatever point I select, I make the opening small, say about two inches, as I can always enlarge it, if needed, with one stroke of the knife, pass through the skin and all the fatty tissue, if possible, down to the fascia, and with one or two strokes of the knife, through the latter down to the peritoneum. I lift it up and may nick it and enlarge the opening with the knife; sometimes I simply stick my finger through the peritoneum and explore it with my finger first, increasing the peritoneal opening, if necessary, later on. In my incisions in the median line I pay no further attention to the peritoneum. If, however, it is at the outer edge of the rectus, I have found that great retraction takes place on each side, and it is very difficult to get hold of the peritoneum when you want to close your incision. In the latter case I catch hold of the peritoneum on each side with a pair of catch forceps, so that it cannot slip away, and after the exploration or the operation is finished, I have it where I can easily sew it up.

If it is a nice clean case, without sepsis, I sew up the peritoneum with a running suture of Kangaroo tendons. Then I take the fascia and muscles in another layer of suture, the fat also if necessary, and at last the skin with a very fine suture, using the buried Kangaroo tendon in layers, as I have described repeatedly. In all infected cases, including tubercular trouble, I use the *en masse* suture of silkworm gut.

In conclusion I would say :—

1st. Obscure abdominal troubles require exploratory celiotomy. No honest physician can do justice to his patient by simply treating abdominal troubles symptomatically. Every honest general practitioner, in justice to himself and his patient should call in an abdominal surgeon as counsel.

2nd. An abdominal surgeon should be prepared to do any operations whatever, when he does an exploratory operation. Hence, an exploratory operation should be done in a well equipped hospital only.

3rd. The exploratory incision should be made in the medium line, if possible, or the outer edges of the rectum. The fleshy parts of abdominal muscles should be avoided as much as possible.

4th. In clean aseptic cases the buried Kangaroo tendon or catgut ligature in tiers should be used. In all septic cases, including tubercular peritonitis, sildworm gut, silk or silver wire, *en masse* suture should be employed.

RULES for the surgeon to observe in order to prevent the absorption of poison during operations on septic patients : 1. After the hands and arms are made aseptic, dip them in strong ammonia water, or in a saturated solution of oxalic acid. This procedure will instantly reveal to the surgeon the least abrasion of the skin from any cause. 2. All small abrasions, or separations of continuity of skin, should be painted with flexible collodion, and immediately covered with a few fibres of absorbent cotton. Dry this dressing quickly with heat from alcohol lamp, and again paint with flexible collodion, and dry in the same manner. Then sterilize finger in 1 to 100 bichloride solution. 3. If the wounds are on the joints, apply a strip of adhesive plaster over the cotton and collodion dressing, passing the plaster quite around the finger, at least twice. Fasten this dressing securely with thread. Or, instead of the adhesive plaster, draw on a rubber cot or glove. Sterilize finger or hand and dressing in 1 to 100 bichloride solution. 4. If the hand or finger is wounded during an operation, stop long enough to place on the wound a drop of saturated solution of carbolic acid, or lysol, or creolin, or touch it with a nitrate of silver point. Cover the wound with a small pledget of absorbent cotton, well saturated with carbolized or creolin water, and cover this cotton thoroughly with adhesive plaster. Fasten this plaster securely with thread. Sterilize the finger and dressing by immersing it in 1 to 100 bichloride solution, and proceed with operation. 5. Remember that your health is, or should be, as valuable as the patient's, and that if you have a good assistant to watch the patient, five minutes' time given to dressing your own wound will make no appreciable difference in the result of the operation you are performing.—*Horace T. Hanks.*

HYDATIDIFORM MOLE AND MALIGNANT DECIDUOMA.—Fraenkell (*Archiv f. Gyrak.*) has recently added to onr knowledge respecting the malignant changes which sometimes take place in the uterus after gestation. Undoubtedly malignant deciduoma is often associated with hydatidiform mole. Small portions of a mole of this class usually remains behind after the greater part has been expelled. The superficial epithelial layer (syncytium) of the chorionic villi proliferates considerably when a vesicular mole develops. It is precicely from this abnormal development of epithelium that the cancerous change known as malignant decidumo is evolved.—*Indian Lancet.*

CHRONIC INFLAMMATION OF the URETHPA COMPLICATED BY OLD STRICTTRE.—Arthur Aulad, M. D., M. B., Ch., B. A. O., B. A., Rathmines, Defoe Road, London, S. W., England, says : "I have very great pleasure in testifying to the extreme efficacy of Sanmetto. The only case in which I have used it was what I would call a test case, viz : one of inflammation of urethra of long standing, complicated by old stricture. I gave it in drachm doses three times a day, and in four days the patient was completely relieved."

SURGERY

IN CHARGE OF

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HOW TO AMPUTATE.

BY JOHN A. WYETH, M. D.

In every amputation the preservation of the life of the patient is the first great principle to bear in mind; the second is to preserve the greatest amount of usefulness for that part of the member which is left with the body. Since hemorrhage is the chief fact of shock, to prevent loss of blood is essential. Practically, every amputation should be governed by these laws.

When hæmorrhage has not occurred before the case is in the hands of the surgeon, this element of danger may, thanks to modern surgery, be eliminated. There is not an amputation, from the fingers to the shoulder-joint, or from the toes to the hip-joint, in which hæmorrhage cannot be eliminated as a factor of danger to the patient's life. And even when extensive bleeding has occurred before amputation is undertaken, the introduction of hot salt solution into an exposed vein, or in a vein at the bend of an elbow, does much to eliminate the great danger of shock from hæmorrage. Therefore, beyond the saving of blood and of as much of the limb as is possible, I have never practiced any fixed rules as to *how* to amputate. Even in the formation of flaps we should make the flap always with the view of saving as much as possible of the limb. With a single exception, I have considered the tarsus and meta-tarsus as a single bone, paying no attention to joints, taking only the precaution to remove any thin film of bone or cartilage which might still remain when the saw passes the articulations. The only exceptions to this rule are (1) in the matter of an amputation at or near the ankle-joint. From experience I am convinced a better degree of usefulness can be obtained by a properly adjusted artificial foot to the stump of a Symes' amputation, than to one which saves either a portion of the os calcis (Pirogoff), or when part or all of the astragalus is left in (Hancock). From the ankle to the hip, the same conservative idea should prevail, unless (2) the line of the saw passes within one inch of the knee-joint, or (3) above the trochanters. In these conditions, it is conservatism to remove the upper end of the tibia and amputate at the knee-joint to enucleate the head of the femur. In amputations of the hand, the preservation of as much tactile sense, together with as much of the member as possible, should be the rule. This should hold, especially in the case of those who use the hand in any avocation. In certain cases of those who do not labor, amputations which sacrifice even more of the member are justifiable. For example, a more shapely hand is often left by the removal of a portion of the metacarpal bone with the finger.

In the effort to prevent loss of blood in an amputation, it may not be always essential to success to force out all the blood that is in the member to be sacrificed. When the quantity of blood is normal, or nearly so, and there has been no hæmorrhage and the patient is in good condition, the sudden crowding of the blood that may be in the limb, such as the lower extremity, into the remaining vessels, may put a strain upon the heart that will produce a serious result.

Of the seven hip-joint operations that I have performed by my own method, the only case I lost was that of a young man, about nineteen years of age, with a sarcoma of the knee. Estimating all the blood that ran out of the wound from the leg, he did not lose in all more than five ounces. The pulse was full and bounding after he was put to bed, and it seemed to me that it was one of the most favorable cases I had had. I left the patient in the hands of an assistant and went to the country; the man went into shock about three hours after the operation and died without ever having reacted. His kidneys were normal; the anæsthetic given was ether, with an Ormsby inhaler, and the quantity was very small. He died, in my opinion, from heart fatigue. The strain on the heart muscle, especially the right side, was too great, and it quit work.

In emptying the member of blood, elevation of the extremity will cause the greater part to gravitate into the vessels of the trunk. In anæmic cases, application of the Esmarch bandage from the periphery almost to the location of the disease,

skipping over this and again applying it above the seat of lesion, will entirely exsanguinate the member, with the exception of a small quantity of blood which may be contained in the diseased portion.

When, as in an amputation at or near the ankle-joint, a rubber tourniquet is applied to the thigh, care should be taken to use a wide rubber band and not a rubber tube, since the accumulative pressure of the rubber tubing is sometimes great enough to injure the nerve. I have seen paralysis follow in several instances as a result of traumatic neuritis caused by the tourniquet.

In high amputations near the shoulder or hip, this objection does not prevail, since pressure on a nerve is immaterial at that point.

In Symes's amputation, I have modified the incision, and carry it from the tip of the malleolus on either side directly downward, parallel with the axis of the leg. In this way the blood supply to the flap, especially on the inner side, is not interfered with (as demonstrated by myself in 1876), which was often done when the incision carried obliquely backward, as advised by Gross and other older surgeons. Professor Stephen Smith pointed out the clinical fact that sloughing of the inner side of the flap occurred in a considerable proportion of cases, and my dissections demonstrated the fact that the oblique incision divided the posterior tibial at or near its bifurcation, and that the chief blood supply at this part of the flap came from the extrnal plantar branch of that artery and from the posterior tibial at the bifurcation; and that it was important, therefore to leave at least a half or three-quarters of an inch of the external plantar artery intact. The pocketing of the flap is not objectionable and can be in great part remedied by making a much shorter anterior flap, the lines of the incision being well above the level of the ankle-joint. I have discarded in general amputations of the leg or arm, any method looking to obtain a long posterior and short anterior flap (Teale), with the idea of bringing the cicatrix away from the end of the stump. I have always held that a circular skin flap, with or without a lateral incision as the emergency may demand, is the ideal flap, the muscles being dividend a inch or more above the level of the circular incision through the skin, and the bone sawed on a level with the muscle. Dissection of the periosteum from the end of the bone in order to secure the periosteal flap, is entirely unnecessary and should not be done.

In certain cases of amputation, when osteomyelitis has prevailed, it was thought that the surgeon might be called upon to carry his amputation high up, close to the shoulder or hip-joint, in order to get above the disease in the bone. This is not good surgery, for the longer limb, the more useful to the patient, and bones that are the seat of osteomyelitis can be readily cured, provided the canal is opened even near the knee or elbow-joint, and the bone carefully curetted up to the canal. The insertion of a drainage-tube, through which aseptic irrigation is made every day or two, and the *gradual* withdrawal of the tube, will cure the disease in the bone and leave the stump long and useful. I have, in several instances carried out this plan with invariable success.

One other point has been of great service to me in effecting rapid amputation. When making a hip-joint amputation, or an amputation through large masses of muscular tissue, after tying large arteries, such as the two femorals and the circumflex branches, in order not to lose time that is usually spent in applying forceps to oozing surfaces, I pass deep catgut sutures through great masses of muscle all the way across the whole cut surface, and tie these firmly. In this way the muscles are brought together and compression exercised which prevents bleeding. Ten or fifteen minutes can be saved by this practice in an ordinary amputation. In the last hip-joint amputation I did by the bloodless method, although I made no effort at haste, the operation was done, the vessels tied, and the disarticulation completed in twenty-five minutes, the tourniquet still remaining on until the wound was ready to be closed by sutures. In this amputation I now apply the tourniquet higher than at first advised. Experience has taught me that complete control of hæmorrhage can be obtained by carrying the strong white rubber tubing close in the crotch, where it is held by the inner pin, while the other pin is so inserted that the tube passes in the notch just below the anterior superior spine of the ilium, from which the sartorius muscle originates. In this way the pressure is entirely above the level of the hip-joint, the capsule can be opened, and disarticulation rapidly effected without any attention to the tourniquet. If the tourniquent is not tightly applied when the bone is removed and the rubber tubing is slackened by diminished resistance, there may be some slight dripping from the vessels in the posterior part of the flap, but this is immaterial and can be immediately controlled by pressure with the fingers and the application of artery forceps.

It is not necessary to emphasize to this Society the point that in amputating for malignant disease, it is the better surgery to get just as far from the lesion as possible, shaping the flap to meet this object.—*The International Journal of Surgery.*

WHEN SHALL WE TREPHINE?

BY W. L. BUECHNER, M. D., YOUNGSTOWN, O.

Fractures of the skull have always been considered among the most dangerous injuries the human body can suffer, and accordingly we find already in the most ancient times a strong effort to remove the danger of such injuries by surgical interference. The operation performed for that purpose "trepanation" was well known to ancient surgeons.

Hippocrates gives in a clear and concise manner the indications for the operation, and the perfection of his instruments and his technique are astonishing. Celsus, Galen and Heliodor improved the technique of the operation. After these men had passed away surgery underwent a stage of decay, and the operation was forgotten, the Arabs being probably the only people who preformed it. Abulcasis speaks about the operation and recommends it, but never preformed it on a living subject. Avicenna did.

Guido de Cauliaco revived the operation, and gave the same indications for its performance as his predecessors. Berengarius, who lived at the same time—in the 17th century—trephined in every case of fracture of the skull. The operation now became rather popular and was performed by Parè, Lange, Hildanus, Mariano Santo and others. Marc Aurel Severinus and Dominicus de Marchellis trephined for insanity, epilepsy and even chronic headache. Heister—1750—is very cautious, giving the indications for the operation, he says, it should never be performed withont urgent necessity and as an ultimum refugium, of which the ultimate result could never be predicted. Petit — 1787 — first described the difference between concussion and compression of the brain, and considered the latter the principal danger of injuries of the skull, and he trephined, to avoid it. Potts—1787—thought the danger was due to contusion of the cranial bones and dura mater and the subsequent suppuration under that membrane, therefore he trephined to give the pus a free exit.

For several decades trephining was done in a rather promiscuous way, and it took the authority of a Desault, to check this trepanation mania. He only advocated the operation in cases of severe compression. For many years the most preminent surgeons were divided on the question of the advisibility of the operation. Le Dran, Quesnay, Sabatier, Louvrier, Mursinna, Rust, Boyer, Zang, von Klein, von Walter, Beck, Blasius and Sedillot advocated Pott's idea, to trephine for every fracture of the skull.

Desault's followers were such men as: Schmucker, Richter, Bell, Abernethy, Brodie, A. and S. Cooper, von Kern, Richerand, Dupuytren, Malgaigne, von Graefe, Langenbeck and Textor.

Astley Cooper condemns the operation strongly in subcutaneous injuries of the skull, admits its usefulness in some cases of compound fractures, but warns very emphatically not to injure the dura mater. He says: "When you preform this operation, there is only one step, a very delicate texture, between your patient and eternity, injure that membrane and in most cases death will follow." Richter and Dupuytren held about the same opinion. Malgaigne says: "It is my full conviction, that the whole teaching of the necessity of the trepan is a lamentable error, which has lasted many years and sacrificed even in our days too many human lives." Dieffenbach says, for many years he was more afraid of trepanation than of the head injuries, and in most cases he considered the operation a sure means of killing the patient. In many hundred cases, where he did not trephine, he lost but few patients, while he lost a majority of the cases where he operated. Stromeyer only consents to the operation under two conditions: To remove foreign bodies or to evacute the pus of a surely diagnosticated and located abscess of the brain.

Bruns says: "Trepanation is indicated in all cases where it becomes necessary to remove from the cranial cavity or its walls a substance, which has either mechanically or chemically a detrimental effect on the brain or its membranes, when that cannot be done by milder and less dangerous means, and is there is a probability that the patient will succumb, if the damaging influence is not removed, and if no other injuries or morbid conditions exist, which would in all probability kill the patient, even if trepanation should be successful."

Gross, Agnew, Ashhurst and many other American surgeons advocate the operation.

We rather agree with Bruns' views as to the proper indications for the performance of the operation, and would consider it necessary to operation:

1. In any fracture of the skull, either simple or compound, where there are symptoms of intracranial mischief.
2. If there is **much** localized depression, indicating the probablity of either immediate or remote evil consequences.
3. In all cases of punctured fracture.
4. For the removal of foreign bodies.
5. In cases of compression of the brain from blood, pus or tumor, where the offending cause can be located with a reasonable degree of certainty.
6. In cases of epilepsy, where the traces of the injury originating the disease can be recognized.

—*The International Journal of Surgery.*

TREATMENT OF FRACTURE OF THE PATELLA WITH CONTINUOUS EXTENSION AND WITHOUT CONFINEMENT TO BED.

BY JOSEPH D BRYANT, M.D., NEW YORK.

It is not my intention to call to notice anything essentially new, nor to make any portentious claims of the great benefit to be derived from giving heed to what may now be said regarding the subject of this paper. However, it is the intention of the writer to renew suggestions already made by him some time since bearing on the questions of personal comfort and the proper physical status of patients who are suffering from fracture of the patella, and who for any reason are regarded as improper subjects for operative procedures or for continuous confinement in bed.

About three years ago this method of treatment of fracturef o the patella was presented to the attention of the profession by the writer, along

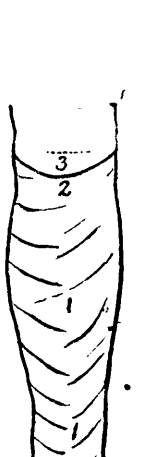

FIG. 1. —1, Plaster-Paris applied to leg; 2, upper part of splint resting against lower fragment 3; 3, lower fragament and line of fracture.

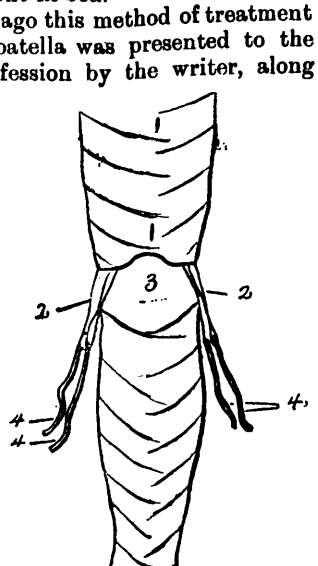

FIG 2.—1, 1, Extension applied to thigh; 2, 2, front view of extension straps; 3, fractured patella; 4, 4, rubber extension.

with a statement of the results in nine cases thus treated. Since that time several additional cases have been added to the record. It appears to me that I can do no better now than to describe again the method of application of the apparatus. In doing so, the verbiage of the previous description will be employed very largely, indeed—amended, of course, here and there by suggestions and modifications that are the legitimate product of a greater experience. The application of the mechanism can be properly divided into four steps:

First Step (Fig. 1).—This step consists in the application to the leg of a plaster-of-Paris splint extending from the bases of the toes up to and partly surrounding the lower fragment of the patella (3, Fig. 1). The plaster casing is applied closely to the leg at a time sufficiently in advance of the succeeding steps to permit of its becoming thoroughly hardened. The upper and anterior border is carefully shaped so as to hold the lower fragment of the patella in proper position.

The functions of this splint are threefold: (1) It affords ample protection to the foot of the patient from the effects of the pressure of the rubber extension which passes across the sole from side to side. Practically the extension acts on the tissues of the thigh from the sole of the foot. (2) It confines the lower fragment in position at the outset and it is maintained there by the upward pressure of the splint, due to the force of the elastic extension as it passes across the sole of the foot (Figs. 1 and 4). In any event, the pressure of the splint at this point can be easily regulated, either by cutting away or padding it at the border contiguous to the lower fragment. (3) It gives proper support to the lower extremity of the extending-brace of the apparatus (Fig. 4).

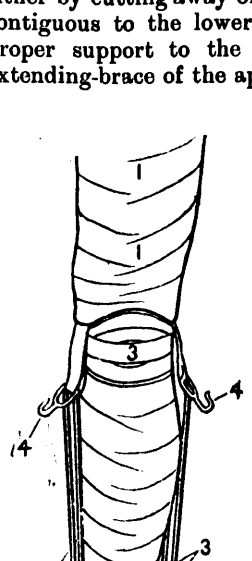

FIG. 3—Front View of Extension.

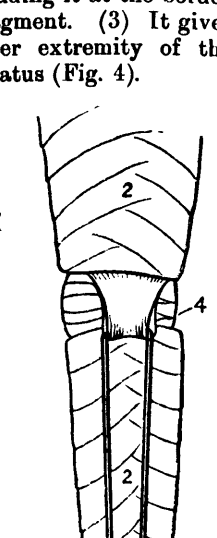

FIG. 4.—Side View of Complete Apparatus.

Second Step (Fig. 2).—The measures of the second step are quite as strongly expressed by the illustration depicting it as words can define them. It consists in the application to the thigh of an adhesive plaster extension fashioned after the manner of the well-known Buck's extension, which in this instance reaches from the perineum to the upper border of the upper fragment (Fig. 2, 1, 1). The adhesive-plaster element of the Buck's extension is at that time held in place by the application of an ordinary roller, as usual. The plaster terminates in the form of loops at either side of the limb a little below the knee. The rubber extending-cords are passed through the loops (Fig. 2, 4, 4) or attached to hooks connected with them (Fig. 3, 4, 4). Moderate extension is then made on the loops by the elastic cords, to draw downward as far as proper the superficial soft parts of the thigh and the upper fragment of the patella. While extension is thus being made, the thigh is encased in a plaster-of-Paris splint reaching from the upper limit of the adhesive plaster down to the upper fragment (Fig. 3, 1, 1), where it is so fashioned and padded as to hold this fragment as nearly in contact with its fellow as possible.

The objects of this plaster-of-Paris addendum are: First, to aid in holding the adhesive dressing of the thigh in as firm position as necessary; second, to afford a support for the upper end of the posterior extending-brace already mentioned; third, to coaptate the tissues of the thigh, thereby exercising a controlling influence over muscular contraction; fourth, the making of direct extension on the quadriceps extensor, by reason of the close application of the splint to the upper fragment of the fracture and the tissues contiguous to it.

Third Step.—This step consists in placing the posterior support or brace in proper position and fixing it there by means of plaster-of-Paris rollers carried around it and around the upper and lower segments of the splint where they lie in contact with each other (Fig. 4). These bandages should hard quickly, and thus incorporate the posterior support at the upper and lower ends firmly with the plaster-of-Paris structure at these situations (Fig. 4, 2, 2). A strip of wood about two inches in width, an inch and a half in thickness, and of sufficient length, placed parallel with and close to each other, will meet the demands of a support.

Fourth Step.—This step consists in drawing together the fragments of the patella as firmly as possible, either with adhesive strips obliquely applied, as is commonly done for this purpose, or the attainment of the object by means of a knee cap suitably constructed and applied to meet the same ends. If strips of adhesive plaster be employed, they are fastened in place by attaching them to the uncovered parts of the posterior support (Fig. 4, 4,). If the knee cap be used instead, it is applied without reference to this support. In applying the plaster strips at the line of junction of the fragments, care should be taken or the strips will be drawn between the fragments and thus interpose an obvious obstacle to proper repair. The hamstring tendons should be properly padded, so that neither the adhesive strips, the knee cap, nor the leather collars of the text-books can cause pressure or chafing of them. And, too, either of the above agents can be more readily and serviceably applied if the extending force be drawn aside to permit of greater room and more careful application. After the apparatus is comfortably in position, the patient is permitted to walk about with the aid of crutches, the limb meanwhile being supported in an advanced position by the agency of a sling carried beneath the sole of the foot and around the neck of the patient.

The apparatus should be made as light as is consistent with proper strength and service. In fact, it is not always necessary to embed the posterior support in the plaster-of-Paris by the addition of more of this material; but, instead, the posterior support may be bound in position by a firm roller bandage applied at either extremity of that structure. The adhesive plaster strips aid also in holding the posterior support in position.

I will not detain you by narrating the various changes that can be made in the utilization of individual elements of the apparatus, as these will be apparent as the circumstances suggesting them shall appear. Thus far thirteen cases of fracture of the patella have been treated under my observation by this method. The results from the treatment are equal in all respects to those obtained by other mechanical non-operative measures. The plan is presented not as a substitute for operative measures, but as an adjunct to them, as the patient can, with this appliance, be about without special danger or discomfort after wiring, etc., and closure of the wounds of the soft parts. The idea is to accomplish, without long confinement in bed, a cure that is equal to one ordinarily attained only by the sacrifices incident to such a confinement.—*Med. Rec.*

Never operate for chronic tumor without having tried anti-syphilitic remedies for at least a week. Many growths supposed to be beyond surgical skill, fairly melt away under the benign influence of mercurial ointment or iodide of potassium. This clinical test is far surer than the microscope.

MEDICINE

IN CHARGE OF

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THE CAUSE OF DEATH OF PROMINENT PERSONS.

BY RALPH S. MICHEL, M.D., SPRINGBORO', OHIO.

A curious incident attaches to the demise of a friend. When "the rider of the pale horse" stops at the house of a friend, we seldom fail to inquire the cause of death. Death is to us so deep a mystery. It changes a being full of energy and life and hope, into an inanimate object, with a rapidity that is appalling. We stand aghast in its presence. The friend, whose welcome smile we meet to-day, is dead to-morrow. We eagerly inquire the cause. So it seemed to me that it would be of interest to make a collection of facts in regard to the death of celebrated persons ; those whom we have learned to know and love from their written pages ; and those whose deeds have moved men's hearts in the times in which they lived. It is impossible to ascertain the cause of death in many instances. Diagnosis has acquired a degree of accuracy but very recently. In many cases the cause of death is given as "fever," which is indefinite. And often the cause is unknown or not stated. The following, however, is believed to be reasonably accurate.

Early in the spring of 1616 Shakespeare and his boon companions, Ben Jonson and Michael Drayton, spent the evening at a tavern at New Place. All became too much intoxicated to reach home, and laid out all night on the ground. The consequence was to Shakespeare a "fever" of which he died in a few days. It was undoubtedly pneumonia.

Lord Bacon died at 65, a martyr to science. While riding one winter day, it occurred to him that snow would preserve flesh, as well as salt. Accordingly he alighted, bought a hen, and stuffed it with snow, at which operation he became much chilled. He was too sick to return home, but stopped at the house of a friend. Their kind hands put him in a cold damp bed—the "best room" perhaps—and he died in a few days. Probably pneumonia.

Burton, author of "The Anatomy of Melancholy," believed in astrology. He calculated by the stars the time of his death. He died at the time assigned, but was suspected of taking something to hasten it in order to make it conform to his calculation.

"O Rare" Ben Jonson had several attacks of apoplexy. As a consequence his mental faculties became much impaired. His last days were dark and gloomy.

Ben Franklin had gout ; also cystic calculus, and the attendant inflammation of the bladder confined him to bed for a year. He was then 84. The immediate cause of death, however, was abscess of the lung.

Washington died at 67, of acute laryngitis, complicated with œdema of the glottis. On December 12, 1799, he rode over his estate on horseback. It was a day of rain and sleet, and he became thoroughly chilled. He contracted a severe cold, and at the end of two days was very sick. Before sending for the doctor he had his overseer to bleed him. When the doctor came he bled him again. Still there being no improvement a consulting physician was called. They bled him again. Being no better, they gave him tartar emetic and calomel. They also applied fly blisters to his throat. The medical treatment has been the subject of much criticism.

Edward Gibbon, the historian, had the largest hydrocele on record—as large as a bucket. Repeated operations for relief exhausted him, and he died of a "fever" brought on thereby at 57.

Napoleon died of cancer of the stomach.

Thomas Gray, author of "An Elegy Written in a Country Churchyard," died at 55. He was subject to hereditary gout. One day at dinner he was taken suddenly and violently sick, with pain in the stomach, and died on the sixth day.

Burns died at 37. Of convivial habits, he perished from drink and exposure. One day in January, 1796, he dined at a tavern in Dumfries. He was barely convalescent from a spell of sickness, and was in no condition to stand exposure. The night was very cold, and Burns, wandering

homewards in an intoxicated condition, sat down upon a doorstep, and fell asleep. Rheumatism supervened, and although he lived until the next July, he never recovered. During the last few days of his life, he was in a state of low muttering delirium.

Byron was born with "club foot." His mother, who was a misanthrope, always spoke of him as a "lame brat." This defect was finally remedied to the extent of enabling him to wear a common boot. He early showed signs of obesity. This was to him a matter of much chagrin, and he combatted the tendency by very low diet and medicine. He died in Greece at the age of 36, of heart complication, coming up during an attack of acute inflammatory rheumatism. Death was sudden.

Cromwell died of remittent fever.

Sir Walter Scott had several strokes of apoplexy. His memory failed, and softening supervened. The end came at 61.

Shelly was drowned by the capsizing of a boat in the bay of Spezia.

Keats died of consumption.

Voltaire died of strangury, probably due to enlarged prostate. Very much has been said by ecclesiastics about the agony of his last days, as though it was a judgment for his outspoken agnosticism. What nonsense! In the days of 1778, when this condition received no treatment worthy of the name, what physician would doubt but that the last days of Voltaire dying at 84, of strangury, must of necessity have been agonizing?

Galileo had stone in the bladder. With care he might have lived to shed upon that benighted time the rays of his intellectuality much longer. But he and the church differed on astronomy. Galileo asserted that the earth travels around the sun. The church would brook no such heresy. Galileo was dragged out in winter, jolted over rough roads in bad weather, to appear before the Inquisition. Exposure, imprisonment and ill-usage killed him—a martyr to progress.

John Milton died at 65, of "gout fever," or "gout struck in," as it was called—our gout retrocedent. It is a condition in which gout leaves the joints, and attacks some internal organ.

John Bunyan rode home in a heavy rain, took a "fever" and died.

Sir Isaac Newton was long a sufferer from gout and stone in the bladder. He is supposed to have died from the latter.

Dean Swift once pointed to a dying tree, and said: "I shall be like that tree—I shall die at the top." He had Ménière's disease, producing paralysis, then aphasia, and finally a decay of all the mental faculties. He lived a year without speaking a word.

Edgar A. Poe was picked up in the streets of Baltimore, one morning in 1849, and taken to a hospital, where he died without regaining consciousness. His death was attributed to drink and exposure. There has always been a suspicion that he may have been the victim of an assault. Age 38.—*Jour. Am. Med. Assoc.*

SYPHILITIC SPINAL DISEASE.

Dr. Sottas has published an elaborate study of syphilis as it affects the spinal cord. From the *International Medical Magazine* we learn that the author has formulated the following conclusions as resulting from his observations on this important subject: 1. Syphilis can act on the nervous system in two ways: First, directly; in attacking the parenchyma, it determines thus at the onset of the affection the first vague nervous troubles of the secondary period, and later, perhaps, certain systemic affections, as tabes. This mode of action is not clearly explained, for there are no anatomical characteristics which permit us to recognize the origin of the affections which are attributed to it. Second, indirectly, in producing an inflammation of the vascular, lymphatic, and connective-tissue elements. The alteration of the parenchyma is secondary to these lesions. The reality of this process cannot be disputed; it is affirmed by the aspect of the inflammatory lesions, which, although not special to syphilis, are nevertheless to a certain point characteristic of this affection. The process can strike all parts of the cerebro-spinal system, but is limited sometimes exclusively to the cord. 2. Syphilis of the cord appears at a period near that of infection, with a maximum between the end of the first year and the end of the sixth, and is much more frequent in men. 3. The inflammation begins with the vascular walls and perivascular regions and involves especially the small vessels of the periphery of the cord. In the large vessels it involves the internal and especially the external tunic, developing about the vasa vasorum. From this point it involves the perivascular lymph space, afterward the lympatic system of the meninges, and finally the entire arachnoid cavity. The infection spreads by the circulatory system and rapidly in the lymphatic system, where it assumes an independent form. At this period the lesions are constituted by: An inflammation of the vascular walls, which attains its maximum in the veins and small vessels; a diffuse general infiltration of the connective tissue of the meninges, an irritation of all the surfaces bathed by the cerebro-spinal fluid (surfaces of the meninges, ventricular walls). These inflammatory lesions are characterized by a tendency to nodular formations

(miliary gummata of the meninges, of the vessels of the cord). 4. The alterations of the nervous parenchyma, of the essential elements, and of the neuroglia are secondary; they may result from imperfect nutrition on account of the vascular lesions of the cord and of the nourishing membrane, or from an invasion of the medullary parenchyma by the specific infiltration. The first is the more important cause. 5. According to the intensity, the distribution, and the rapidity of evolution of the primary lesions, the anæmic necrosis of the nervous tissue appears abruptly as a transverse softening, which may be located at different points of the cord or predominate in one or the other vascular department; or else it appears slowly, and then the destruction is accompanied by a process of substitutive reaction of the neuroglia, which replaces the destroyed elements. This period of substitution is favored by the partial return of the circulation (collateral circulation, development of the vasa vasorum, formation of new capillaries in the obliterated vessels), and terminates in the neuroglia sclerosis. The connective tissue which enters the cord with the vessels is also thickened. 6. Although the necrobiotic lesions followed by selerosis constitute the principal alteration, there are certain medullary and especially radicular changes, which result from the invasion of the nervous tissue by an infiltration extending from a point in the meninges or from a perivascular sheath. This process can in certain cases assume a considerable importance. 7. While the lesions preserve the same characters, they may vary in their distribution. They are generally diffuse, but they sometimes assume the aspect of a transverse lesion, more or less intense, more or less limited, and located at different heights of the cord. They can be distributed more irregularly in a considerable extent of the cord. In every case they are more marked in the marginal zone. The dorsal location is the most frequent. Be the lesions confluent or be they disseminated, the result is always the same, and they produce the effect of a transverse lesion accompanied by a secondary degeneration ascending and descending. The lesions involve especially the territory of the postero-lateral spinal vascular system. They may predominate in certain regions of the cord—the lateral columns, the posterior columns, the gray substance of the anterior horns—and thus simulate certain systemic affections. 8. The ordinary clinical evolution is the following: At the period of formation of the primary vascular lesions and of those of the meninges, there are diffuse premonitory phenomena. At the period of softening and of degeneration of the nervous elements there is an attack of paraplegia, followed by paralytic phenomena and grave trophic troubles. At the period of sclerosis there is the chronic spastic paraplegia. The abrupt onset can be manifested without being preceded by a prodromic phase, or in other cases the spastic paraplegia comes slowly without passing through the acute stage. 9. Death may occur either in the first period of the affection from the localization or extent of the lesions, or more slowly from the progress of the affection, or from a complication. The ordinary termination of the affection is a spastic paraplegia persisting in a chronic state after an amelioration more or less marked. The complete recovery is possible only in certain conditions, when the primary vascular and meningitic lesions have been arrested before the final destruction of the nervous parenchyma. The reorganization of the necrosed nervous tissue, if it is possible, is manifested only in a limited degree. 10. In certain conditions the primary inflammation is accentuated in the meninges, producing a meningitis or a pachymeningitis, or else it assumes the form of a circumscribed gummatous neoplasm. 11. The iodo-mercurial treatment is demanded at the appearance of the first symptoms. It acts only on the primary inflammatory productions and is without influence on the necrobiotic lesions once established. 12. The medullary syphilis is always a serious affection. Death may intervene in spite of treatment, especially in the acute forms. Outside of certain rare fortunate cases in which complete recovery is obtained, the amelioration never goes beyond a certain limit, which is fixed, on account of an incurable sclerotic cicatrix of the cord.

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40 cases of subacute and chronic bronchitis with unvarying success. One case was peculiar, inasmuch as it was associated with asthma and had been under treatment of many physicians, and without relief. I consider it of sufficient interest to relate.

Miss A., an American, æt. 19, consulted me on 17th November, 1894, with the following symptoms well marked. She said that in the previous spring she had an attack of la grippe, which kept her in bed for three weeks. As convalescence set in she had a relapse which developed into a pneumonia, during the course of which she came near dying. Her convalescence was very tedious and she was left as sequelæ, a chronic cough which, on examination, I found was chronic bronchitis, all of the symptoms being present. At the time of my first visit she was in bed, well bolstered up with pillows, and, on inquiry, I found that it was impossible for her to lie down, from the persistent attacks of asthma from which she suffered.

She was anæmic, emaciated, little or no appetite, a persistent cough with but little expectoration. The bowels were constipated, and all of the organs seemed to be in a generally disordered condition, without being actually diseased. Small doses of calomel soon relieved the portal circulation and the bowels were kept regular by simple laxatives. Stearns' Wine of Cod-Liver Oil was administered, at first in teaspoonful doses four times a day, gradually increased to a tablespoonful three times a day. It was not long before a change took place, the first symptom to be relieved being the asthma. She could sleep better, and gradually the pillows were withdrawn, until she slept as others do in the recumbent position. Soon the cough began to lessen, the appetite to return, and in two months' time she had entirely recovered. Aside from the calomel and the laxative, she did not take another thing in the way of medicine during the whole period of my attendance.

This case, while possessing some points of unusual interest, is not, in the main, unlike many others which I have treated with this preparation and with such unvarying results, that it has become almost a routine.

In phthisis, it relieves the symptoms and lessens the strain upon the general system. I have used it with great advantage in cases of simple chlorosis.—E. E. Stilwell, M.D., in *New England Medical Monthly.*

ALBUMINURIA DURING PREGNANCY.—In a paper on this subject, Dr. Harry G. Utley (*American Journal of Obstetrics*) says that albuminuria is simply an indicative symptom. Its meaning and import must be determined by the gravity of any coincident pathological renal condition (as shown by the urinary examination) and by the presence and degree of severity of the general manifestations of kidney disease. The treatment, therefore, is to be directed to the condition or set of conditions with which the albuminuria is connected or with which it is dependent, and its permanent disappearance will signify that the harmful processes or conditions with which it is related have become inoperative. Most naturally the therapeutic indications are suggested almost altogether by the condition of the kidney, the amount of elimination it can probably do, and the probable amount of noxious substances in the body to be eliminated, which latter condition can be made evident only the signs of uremic intoxication. It every instance it is wise to curtail the further production of toxin by restricting the amount of nitrogenized food. An exclusive diet of milk seems to fulfil the indications admirably, serving at the same time as a mild diuretic. The author has frequently seen albumin disappear altogether by the use of this measure alone. This result would seem to add some force to the proposition that albuminuria is often due to the presence and influence of these toxic materials. Excellent results may be gained by employing a mixed diet of foods poor in nitrogen, viz.: bread, butter, fruits preserved or fresh, vegetables in limited quantities, etc., of which only a sufficient quantity to sustain nutrition should be taken, for any excess has to be eliminated by an already over-worked kidney. This measure greatly relieves the kidney and puts it in position to more effectually and quickly recover. Further, if circumstances demand or even justify it, the elimination of the harmful materials may be both hastened and accomplished by the use of the other emunctorial channels—the bowels and the skin. The indications for using one or both of these, as well as the degree to which their functions should be stimulated, must be suggested by the merits of each individual case. They should in all cases be kept active. The bowels may be "appealed to" with very satisfactory results by the frequent administration of the compound jalap power, say in drachm doses every other morning, or any of the hydragogue cathartics, which will be found especially useful. As to the skin, its action may be encouraged by resorting to the hot bath, the steam bath, the hot-air bath, or the hot pack. The employment of the medicinal diaphoretics, especially pilocarpine, is not indicated except as a last resort, and even then the use of this agent should be extremely guarded, for the reason that pulmonary edema is very often the result and the burden of cardiac depression is put upon the patient,

possibly already struggling for life. It is probably neither wise nor necessary to unduly stimulate the skin function unless signs of beginning uremia are evident, and even then their gravity should dictate both the method and the extent and frequency of its employment. The wisdom of the use of the stimulating diuretics to aid elimination by the kidneys is much to be questioned, at least in those cases not showing symptoms of uremic intoxication, for it seems grossly unjust to goad on an already crippled organ when the same or a better result may be gained by the timely and judicious use of the eliminative powers of the bowels and skin. The high blood pressure incident to pregnancy can not be overcome until delivery is accomplished; but it is not proposed to refer in this article to the indications for the inducement of premature delivery. The above principles of treatment, in addition to the fulfilment of any symptomatic indications that may arise, if prudently employed will bring much relief to the kidney laboring under untoward circumstances, and yield grateful and lasting satisfaction to the conscientious "man of medicine" in whose hands the destiny of so many innocent lives reposes.—*Med. Rec.*

PREDISPOSING CAUSES IN FACIAL PARALYSIS.—Neumann *(Neurol. Centralbl.)* considers that in most cases where cold is the exciting cause of so-called rheumatic facial paralysis, there is also a predisposition which in many cases is hereditary. Two cases are quoted in which facial paralysis arose from quite trivial causes in patients whose antecedents showed in the one case migraine in the mother, and neurasthenia with facial twitchings in the father; in the other facial paralysis in the father and insanity in one aunt. In such cases hereditary weakness of nerve tissue, particularly of the facial nerve, is supposed to predispose to the molecular changes which interfere with conduction. These changes, although in the severer cases presenting the appearances of parenchymatous neuritis, may show no visible change in the slighter ones. The predisposition may, however, be acquired. The facial paralysis occurring in association with certain constitutional diseases, for example, diabetes, syphilis, tuberculosis, would be thus explained, the general disease weakening the nervous tissue, and thus predisposing to the local condition on exposure to some local cause, however slight. The special liability of the facial nerve to be affected he considers due not so much to its exposed position, else the ulnar should often be affected, but to the large number of lymphatics and lymphatic glands surrounding it at its exit from the stylo-mastoid foramen. Stagnation of lymph would favor morbid changes in the neighboring nerve, and such stagnation would be particularly likely to occur at night; hence the frequency of nocturnal onset of facial paralysis.—*Brit. Med. Jour.*

ACROMEGALY.—Tamburini analyses 24 published cases of acromegaly. In 17 of these there was tumor of the hypophysis cerebri; 8 of these were examined microscopically as well as macroscopically. Of the 7 cases in which no lesion of the hypophysis were observed, in 2 the disease was only six months old, so there was not time for gross change in the hypophysis, and it was not examined microscopically; in 2 others the disease was more probably osteo-arthropathy of pulmonary origin, and the other two were doubtful cases. So that the typical disease seems to be closely associated with affections, chiefly tumors, of the hypophysis. Various kinds of growth have been met with, the commonest being adenoma and its congeners. Adding a case of the author's, of the 18 the thyroid was hypertrophied in 9, atrophied in 1, normal in 3, and no record of it in 5. The thymus persistent in 8 cases failed in 3, no record in 7. Sympathetic ganglia hypertrophied in 6, normal in 2, unobserved in 10.—*Brit. Med. Jour.*

TUBERCULOSIS OF THE SOFT PALATE.—Brocq (*Jour. de Méd.*, March 10th, 1896,) describes the case of a woman whose soft palate was covered by a series of small ulcerations having a punched-out appearance of some depth. There was also considerable infiltration, and on the surface a number of small yellow points. There was also laryngeal tuberculosis, and the author was certain of the tubercular, nature of the palate lesion. An interesting point was that the whole of the velum palati was involved, notwithstanding that the history was of only two months' duration. In this instance the patient was pregnant, and the writer draws attention to the rapid course of these somewhat anomalous tuberculous affections under such circumstances, a rapidity which he says in some cases may give rise to hesitancy in diagnosis. He recommends lactic acid in the treatment of buccal tuberculosis.

The *London Lancet* of March 28th, 1896, says editorially:—"Antikamnia is well spoken of as an analgesic and antipyretic in the treatment of neuralgia, rheumatism, etc., etc. It is not disagreeable to take, and may be had either in powder or tablet form, the being made in five-grain size. It is described as not a preventive of, but rather as affording relief to, existent pain. By the presence in it of the amine group it appears to exert a stimulating rather than a depressing action on the nerve centres and the system generally. If this be so, it possesses advantages over other coal-tar products."

OBSTETRICS AND GYNÆCOLOGY

IN CHARGE OF

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OBSTETRICAL SUPERSTITIONS.

In no department of medicine does the practitioner meet with so many absurd superstitions and traditions as in the practice of obstetrics. Like all superstitions, they are difficult to eradicate, and woe to the venturesome practitioner who undertakes the job; he is at once set down as having very little knowledge and less experience. It is not my purpose to give a list of these superstitions or traditions, but merely to mention some of the most common ones, laying special stress upon those productive of great harm to the lying-in woman and her off-spring.

As soon as a woman is known to be pregnant she is overwhelmed with advice from those of her friends who have been through the mill; even the husband does not always escape, but is commiserated with an account of morning sickness, though I have never seen a case in the masculine that could not be more properly ascribed to the worship of Bacchus than to that of Venus. A favorite and largely advertised remedy for lessening the pains of labor is known as "Mother's Friend"—an ointment, to be rubbed daily over the abdomen, said to insure an easy and uncomplicated labor; I have heard intelligent and well educated women highly laud this remedy. The prospective mother is urged also to look only at beautiful objects of art, etc., if she desires a pretty child. I have known these same well educated women to invest in a beautiful picture and spend hours each day wrapped in contemplation of it; less frequently they betake themselves to the study of higher mathematics and the sciences, hoping by this means to bring forth a being of extraordinary intelligence. Some of the friends also predict with confidence the sex of the child according to the manner in which it is carried. When labor begins, there comes a deluge of suggestions as to the position the woman should assume: if she extends her arms above her head, she is at once told to lower them, as such a position will knot the cord around the neck of the baby and produce its death. If her pains are very severe, and the attending physician advises the use of chloroform, the patient, if a multipara, will probably demur, because So-and-So told her that if ever under any circumstances she took chloroform it would kill her. If the patient does not object, some of the neighbor-women will "chip in," saying that it is not right to give it—that it is flying in the face of Providence, etc.

No labor is without some pain, but in many cases the pain is easily bearable; the ability to bear and to feel pain varies with the individual. I have delivered women who made no outcry and seemed to suffer a minimum of pain; they did not wish to take chloroform, and as there seemed to be but little suffering I did not insist upon its use. But I think it is the duty of every doctor to rob the lying-in chamber of all the agony possible; it is a cruel and disgraceful thing for him to sit and listen unmoved to the agonizing cries of a woman in this the most critical time of her existence when he has the power to safely and easily relieve her. With little effort on his part the lying-in room can be made very much less terrible to the prospective mother, and the frequency of abortions and conjugal onanism be thus indirectly diminished.

In the first stage the pain can be greatly mitigated by the use of chloral hydrate and the hypodermatic administration of morphine. Fifteen-grain doses of chloral given every half-hour until three doses have been taken will produce sleep, and after this the pain sets in with renewed vigor. A full dose of morphine may also be given; it quiets the pain for some hours, but when its effects die out the pains are stronger and more efficient.

In the second stage the analgesic *par excellence* is chloroform. No one now contends that its use in the lying-in room is dangerous. I have been unable to find a single well authenticated case of a death occurring from its use under such circumstances. If a retardation of labor occurs when chloroform is given, it is of short duration; if the

drug is given properly the patient will soon begin to add voluntary efforts when she finds they are less painful than befora,—by giving properly I mean it should never be pushed to the surgical degree, except during operation or when the head is crowding; its use in the latter instance is important, as it enables the accoucheur to control the advance of the presenting part, deliver it in the interval of a pain, and thus diminish the danger of laceration of the external structures.

In regard to chloroform favoring post-partum hæmorrhage, I have never seen a case that could properly be attributed to its use. In quite a large experience the only cases of post-partum hæmorrhage I have seen have been the result of long and fruitless efforts on the part of the mother, resulting in a complete fagging out of the uterus and necessitating artificial aid. None have resulted fatally.

When the child is born and the doctor is preparing to cut the cord, he is sometimes interrupted and told he must cut it longer, as the length of the penis at maturity depends on the length the cord is cut. I have never been able to verify or refute this idea, as the oldest male I have ever delivered is only thirteen. Old nurses insist on burning the afterbirth to avoid the occurrence of afterpains. Also to facilitate the passage of the placenta the patient is told to blow into a bottle or her closed hands or to take snuff.

Too early efforts to deliver the placenta are objectionable; and the practice of Credé's method of expression at the expiration of fifteen minutes does great harm, frequently resulting in retention of a part of the membrane and in cupping of the uterus. It is natural that the uterus should rest after its long labor, and the placenta will be extruded ordinarily when this has taken place.

There is an obstetrical superstition the observance of which has cost numberless lives and desolated many homes, viz., the fancied superiority of the old quilt or "comforter" as an absorbent of liquor amnii, blood, urine, etc. The older and dirtier it is, and the more often it has served in a similar capacity, the more highly it is prized. It is the duty of all physicians to aid in its complete abolition; the means of so doing are within reach of all, the only materials necessary for an aseptic pad being a yard or so of cotton to make a bag, and bran or sawdust with which to fill it. A little absorbent cotton or oakum should supplant the so-called elean rags used to catch the lochial discharge.

Puerperal fever is generally regarded as an unavoidable disease, but if the falsity of any theory has ever been proved it has been this.

Another pernicious superstition is that as soon as the baby is dressed it needs something in the way of nourishment,—usually fat bacon, a sugar teat, whiskey and water, or some variety of tea. The sooner such ideas are done away with, the better. The infant should not be given anything, but after a while put to the breast, and then wait for the secretion of the mother's milk, which will take place before it succumbs to starvation.

There are many other superstitions relating to the child: For instance, it is considered highly improper to take it down stairs before taking it up: Its nails are to be bitten off, for if they are cut the child will be a thief, etc., *ad nauseam*. The mother must stay in bed for nine days and eat nothing but toast and tea,—she was formerly starved, but now she is allowed to eat anything she choses in reason and is kept in bed (if she has had a hard labor) for from two to three weeks. Those of her sisters who get up very early, age much quicker, as witness the North American Indians.—Dr. T. S. Bullock, in *Am. Prac. and News.*

THE WALCHER POSITION DURING PARTURITION.

What are the indications for the use of the Walcher position, and what its objections?

1. Cases of protracted labor in which the dimensions of the pelvis are normal or the antero-posterior diameter is somewhat shortened, the head being above the brim. The patient being placed in the position of extreme extension for an hour or more the pelvic joints may become so relaxed, or the antero-posterio diameter lengthened by the necessary half-inch, that the head will engage and labor be terminated normally or with forceps; the high forceps, version, or symphisiotomy being avoided.

2. Cases in which version, either cephalic or podalic, has been performed, or footling or breech cases. The flat pelvis, the generally contracted pelvis, transverse positions, occipito-posterior positions, are in this category. The cases which were quoted show that in some instances labor will be terminated naturally, and that in others the forceps must be used as an adjuvant.

3. Cases in which some form of operative procedure has already been adopted without success.

It has thus far been used after high-forceps operations, version, symphysiotomy, craniotomy, and low forceps, and it will probably be shown to have a yet more extensive field.

The length of time during which this position may be used to advantage depends upon the effect which it produces upon the patient. It has been shown by those who have used it that it may be discontinued and re-employed without disadvan-

tage, and sometimes with positive advantage.

After the legs have been suspended half an hour or an hour, it would usually be desirable to discontinue the position for a time, since it is tedious and may cause interference in the venous circulation of the legs and thighs. After a rest of an hour, the position can be resumed if necessary.

The application of the forceps in this position will probably be found less easy than in the classical lithotomy position. It may be that this difficulty can be remedied by placing the patient in the Trendelenburg position, in which the condition of extension would still be preserved.

The contribution of Walcher to practical obstetrics is certainly a valuable one, and will often prove as useful as it is simple and harmless.—*Med. News.*

RUPTURE OF THE UTERUS, WITH RECOVERY.—Queisner (*Centralbl, fur Gynäkologie*, 1895, No. 51, p. 1341) has reported the case of a woman, 38 years old, who in the course of her ninth labor experienced a sense of something having torn in the abdomen. The pains, which previously had been active, suddenly ceased, and the woman lost consciousness and presented the appearance of collapse. External examination showed the breech to be above and the head at the superior strait; the small parts could not be detected. On introducing the hand into the dilated os a uterine laceration, between four and five inches long, could be felt at the right side of the fundus, in which rested the right lower extremity of the fœtus, which projected into the peritoneal cavity through a tear two inches in extent. The umbilical cord was pulseless. The right foot was carefully drawn into the uterus, and version readily effected. The placenta was seated upon the anterior uterine wall, and was removed by the hand. After the removal of the fœtus the uterus contracted well upon the left side, the right half remaining relaxed and boggy. The pulse was improved by injections of ether, The hæmorrhage was slight and tamponade was unnecessary. A five-pound sand-bag was placed over the uterus, a bandage applied, and opium administered. The woman was out of bed on the 14th day. After the lapse of four months the uterus was anteverted and displaced to the right. Upon the right side a firm, sensitive cicatrix could be felt. Five months later the cicatrix could still be appreciated, but the sensitiveness was less. The only predisposing influence to which the rupture of the uterus could be related was the lifting of a heavy weight, as there appeared to be no disproportion between the uterus, the fœtus, and the uterine contractions.—*Med. News.*

DECIDUOMA MALIGNUM.—Apfelstedt and Aschoff (*Arcivd. f. Gynak.*,) add to medical literature two more cases of the remarkable disease generally known by the above title, though, on histological grounds, they believe that it should rather be termed chorioma malignum. The first patient, aged 33, aborted at the fourth month on October 4th, 1894. The membranes were passed unruptured. As usual in this newly-recognized disease severe uterine hæmorrhages followed the miscarriage. On Feburary 5th, 1895, a mass was removed from the uterus; as the membranes had been discharged entire it could not have been a placental polypus. On May 17th, the patient being worse, the curette was used. The masses removed were found to be sarcoma deciduo-cellulare. On May 24th the uterus was removed by Runge. The patient died on the twenty-sixth day. The uterus contained a malignant deciduoma, and there were metastatic deposits in both lungs and in the liver, pancreas, mesentery, intestines, and cancellous tissue of the head of one femur. The second patient was 42. She was delivered of a vesicular mole on March 21st, 1895. The left labium became swollen, and the swelling extended up the vagina; it was laid open on June 19th; then, to the surprise of the observers, tissue precisely resembling a vesicular mole was found growing from its walls. On June 20th similar masses were removed from the uterine cavity. Pyæmia, originating in suppuration in the cavity laid open in the labium, caused the death of the patient on July 25th. Metastatic deposits were found in the lungs and spleen.—*Brit. Med. Jour.*

ANTISEPTIC DOUCHES AFTER LABOR.—In the obstetric clinic the question is frequently asked, do you give antiseptic douches after labor? In answering this question Dr. Wills gives his opinion as follows: After a perfectly normal labor conducted under antiseptic precautions, in a clean room, the hands of physician and nurse having been perfectly prepared, and the patient a healthy woman, one free vaginal douche containing some mild antiseptic agent, such as creolin, lysol or boric acid, is sufficient, provided the vulva be kept covered with an occlusion dressing. Both the liquor amnii and lochia are in such cases sterile fluids, and infection is not likely to occur except from without, this being prevented by the occlusion dressing. When, however, the labor has been long, forceps have been used, or the physician's hand inserted within the uterus for version or removal of the placenta, or considerable laceration of the parts has occurred, an antiseptic douche may be used once a day for five or six days with good effect.—*Philadelphia Polyclinic.*

CYCLING AND THE SADDLE.—Bicycles have taken the country and the world by storm and are fast coming into universal use. That they have accomplished no end of good none will dispute; that they have brought with them certain evils, though not perhaps understood by people in general, is distinctly recognized by the medical profession. This does not result from any defect necessarily inherent in the bicycle, but from faults in its construction, particularly in the saddle employed. Speed has been quite generally the object primarily aimed at, the health of the rider being given very little consideration.

From a medical standpoint bicycle saddles are, as a prominent New York physician expressed it in a recent article, "physically and morally injurious. The entire weight of the body comes on the soft tissue of the pelvic floor. The sensitive tistues, subject to such pressure and irritation, must suffer, and the evil cannot yet be estimated."

As all physicians are well aware, few persons afflicted with urethral, prostatic or bladder trouble are able to ride a bicycle without materially increasing the difficulty. This must be distinctly charged to defective saddles, and the same cause will produce disease in perfectly healthy people. Hence the importance, the absolute necessity, of using a proper saddle cannot be exaggerated.

As the writer referred to aptly expresses it: "A perfect saddle for either man or woman is one that will maintain the body in an easy and proper position. It must be a surface large enough to receive the tuberosities so that the weight come on the gluteal muscles. It should have, like an army saddle, a hole in the center, to relieve any injurious pressure. This will prevent urethritis, prostatis, prostatic abscess and costitis. The saddle should allow pedaling without needless friction. The rider should have a firm yet elastic seat."

In the Christy Saddle Messrs. A. G. Spalding and Bros. have secured a bicycle saddles that fully meets all the demands and satisfies at once all medical and scientific requirements without losing any possible advantage in other directions.

It is molded in strict anatomical conformity to the parts of the body with which it comes in contact; comfortable yet firm cushions are employed and so adjusted as to properly receive the bony prominences of the pelvis. These cushions, which are removable, rest upon a perforated base, and with a free circulation of air through the horn of the saddle, insure a cool seat, a most important consideration from the standpoint of comfort as well as hygiene. The frame is made of metal and maintains its correct position under all circumstances. The saddle is easily adjusted at the proper angle, Numerous testimonials from eminent surgeons declare this saddle to meet all medical requirements, while eminent riders give it the highest praise.

HYSTERICAL BREAST.—Gilles de la Tourette (*Nouv. Icon. de la Salp.*, vol. 8, p. 107) says this hysterical affection of the breast consists in a temporary or permanent enlargement with distinct hyperesthesia of the integument. During the attack there are various local vaso-motor disturbances which vary from simple congestion to distinct edema, and which at times perhaps terminate in cutaneous gangrene. The hyperesthesia is sometimes so intense that the patients cannot endure the contact of clothing. It is sometimes permanent, but there are always exacerbations produced by the causes which ordinarily aggravate hyperesthetic zones (intense emotion, menstruation, etc.); at the same time that the hyperesthesia increases, the breast becomes the seat of prickly, lancinating pains and a burning sensation, at times very intense; it becomes swollen, sometimes to double the normal size, and the nipple is in a state of erection. Not infrequently at the height of the attack there is a convulsive seizure, or at least an indication of the same, consisting of a feeling of strangulation, dizziness, and other cephalic phenomena. The appearance of the integument is variable. There may be white, red, or cyanotic edema. In the more simple cases the tumefaction disappears with the pain, but very often, especially if the attacks are frequent, the swelling persists to a certain degree and is always accompanied by more or less hyperesthesia. During the attack all palpation is impossible, but in in the intervals one or two tumors, only slightly tender to pressure, may be discovered by deep pressure.

The diagnosis may be difficult even during the intervals, but is much more so during the attack, particularly if cutaneous gangrene with ulceration is added to the former symptoms. It is possible that secondary infection may be grafted on to the spontaneous gangrene, producing suppuration, swelling of the axillary glands, etc., but this is exceedingly rare.—*Med.*

General anæsthetics are used far too often. As two per cent. boiled solution of cocaine hydrochlorate injected, with a sharp needle, *into* the skin, not under it, will enable one to perform such operations as castration, the removal of non-malignant breast tumors, even if they are as big as a cocoanut, many herniotomies, where there is strangulation, and the removal of almost any subcutaneous tumor up to four pounds in weight. Intra-abdominal work, however, to be well done, requires general anaesthesia.

NERVOUS DISEASES AND ELECTRO-THERAPEUTICS

IN CHARGE OF

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SOME COMMON FORMS OF "NEURASTHENIA" AND THEIR TREATMENT.

BY GEORGE HERSCHILL, M.D., LONDON, ENG.

(Continued from last month.)

In the ætiology of neurasthenia, due to real exhaustion of the nervous centres, heredity plays by far the most important part as a predisposing cause, although in a considerable number there is no ancestral taint. Where the tendency is inherited, the affection as a rule appears early in life, and is remarkably rebellious to treatment. When neurasthenia arises in people of middle age, as it constantly does, it is usually quite independent of heredity. One must be careful to distinguish an hereditary tendency to neurasthenia from a neuropathic tendency. The former has no tendency to produce anything but a neurasthenia; the latter may develop insanity, sclerosis, or other serious diseases of the nervous system. In fact, if we find a neurasthenic with a marked family tendency to insanity, I think that we should strongly suspect that his disease is the development period of a psychosis, and not true neurasthenia. Among other causes acting by heredity, we must place gout and intemperance in the parents. It is also probable that advanced age of both parents may predispose to neurasthenic offspring. A child of such parents will come into the world with feeble recuperative power. Another predisposing cause of neurasthenia during adult life, is the far too common overstrain to which children are subjected during the process of their education. The striving to obtain scholarships and to pass competitive examinations at too early ages, is responsible for a great deal of the neurasthenia that we meet with; likewise the forcing young girls who have no taste for music, to spend many weary hours daily at the piano. It is also not at all unlikely that heredity may play an important part in the production of neurasthenia, even when due to toxic causes. It is quite easy to understand that an individual coming from a neurotic stock may exhibit a diminished resisting power to various toxic agents, and that a toxine which would be easily dealt with by a healthy organism, may in him produce symptoms of neurasthenia. We have an illustration of this in the different toleration of individuals to tobacco. A daily dose which will be entirely harmless in one man, in another will produce grave neurasthenic symptoms.

We may divide the exciting causes of neurasthenia into two groups, non-toxic and toxic. In the former we shall find overstrain, worry, and traumatism; in the latter the influence of poisons, such as tea, tobacco, alcohol, lead, the toxines generated in the gastro-intestinal tract, and the poisons of gout, tubercle and syphilis. Traumatism should really, I think, be placed in the second group, as the symptoms are in all probability due to a toxine generated by shock or terror. This is proved by the poisonous state of the urine after great mental emotion. The neurasthenia of gout, syphilis, and tubercle is, of course, a part of the respective disease, and can only be considered with the other neurasthenias for the purpose of differential diagnosis.

There are very many subjective and few objective symptoms of neurasthenia, and although any given patient will probably only have a limited selection, it is necessary to be acquainted with them all if you wish to be able to diagnose the cases which you will meet. I would here say, at the risk of appearing wearisome, that the recognition of the fact that the patient has neurasthenia, is only the first step in the diagnosis. You have afterwards to determine what disease this neurasthenia is a part of, or what morbid condition it denotes. But the first step is to recognize that the patient is neursthenic, and to do so it is absolutely necessary to carry in your mind the whole formidable list of possible symptoms. This is not so difficult as you imagine if you classify them. The following is the arrangement which I have adopted myself:

Classification of the Symptoms of Neurasthenia.

I.—SUBJECTIVE.

(A) MOTOR :—

1. Muscular weakness in the form of incapacity for prolonged exertion.

2. A sense of general weakness, especially in the back and legs. (Real loss of power would suggest organic disease.)

(B) SENSORY :—

a. Gereral symptoms.

1. Feeling of indefinite discomfort, which the patient is unable to accurately describe ; he will often complain of feeling "ill all over."

2. Feeling of profound exhaustion, or of always being tired.

3. Diffuse aching of the limbs or trunk.

4. A feeling of uncertainty of movement. There is no actual inco-ordination, but the patient feels an uncertainty about placing his feet.

5. Flushes of heat or cold.

b. Sensations referred to the head—

1. Headache.

2. Sensation of emptiness or lightness of the head.

3. Giddiness. (The attacks will often come on in the street.)

4. A sensation of profound misery in the head. This is indiscribable.

c. Localized sensory phenomena.

1. Feeling of construction or pressure or uneasiness in over a limited area ; a sensation of a cord tied around a limb is not uncommon.

2. Local pain—

a Back-ache.

b. Pain in the left infra-mammary region. This is exceedingly common, and occurs in a large proportion of female neurasthenics.

c. The local pain or discomfort of gastric neurasthenia, or "atonic dyspepsia," or of hyperchlorydria.

3. Areas tender on pressure. This subject has been exhaustively worked out by Dr. Henry Head, and the results communicated to the profession in 1892.

4. Dysæsthesias of various kinds, such as numbness, tingling, pins and needles, a feeling as of cold water trickling, itching sensations of heat or cold.

d. Visual symptoms.

1. Photophobia and lachrymation. Many neurasthenics are much annoyed by watering of the eyes on going into the cold air.

2. Asthenopia. This may be met with in two forms, either as a defect in the retina, or as a partial failure in the muscular accommodation. In the former case we may have diminution of the visual field, in the latter we shall find fatigue, headache, or vertigo, produced after quite a moderate use of the eyes. Under these conditions slight degrees of astigmatism, which, in a healthy person, would be of no moment, may set up such disturbances as to require to be corrected by glasses. The fact must not be lost sight of that it is quite possible for neurasthenia to be itself set up in persons having a tendency to it by astigmatism of not more than 5.D.

e. Disturbances of hearing.

A certain amount of hardness of hearing is often complained of by neurasthenics, but a commoner phenomenon is tinnitus, or singing in the ears. I have reason, however, to think that, with the progress of knowledge, an increasing number of such cases will be found to be due to nasal obstruction at night, owing to turbinal varicosis.

f. Disturances of the sense of smell.

Cases have been reported in which there has been hyperosmia and parosmia, but in all probability there has been some unrecognized disease of the mucous membrane. If there are any neurasthenic conditions in which the sense of smell is affected, they must be of extreme rarity.

g. Alterations in taste.

These may be part of a gastric neurasthenia, but, in many instances which have been reported, are probably due to overlooked nasal obstruction.

(C) PSYCHIC.

1. Defect in the power of continued mental application. Loss of the power of concentration. In these cases work continued after the fatigue symptoms come on cause headache, vertigo, or sensations of pressure in the head. In many of the patients presenting these symptoms who are supposed to be neurasthenic, the real trouble is caused by an unrecognized astigmatism. In others there is neurasthenic weakness of the recti muscles, which in many cases is aggravated and perpetuated by slight degrees of astigmatism.

2. Loss of memory. This is usually more apparent than real. Patients fancy that they are losing their memory and are greatly alarmed. This trouble depends very often upon the lack of concentrative power mentioned above. The memory of any idea depends upon the intensity with which it has been impressed upon the mind, and this will vary directly with the power the patient has of directing his individual attention to the subject.

3. Uncertainty, vacillation, and lack of decision. This mental condition often shows itself by such simple things as going back once or twice to

see if the gas has been properly turned off.

4. Irritability of temper, a tendency to become angry at trifles, constant unhappiness at fancied slights.

5. Introspection, nosophobio.

6. Mental depression.

7. Morbid fears.

a. General—

1. Associated, when the attack comes on, with physical phenomena such as pallor, or sweating.

2. Unassociated with such symptoms.

b. Special—

1. Claustrophobia The attacks of panic come on when the patient finds himself shut up in a closed place, such as a chnrch or railway cariage, from which there is no escape for a certain fixed time.

2. Agoraphobia: The same thing coming on in open places.

3. Monophobia: The fear of being alone Besides these, there are several other fears, to each of which a special name has been given.

8. Insomnia.

9. Imperative conceptions: The patient feels a sudden impulse to perform a certain act, such as to throw himself out of a window, to take poison, or to injure himself or others. The patient is usually in a state of great distress lest he should have an impulse which he could not withstand.

(D) CIRCULATORY DISTURBANCES:—

1. Consciousness of palpitation, or arrhythmia of the heart.

2. Shortness of breath.

3. Consciousness of pulsations in the neck, ears, or abdominal aorta.

4. Anginoid attacks.

(D) DIGESTIVE DISTURBANCES, OR GASTRIC NEURASTHENIA:—

1. Pain.

2. Flatulence.

3. Sinking sensation.

4. Constipation, etc.

II.—OBJECTIVE.

The objective signs of neurasthenia are not numerous, but those present are of considerable interest. They are—

1. MUSCULAR SYMPTOMS;—

a. Tremors. These are rare, but when present are rather fine and accompany conscious movements. They are most frequent in traumatic neurasthenia.

b. Clonic Spasms. We are all of us familiar with the twitching of the fibres of the orbicularis, called by the lady "live blood." In neurasthenia, it is exceedingly common to get the same phenomenon in portions of the larger muscles of the trunk. It is especially the case in that form of the complaint due to excessive use of tobacco.

c. Tonic Spasms. These are of two kinds.

1. If you strike sharply on an intercostal muscle in a neurasthenic you will often throw the whole muscle into contraction. You can often observe this also in phthisical patients.

2. If you suddenly approximate passively the two attachments of a muscle in certain neurasthenics, it will be thrown into a brief tonic contraction.

d. The knee-jerk is sometimes excessive and occasionlly diminished.

e. Ankle clonus can often be obtained.

2. EYE SYMPTOMS.

a. Contraction of the visual field. This is often merely a fatigue sympton.

b. Pupillary phenomena.

1. Dilation of the pupil.

2. Sluggish reaction to light.

3. "Hippus." This is alternate dilatation and contraction of the pupil during excitement.

4. Transient inequality.

3. CIRCULATORY PHENOMENA.

a. Alterations in the rhythm or frequency of the cardiac contractions.

b. Loss of vaso-motor tonus as shown by coldness of the hands and feet, easy production of the red mark upon the skin known as the "Tache Cerebrale," and in rare cases a condition of the fingers resembling the early stages of Raynaud's Disease.

4. STOMACH PHENOMENA.

a. Splashing and other signs of a dilated stomach.

b. Gastroptosis and enteroptosis.

c. Abnormality in the composition of the stomach contents after a test meal.

5. DISTURBANCE OF THE SECRETIONS.

a. Deficient secretion of saliva, perspiration, urine, or of the HCL. of the gastric juice.

b. Polyuria, hyperidrosis, hyperchlorhydria and hypersecretion of gastric juice.

c. Excess of uric acid and urates in the urine.

d. Facial acne.

6. SKIN PHENOMENA.

These almost invariably point to the the absorption of toxines. Those commonly met wit are—

a. Brown pigment spots on the forearms.

b. Urticaria.

c. Lichen urticatus and other itching rashes.

(To be continued.)

PATHOLOGY AND BACTERIOLOGY

IN CHARGE OF

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FORMALINE GELATINE: A NEW MODE OF ANTISEPTIC TREATMENT.

In the *Therapeut. Monatsch.*, Dr. Schleich relates his experiences in the use of formaline gelatine in the treatment of wounds. The formaline gelatine is prepared by drying gelatine dissolved in water over formaline vapor. A firm, resistant, stony, hard transparent body is thus formed. The question first to be decided was whether the gelatine would gradually dissolve and give off its formaline, and in this way set up a continued state of asepsis in its neighborhood. In the first experiment resection of intestine was performed on a rabbit, and before closing the abdominal wound a piece of formaline gelatine the size of an apple was introduced into the abdominal cavity. The animal was killed six and-a-half weeks later and only a minute remnant of the gelatine was found in the midst of the newly-formed connective tissue. Further experiments were modified by the author to the extent that a quantity of virulent bacteria cultures was mixed with finely-powdered formaline gelatine and introduced into the system, all of which were absorbed without any reaction. These results led the author to use the gelatine in the treatment of wounds in the human subject. It was used in the form of powder, and Dr. Schleich became satisfied that it was gradually decomposed by continuous freeing of formaline, and consequent steady asepticism of the wound. Up to the time of writing he has used it in 120 cases of acute suppuration, 93 aseptic healings of wounds, 4 compound fractures, and 2 deep scalp wounds, and he was in a position to state that by its means, all acute suppurations were cut short, and that in every wound an aseptic course could be guaranteed without the adoption of any further measures. Where necrotic tissue was present, however, it was powerless, as contact with sound tissue alone was able to set free the formaline. In order to render it serviceable in such cases a means must be discovered of setting the formaline free outside the body, and such a means has already been found by the author in a peptic acid solution (pepsin 5 parts, acid hydrochl. 0.3 parts, water to 100 .The powder with which the wound is powdered requires moistening with the above pepsin solution. The mode of preparation of the formaline gelatine is given by the author.

The fact that when the gelatine was enclosed within the system it became eventually completely replaced by connective tissue led the author to still further experiments. These led to the conclusion that formoline gelatine, being procurable in any shape, and on being heated capable of being moulded into any form, it might be employed for the plastic connective tissue closure of defects of all kinds. Impregnated with lime salts, it proved itself capable of replacing pieces of bone removed in the course of resection.—*Berlin Cor. Med. Press and Circular.*

UPON THE SPECIFIC PECULIARITIES OF THE PROTECTIVE SUBSTANCES FOUND IN THE BLOOD OF ANIMALS IMMUNIZED AGAINST THE BACILLUS TYPHI AND THE BACILLUS COLI COMMUNIS.—Löeffler and Abel (*Centralblatt für Bacteriologie und Parasitenkunde*, Bund xix. Nos. 2 and 3, January 23, 1896) experimented with four cases of virulent typhoid and two of virulent colon bacilli. The exact minimal fatal dose of cultures of the various bacilli was carefully worked out by inoculation into guinea-pigs. The animals selected for immunization were dogs. Each animal received inoculations of live cultures in increasing doses, until at the end of about three months it was found that protective substances were present in the blood.

The results of the work are summarized as follows:—

(1) The immunization of dogs to increasing doses of virulent cultures of bacillus typhi and bacillus coli communis produce in the blood of these animals specific protective substances operative against the particular bacillus by which they have been produced.

(2) The normal serum of the dog, without any preliminary treatment, has a protective power, not only against the minimal fatal dose of the bacilli,

but also against several times this dose. The size of the dose of toxic bacilli always bears a definite relation to the quantity of previously injected serum.

(3) The specificity of the serum of immunized animals is only observable when the animals are injected with distinctly larger doses of the bacteria than can be combated by the normal serum.

(4) The specific nature of the serum is obvious from the results of injections of a mixture of the toxic bacteria and the protective serum.

(5) The typhoid serum protects against the colon bacillus and the colon serum against the typhoid bacillus more powerfully than normal serum, thus pointing to a relation between the organisms.

(6) The protective serums do not protect the toxins in the dead bodies of the bacilli any more powerfully than normal serum.

(7) By the injection of normal serum into the peritoneal cavity of the guinea-pigs and the subsequent injection, after twenty-four hours, of twice the fatal dose of dead typhoid bacilli, the guinea-pigs can, within two weeks, be immunized to 100 times the fatal dose of living typhoid bacilli.

(8) Guinea-pigs can endure the intraperitoneal injection of typhoid bacilli if one begins them with less than the fatal dose and increases the multiples rapidly, so that within forty-eight hours a forced immunity to 100 times the fatal dose is reached.

(9) By the injection of 0.5 cubic centimetre to 1.0 cubic centimetre of a powerful typhoid serum animals can be saved from the effects of twice the fatal dose (intraperitoneal), which would bring about the death of a non-protected animal in twenty hours.

(10) The results of the experiments bring about a perfect confirmation of the studies of R. Pfeier upon the cholera bacteria and cholera serum.—*Univ. Mag.*

RESEARCHES UPON THE PATHOGENESIS OF PERITONITIS OF INTESTINAL ORIGIN.—Klecki (*Annales de l'Institut Pasteur, 1895,*) found that the colon bacilli secured from the ileum of a dog were highly virulent, while those from the jejunum and colon were much less so, and from this concludes that in different parts of the intestine the virulence of the bacillus varies.

Kleck regards the pathology of the colon bacillus as dependent upon a symbiotic action with other intestinal bacteria. The escape of the colon bacillus from the intestine is in combination with these other pathogenic (guinea-pigs) and non-pathogenic bacteria can cause peritonisis.—*Univ. Mag.*

BEARDS AND BACTERIA.—The bacteriology of the beard has not yet, so far as we are aware, been exhaustively studied; this might be a new world for one of our young Alexanders of pathology to conquer. That it is possible that disease can be carried in the manner suggested will hardly be denied, but we cannot say that we think the danger so great that doctors need sacrifice their beards on the altar of hygiene. Most will think even the careful sterilizatfon of the beard on leaving a sick room a counsel of perfection. If the scrupulous hygienist thinks such a precaution necessary, he should be consistent, and insist on doctors shaving their heads and even their eyebrows. How would our professional sisters like this? To live in the odor of antiseptic sanctity we should, after due purification, clothe ourselves in cotton wool, wrap our heads in sterilized gauze, and go about like veiled prophets of Khorassan.—*Brit. Med. Jour.*

TO PRESERVE THE URINE.—Dr. Leffmann finds choloroform 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 months, 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 phemylhydrazin test must be used. Chloroform does not interfere with these nor simulate sugar.—*Med. Times.*

HOW TO STERILIZE COTTON.—A rather ingenious plan for sterilizing cotton is referred to in a French contemporary. A pieee of cotton is taken, twisted ou a stick or a piece of wood, and dipped into a saturated alcoholic solution of boracic acid for a moment or so. It is then withdrawn from the solution, and a light is applied to it, as the result of which the alcohol burns out, while the boracic acid prevents the cotton from burning. Five seconds are enough; as soon as the flame turns green it is extinguished. The cotton remains white, dry, warm, but absolutely sterilized.—*Med. Press and Circular.*

Do not use the old-fashioned curved bistoury in opening the simplest abscess. It is unsurgical because you proceed from within outward—from the unknown to the known. This is a false principle in philosophy, in surgery, and in everything. Cut from the surface inward and you can deal with difficulties in the order in which they occur. Always work with the aid of sight and do not pin your faith on anatomy.

NOSE AND THROAT

IN CHARGE OF

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MODERN METHODS OF TREATING DISEASES OF THE NOSE AND THROAT.

BY O. B. DOUGLAS, M.D., NEW YORK.

More frequent than any other disease, more widely distributed, and more destructive to usefulness and happiness, if not to life, is that we have spoken of as causing catarrh. And what is the disease? has been earnestly asked a thousand times. What causes such wide destruction? Has it a specific micro-organism? I think not. Is it a blood disease? No. Can it be cured? Yes. Is it difficult to cure? Not specially. How should we go about it? Remove the cause. What is the cause? Now we have arrived at the starting point; our duty, as surgeons, is to find that cause. Where shall we look? First in the mouth and throat. Here we shall probably find the index which points toward the cause. Observe the tongue, the fauces, the tonsils, and the posterior and lateral walls of the pharynx. A typical case of "catarrh" would show a relaxed uvula, enlarged tonsils, follicular pharyngitis, and thickened and inflamed tissue back of one or both posterior pillars of the fauces. There would be some hoarseness, with a tickling and tendency to cough. Examine, if you please, the larynx; you will find the vocal bands slightly reddened, the whole larynx mildly congested. Look into the superior pharynx. Here is more trouble. The adenoid growth is enlarged; the posterior ends of the turbinate bodies are hypertrophied; the septum is thickened, and the whole passage is bathed in a thick, tenacious, muco-purulent fluid. Examine the nose anteriorly. The inferior turbinate body is enlarged, the septum more or less deflected. In one or both sides you may see above the inferior body a mass filling the fossa and pressing upon the septum. It is exceedingly sensitive, and the mucous membrane generally is congested and hyperæsthetic. Cocaine solution (ten per cent.) applied, blanches and contracts the tissues about the lower turbinate body, and reveals more clearly the middle turbinate, which is still enlarged though under the full contractile influence of cocaine. If we attempt to pass a probe between the body and the septum, we find them in persistent contact—often adherent—and it causes severe pain, often reflected to the supraorbital region, but especially intensifies the habitual pain in the head, wherever it may have been.

The history of this case, as given by the patient previous to examination, is about as follows: frequent and easily acquired cold in the head, pain over the eyes, in the temples, and in the lateral portion of the occiput; eyes watery, sometimes painful, with difficulty in seeing distinctly. The hearing is not so acute as it should be, and there is a buzzing or roaring in the ears. The throat is frequently sore; breathing through the nose is difficult or impossible; and there is mouth breathing, especially at night. The tonsils swell and occasionally suppurate. The stomach is out of order, the bowels are constipated, the liver is torpid, and there is a general tired feeling, with more or less pain of a neuralgic character.

Such cases we see very often. It is difficult to believe the little mass we saw pressing the septum (in spite of the persuasive cocaine) to be the cause of all this suffering. But I am persuaded that the hypertrophied middle turbinated body is capable of more mischief, can cause more suffering, directly and remotely, than any other mass of its size in the human body. It will not contract—cocaine has proved that—it must be removed. We anæsthetize it as thoroughly as possible; then, with scissors adapted to the work, shear off such portion as must come away in order to leave the space clear after the parts have healed. Do not cut away any more tissue than is absolutely necessary, but be sure you get just enough. We can not cut at the farther end and must twist off the mass with forceps. This causes some pain, differing greatly with different people, but not so severe as that of the extraction of a tooth. A pledget of cotton wound loosely upon an applicator, moistened in a solution of acetotartrate of aluminum (a drachm to the ounce), and perhaps fortified in its hæmostatic power by a solution of perchloride

of iron, is inserted where the tissue has been removed, and a cotton tampon placed in the nostril anterior to the first; this latter cotton to be changed as often as it becomes moist; the former may remain twenty four hours or longer, as alum is one of our best antiseptics. This operation is the one most frequently required, but any persistent contact of surfaces in the nose that ought not to touch will certainly cause trouble and must be relieved. Herein lies the key to successful treatment of catarrhal affections—*remove the cause.*

In reviewing older methods the contrast is very marked. Eighteen years ago I was taught by one of the best specialists in this country to swab out the throat with a solution of silver nitrate, and make similar applications to the lower turbinated bodies if they were thickened. I regret to say that that man—conscientious and honest—met with such poor results, as he told me, that he determined to give up this special work and devote himself to general medicine, and he is to-day in general practice one of the best.

The evolution of modern methods has been slow and labored, but persistent and successful. In no department of surgery have there been greater improvements than in the treatment of nose and throat diseases. I well remember attending a clinic in Charity Hospital, New York, in 1876, at which Professor Lister did an operation demonstrating his then new theory of antisepsis and disinfection. What marvellous changes have grown from that theory!

We might inquire how a mere contact of surfaces (that ought not to touch) in the nose can cause so much trouble. I answer:

1. The immediate local effect upon two surfaces so sensitive must be irritating, evinced by a tendency to sneeze, by local pain, etc.

2. The nose, being an important organ directly communicating with the brain and all other organs in the head, must be carefully guarded; hence there are numerous reflex irritations resulting from this primary cause.

3. Secretions, which are normally profuse in the nose, amounting to five or six drachms an hour, are retained by this artificial dam, become acrid, overflow their bounds, irritate adjacent parts, and produce congestions and inflammations—*e. g.*, rhinitis, pharyngitis, faucitis, amygdalitis, and laryngitis.

4. By extension of these induced troubles to other organs—the lacrymal ducts, the Eustachian tubes and middle ears, the accessory sinuses, pharynx, fauces, lungs, and stomach. Ninety-two per cent. of cases of otitis media are induced by extension of nasal inflammation. The effort to breathe through an obstructed nostril produces a partial vacuum, acting as a cupping glass, and causing congestion alternating with undue pressure in the tubes and middle ears. Acrid or purulent secretions are forced into the orifices of the tubes by this pressure, and deafness results in many cases.

I have by no means exhausted the list of evils resulting from obstructions in the nose, but I have mentioned enough to call your attention to the importance of the subject and convince you that the ounce of prevention—removing the cause—is worth many times the pound of cure.

Adenoids at the vault of the pharynx (a secondary disease of childhood) must be removed with forceps or curette, and should be done while the patient is under the influence of an anæsthetic.

It is not so important to excise enlarged faucial tonsils as to cure the cause. I rarely find it necessary to cut them, preferring to take away the irritant. The disease is not often inherent in the tonsil. We should punish the culprit and not the victim.

Wrongs are not righted by deploring them, neither are they corrected by counteracting their evil effects. So diseases are not cured by treating their symptoms, or suppressed by doctoring their results. The terms of success are not subject to revision. Modern methods are founded upon a knowledge of cause and effect. Like labor in childbirth, effort may be spasmodic, but the more constant it is the better. Cures are always difficult and never acquired unless we pay the price. We have to deal with organs that are constantly in use, never at rest.

Organs of so much importance as the nose are always protected by Nature in a special manner; but when we consider the excessive exposure to infections—malarial and bacteriological—to dust and noisome gases, to traumatisms and distortions, we wonder only that we are yet alive.—*N. Y. Med. Jour.*

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Editorial.

THE NATURE OF PUERPERAL FEVER.

There is no more interesting or important disease to the general practitioner than puerperal fever, and until the day comes, which come it has not yet, when we shall have a clear and full understanding of its cause or causes, speculation and investigation regarding it will not cease.

We take it that our readers have each a theory or theories as to the nature of this ubiquitous scourge, and that they will be interested and informed by a short abstract of a paper on recent bacteriological investigation concerning the nature of the disease, read by Wm. T. Lusk, M.D., of New York, before the section on Gynæcology of the College of Physicians of Philadelphia.

Not many years ago it was discovered that the vaginal canal abounded in micro-organisms. Without stopping to consider the nature of these organisms, as to whether they were pathogenic or non-pathogenic, the members of the medical profession vaulted over one another to devise some means of getting rid of these pestiferous germs.

Dr. Lusk believes with the recent investigators, that the natural micro-organisms in the vaginal canal intensify the acid reaction of the vaginal secretions and render the latter especially unfavorable to the multiplication of the streptococcus, which is the germ that produces puerperal septicæmia. The normal vaginal secretions furnish a soil hostile to all forms of cell growth, and render the latter non-virulent.

The cervical canal of a pregnant woman, he asserts, is protected from the invasion of micro-organisms by the mucous plug. He quotes Walthard's observations, as showing a line of defence between the attacking germs below and the clear portion of the mucous plug above; thus in natural labor the protection of the uterine cavity is complete. Contagious material has to be carried to it from without, but cannot gain entrance on account of the mucous plug. The entire parturient act, furthermore, serves to guard the woman against infection. With the rupture of the membranes a downward current is produced by the escape of amniotic fluid. The descent of the child cleanses the vaginal canal and the associated leucocytosis and increase of vaginal secretion are inimical to the action of the septic germs. Finally, the toilet of the vagina is completed by the passage of the placenta.

The fact that Nature provides this precious means of self-defence, clearly shows that the disturbing methods of disinfection employed before and after labor, under the plea of prophylaxis, are not commendable. The antiseptic douche dissolves the mucus, sets free the imprisoned germs, weakens the resistance of tissue and contributes to the extension of the source of infection.

Dr. Lusk quotes the statistics of several of the maternity hospitals, showing a complete change of front in the management of puerperal cases in many of them within the last year or so. He says that a careful examination of hospital statistics, on the whole, shows that with the abolition of the routine practice of douching, the morbidity is diminished and the mortality statistics are slightly more favorable. He thinks it is probably wisest

to regard parturition as a normal act, and to attach more importance to the general obstetrical management than to a single detail in practice. He also asserts that in most cases infection is conveyed by the hands of the attending physician or midwife. The ideal of obstetric art is to conduct labor without any internal examination or manipulation. In all cases, examinations should be infrequent and only after a careful disinfection is employed, and externally only. He says that throughout the continuance of labor the attendant should remember the circumstances which favor puerperal fever, such as frequent examinations; operations; the artificial dilatation of the cervix; prolapsed cord and extremities, which form highways to the uterine cavity; leaving behind bits of placenta or strips of membrane; impaired vitality of maternal tissue from pressure; retention of clots from displacements; lowered vitality from hæmorrhage from the long continuance of labor; from deep wounds; from eclampsia; from complicating diseases and from unhealthy sanitary surroundings. Many of these dangers, he said, are avoidable and are the result of slovenly practice.

He said in stating conclusions: "I reserve to myself the privilege of changing my views to-morrow if it seems to me new observations should make a change necessary. But at present it cannot be too strongly insisted upon that a lessened death rate must for the most part follow the lines of improved midwifery practice. The unquestioning child-like faith in the indiscriminate use of the douche and curette as a panacea against the consequences of ignorance in the lying-in room, is a curious phase in the working of the human mind."

He therefore claims that an injection of weak microbicide solutions will not kill the streptococcus germ, while a strong solution acts only upon the surface, where it likewise kills the tissue, washes away the thrombi, and, when the douches are repeated at short intervals, paralyzes the muscular structures.

Regarding the use of the curette, he says that the enemy does not long remain upon the surface; at an early stage it has already penetrated the underlying tissue. And the curette as employed destroys the barrier formed by the leucocytes and opens the door to the enemy. Mild cases are thus frequently converted by this process into virulent ones.

We have always entertained and have expressed freely and vigorously the views expressed in Dr. Lusk's paper. There is no safer teacher than clinical experience carefully observed and noted, and we are as positive now as heretofore that Nature is not prone to mistakes.

We have not forgotten the painful exhibition of the members of the American Medical Association, some years ago at the Chicago meeting, when the Bergeon treatment of pulmonary tuberculosis was successful in curing the most advanced cases of phthisis, and when the vagina in its normal condition was discovered to be the hotbed for the development of the most virulent micro-organisms of all kinds. These contemporary crazes became at once epidemic. The one ephemeral, the other more difficult to disprove; hence it continued to spread until it had reached a point that became dangerous. It was first advised that the vaginal douche should be employed after labor only; this did not satisfy some of the would-be famous obstetricians, so they ventured a step further in advance, and advised that the douche should be used prior to labor, as well as afterwards. Then came the assertion that, to obtain good results, the vaginal douche should be used several days before the commencement of labor, to be certain that the canal was entirely rid of the micro-organisms. Then followed the intra-uterine douche at the completion of labor, with antiseptic solutions. It was then thought best to employ the intra-uterine douche for many days after the confinement. The climax in obstet-

rics was not reached, however, until the sharp curette was employed vigorously to the endometrium as soon as labor was entirely completed. We next expected to hear of the catheterization, douching, curetting and plugging of the Fallopian tubes. These doubtless escaped punishment because the procedure would be an exceedingly difficult one. Having reached the extreme limit of obstetrical folly and meddlesome midwifery, a halt was called and the profession began to think of retracing their steps.

If these so-called progressive obstetricians had taken the pains to consult the statistics of the country doctor or midwife, they would not have rushed to such a foolish extreme. They would have discovered that the old practitioners who had delivered women by thousands, never possessed a syringe, curette, or anything of the kind, never used bichloride solutions, or any other antiseptic solution for any purpose, and who, as a result, never had a case of puerperal septicæmia. They were not troubled with the streptococcus, or any other pathogenic germ; and their obstetric practice was never followed by death from this cause.

CHOLAGOGUES.

It would appear that the new teachings regarding the action of cholagogues have been all wrong, at least the results of experiments on animals go to show that the various substances which our forefathers, fathers and ourselves looked upon with the eye of simple faith as bile compellers, are simply inert in that direction, if not actually preventive. Thus at the last meeting of the Berlin Medical Society, Herr Stadelman gave, *Med. Press*, the conclusions arrived at from a large number of experiments on animals, extending over a period of five years. In all cases complete biliary fistulæ were established in dogs, and it was only when convalescence was thoroughly established that the experiments were begun. Almost the whole of the supposed cholagogues were absolutely inert as regarded the increase in the secretion of bile. Water alone had no effect, whatever the quantity given, whether 500 or 2,000 cm., or whether hot or cold. The drugs experimented with were taken from three classes, such as have no cholagogue action, *i.e.*, the alkalies and their salts, sod. bicarbonate, common salt, sod. sulph., artificial Carlsbad salt, sod. phosph. potass. tart., magn. sulph., potass. carb., pot. sulph. Scarcely any change was produced by any of these preparations; with large doses the secretion was rather diminished. The drastic purgatives were next tried: these were gamboge, jalap, aloes, rhubarb, cathartic acid, podophyllin, senna, and calomel. They had no cholagogue action; sometimes the secretion was increased, sometimes diminished; it frequently remained the same, so that even when the cathartic action was considerable, the quantity of bile remained the same. Various substances were next tried, amongst them alcohol and olive oil, and from these a diminution rather than an increase was observed. The next series of drugs were such as diminished the secretion of bile, such as pilocarpin and atropin. Whilst the action of pilocarpin was doubtful, that of atropin, he was of opinion, was certainly in the direction of diminishing the flow. The next class was that of drugs of doubtful action, and included anti-febrine, anti-pyrine, caffeine, diuretine, and santonine. In general the action in this class was uncertain, little pronounced, and doubtful. In the next class were the pronounced cholagogues, sodium salicylate, and the biliary acids. Sod. salicylate sometimes produced an extraordinary effect, increasing the flow 60 to 70 per cent. for several hours —even as long as 24. Sometimes the effect was more marked and the action was somewhat uncertain. He gave the animals either their own bile or ox-gall, or the biliary acid

suets in pure preparations. He always found a considerable increase in the quantity, and it was remarkable that those biliary acids produced the greatest effects that were foreign to the animal. Glycocholic acid acted much more powerfully than taurocholic. When a large quantity of taurocholic acid was given to an animal, it was excreted along with the bile. In doses of 4 to 5 grms. the increase was almost always 100 per cent., and if the quantity was still increased an increased flow, even up to 120 per cent. could be obtained. The larger the dose the greater the effect, and not only was the bulk increased but that of the solid constituents, and especially the biliary acids. He had no hesitation in pronouning the biliary acids to be most powerful, certain cholagogues; they occupied a distinct position, as they increased the formation and of course the flow of biliary acids, whilst the others only increased the flow of the watery constituents. These effects as regarded sodium salicylate and the biliary acids were previously known, Prevost, Pinet, Lewascheff, and others had studied the action of the former before him. Most people were also convinced of the action of the biliary acids, and the only service he had performed was to place the action on a scientific basis.

These experiments appear to show that, while most of our so-called cholagogues are of no value, many of them instead of hastening the flow of bile, retard it, and that all our ideas regarding them are out of joint.

But the evidence of clinical experience in regard to their utility is so strong that, to the practical mind, the experiments on dogs with fistulæ, *et al.*, may go to the dogs. No one who has, in his own person, or in that of a patient, seen the bile flow after a mercurial followed by a saline, can for a moment doubt the value of our old friends the cholagogues, and no amount of experimentation and scientific research will drive them from the ground they have so long and so profitably occupied.

MEDICAL MALPRACTICE.

In the past Surgeons have had a practical monopoly of the unpleasant experience of being sued for malpractice.

That this condition of affairs may undergo a change is indicated first by the suit now before the courts in Indiana in which the plaintiff alleges that the defendant physician treated his wife for a heart disease which never existed and overlooked in his treatment a condition which ought to have been diagnosed, and which, if recognized might readily have been cured.

Another case before the Supreme Court in Brooklyn is of interest. Dr. Boyden, under the direction of the Board of School Commissioners, vaccinated a child, and the child shortly afterward developed tetanus, from which it died. The only question which the Court instructed the Jury they were to consider was whether the vaccination was performed in the manner generally practiced by physicians; or, as the Court expressed it, "whether Dr. Boyden exercised the care which a doctor should exercise in the operation of vaccination to prevent any harm arising therefrom."

The testimony was to the effect that Dr. Boyden did not wash the arm nor use antiseptics prior to the vaccination. In this practice he was supported by a number of medical witnesses, who testified that they never washed the arm, and did not regard it as necessary, inasmuch as the abrasion preparatory to the rubbing in of the lymph was in itself a cleansing process removing everything infective; others claimed that they always washed the arm.

From the evidence it was for the Jury to decide what was the usual practice and whether Dr. Boyden departed from it.

The Jury stood, as we are informed by the *Brooklyn Medical Journal*, eleven for the plaintiff, and one for the defendant. The

point, we are told, upon which the eleven based their opinion was that Dr. Boyden in abrading the skin dipped the ivory point in the glass of water and then rubbed in the lymph, and that this being constantly repeated, using the same water, was liable to produce contamination.

There was not the slightest evidence adduced to support this theory, but the uncertainty of the result in Jury trials received another confirmation. The ivory point was taken directly from the case as received from a reliable vaccine Co., and dipped in the water before it touched the arm of the child to be vaccinated.

The charge of Judge Van Wyck is said to have been a model one, displaying a thorough grasp of the subject and absolute fairness, but in spite of it the Jury disagreed as above stated.

In these days Heaven help the professional man whose interests are at the mercy of Patrons, Grangers or Knights of Labor!

THE LATE DR. RAE.

It is our sad duty to notice the demise of Dr. Rae of Oshawa, which took place on the 8th ult., at his home.

His death was very sudden, as he had been attending to his professional duties only the evening before. Pneumonia, followed by rapid heart failure, was the cause. Dr. Rae was one of those men who are an honor to their profession, being beloved by all—rich and poor alike.

He was born at St. John, N. B., in 1833, and removed to Ontario when he was very young. He graduated in medicine in 1865, and has practised ever since in Oshawa. He was a prominent man in municipal affairs, and was mayor of Oshawa for some ten years.

As surgeon to the 34th Battalion, he was well known to the military men of our country.

But it was as member of the Provincial Board of Health that he was best known to the profession, having held that position from the time of the organization of the Board till the time of his death.

Only three weeks before his death, he was appointed Registrar for the County of Ontario, which his friends hoped would secure for him the much needed rest from his onerous professional duties.

We beg to extend our sincere sympathy to his widow and sorrowing children.

QUEEN'S UNIVERSITY.—At a meeting of the medical faculty of Queen's College appointments were made to fill the vacancies caused by the deaths of Drs. Fenwick and Saunders, as follows:—Dr Garrett will teach obstetrics and gynaecology; Dr. Herald, clinical medicine; Dr. Anglin, clinical surgery; Dr. Campbell, materia medica; Dr. D. V. Sullivan will be demonstrator of anatomy; and Dr. W. T. Connell will teach sanitary science.

THYREOID EXTRACT IN THE TREATMENT OF MYXEDEMA.—In the *Brit. Med. Jour.* there is an article on this subject by Mr. George R. Murray, who remarks that, when thyreoid extract was first suggested by him as a remedy for myxedema, two important questions were raised:

1. Can myxedema be completely cured?
2. Will not the disease ultimately return, even if the use of the remedy is continued?

In answer to these questions, he says, evidence will be brought forward to show that myxedema can be cured, and that it does not return when the use of the remedy is continued. It is necessary, however, to be quite clear as to terms. Myxedema is a symptom or combination of symptoms of loss of the function of the thyreoid gland. In the idiopathic form it is a symptom of chronic interstitial thyreoditis, just as anasarca may be a

symptom of renal disease or ascites of hepatic disease. The myxedema can be cured, although the chronic interstitial thyreoiditis still remains. As myxedema is thus a symptom of thyreoid inadequacy, it occurs not only as a result of removal or of fibrosis of the thyreoid gland, but also in rare cases in consequence of other diseased conditions of the gland.

CONTRAINDICATION IN THE USE OF SALOL IN NEPHRITIS.—Dr. James Tyson, writing in *The Univ. Med. Mag*, says:—An experience with two cases has led me to think it worth while to make known a more than possible danger in the use of salol in cases of nephritis. The first of these was a very serious case of chronic nephritis, in which, after a time, diarrhœa became so serious as to demand control. Knowing the danger from opium in these cases, I sought some other means than this for the purpose, and advised ten grains of bismuth subnitrate and five grains of salol to be given once, and to be repeated if ineffectual. The second dose was not required, as the diarrhœa promptly ceased, and with it the urine, which had previously been most copious, also fell off, and no measures that we could think of had any effect in restoring its original copiousness. There was not at first suppression, but the quantity gradually diminished until it ceased altogether, and the patient died a couple of days later.

A second case was that of a woman pregnant with her second child, complicated by severe puerperal nephritis, in which the urine was almost solid with albumin, was as black as ink, with altered hæmoglobin, and contained large numbers of dark-granular, pale granular, and waxy casts, with compound granule-cells. Under rest in bed, nourishment limited to milk and Vichy, which she drank copiously, the color of the urine gradually returned to the natural, and the quantity of albumin was largely reduced. A condition of constipation was gradually substituted by a natural state of the bowels, and later—without evident cause—a looseness of the bowels. For this looseness I ordered ten grains of bismuth and five grains of salol. After the administration of one powder the urine again became black, as first noted, and resumed the other abnormal characters. It did not, however, go on to suppression, and under appropriate treatment was assuming a more natural character, when, fortunately, she miscarried and was delivered of a dead eight-months' child. Afterwards convales. cence was rapid.

TAPE WORM.—Nervington accidentally discovered the efficiency of the following combination-*Am. Pract. and News:*

℞—Hydriodate of potass., . . gr. xxxvi.
Iodine, ... gr. xii.
Water, ... ℥ j.
Sig.—Ten drops three times a day.

A COUGH LINCTUS, WITHOUT OPIATE.—*Pract.*

℞—Acid. hydrobromic. dil., ... ℥ j.
Spt. chloroform., ... ℥ j.
Syr. prun. virg., ... ʒ iv
Mucilag. ad., ... ℥ iss.
Sig.—Urg. tuss. ʒ j.

IS there an inebriate neurosis? If the doubters will study the inebriates who appear in the police courts and jails, and the inmates of asylums, the answer will be clear and unmistakable. *Crothers.* The defective degenerates both in appearance, and history furnish abundant facts, far more impressive than any theories, however well presented.

PICRIC ACID FOR BURNS.—It is stated, *Med. Press*, that at the Hospital de la Charité in Paris, the usual treatment of burns has been superseded by the use of picric acid as a lotion, in aqueous solution of about 5 grammes to the ounce. Its virtues are said to have been accidently discovered by a medical student, and that the application not only affords immediate relief from pain but hastens the healing very much.

A NEW STYPTIC.—Dr. Roswell Park has called attention in the *Medical News* to the advantages of a combination of antipyrine and tannic acid as a powerful and simple styptic. He came upon this combination accidentally in an emergency and finds it easily applied and very effective. When these two substances are brought together there is formed a gummy, sticky substance which may be applied on a sponge. The two may be combined in almost any proportion.

GLYCOSURIA A PRODUCT OF THE NERVOUS TENSION OF CIVILIZATION.—Some interesting conclusions have been reached by Dr. Worms, of Paris. *Bulletin de l'Academie de Medicine; N. Y. Med, Rec.*, in regard to the increasing prevalence of glycosuria. He says that 7 per cent. of brain workers of sedentary habits have glycosuria. This conclusion is based on one hundred examinations, which is, perhaps, scarcely a sufficiently large number. Only about 5 per cent. of these are of the severe type.

HYDRASTIS CANADENSIS FOR NIGHT SWEATS.—Hydrastis canadensis, the *Nat. Med. Rev.* says, is being used with excellent results for controlling night sweats. If a single dose of twenty or thirty drops of the fluid extract does not suffice, then give twenty-five to thirty drops two or three times daily. In nearly every case the night sweats will be overcome. One writer reports seventy out of seventy-three cases of night sweats in tuberculosis where the remedy afforded certain relief.

ASTHMA.—Pepper.

℞—Ammon. brom., ... ℥ viij.
Ammon. chlor., ... ℥ jss.
Tinct. lobeliæ, ... f ℥ iij.
Spir. æth. comp., ... f ℥ j.
Syr. acaciæ, ... ad. f ℥ iv.—M.

Sig.—Dessertspoonful in water every hour or two during paroxysms.

REMEDX FOR CHILLS, IN LIEU OF QUININE.—*N. Y. Polyclinic.*

℞—Liquor potassæ arsenitis,
Tinct. iodinii, ... āā ℥ ss.
(15.625 cc) —M.

Sing—Dose for an adult—10 drops in water or milk three times a day.

BRONCHITIC ASTHMA.—

℞—Potassii iodidi, ... ℥ ij.
Ammon. carb., ... ℥ j.
Tinct. lobeliæ, ... f ℥ j.
Sp. chloroformi, ... f ℥ iv.
Vin. ipecac., ... f ℥ j.
Infus. senegæ, . . . q.s. ad. f ℥ vj.

M. Sig.—A tablespoonful in a wineglassful of water every four hours.

A LADY DOCTOR, as we, *Am. Med. Rev.*, are informed upon the reliable authoritv of a prominent St. Louis physician, was sent for some time since to attend an acouchment for which she had been previously engaged. When the call—an urgent one—was received, the reply was, that she was very sorry, but the patient must get another doctor as she was "engaged having a baby herself, and could not leave the field just then.

CARE OF NOSE AND THROAT IN MEASLES AND SCARLET FEVER.—Dr. Clarence C. Rice recommends the use of Seiler's tablets, one; cocaine, four grains; water, two ounces; applied with a simple hand bulb atomizer, throwing a coarse spray, for cleaning the nose. It may also be applied by a nasal douche or poured from a teaspoon or a dropper. As a protective use alboline or hydrastol, one ouce; menthol, thymol or eucalyptol, one grain and spirits chloroform, one-half drachm. To this may be added one-half per cent. cocaine (alkaloid) prievously dissolved in oleic acid (gr. 1 to the minim).

The object of the treatment being to render the secretions alkaline, to kill the bacteria present and to lubricate the membrane and prevent too rapid evaporation. For catarrhal laryngitis he recommends:

℞.—Chloroform, ... ℥i
Menthol . . . . . gr. v.
Camphor . . . . . gr. x.
Hydrostol, q. s. ad . . . . . ℥ i.

This is sprayed into the larynx several times a day.

THE SANITARIUM AT GRAVENHURST. — We are glad to know that the Sanitarium for patients suffering from tuberculosis will soon be an accomplished fact. The building is well on its way to completion and will be opened in the autumn. Applications for the position of Medical Superintendent will be received by Dr. N. A. Powell, College St., up to July 1st.

THE COUNCIL EXAMINATIONS.

The results of the recent final examinations of the College of Physicans and Surgeons of Ontario are as follows :—

H. E. Arkell, J. F. Argue, J. H. Allin, G. S. Burt, T. H. Bier, T. C. Bedell, D. Buchanan, W. J. Beasley, J. R. Boyle, A. A. Beatty, T. H. Bell, W. G. M. Byers, W. J. Beatty, George W. Barber, C. H. Brereton, F. X. Boileau, J. F. Baskin, T. H. Blow, G. H. Berry, B. G. Connolly, D. T. Crawford, H. Clare, P. M. Campbell, J. G. Cranston, F. B. Carron, D. A. Cameron, Jennie Drennan, George R. Deacon, J. D. Deacon, Geo. A. Elliott, A. T. Embury, J. J. Elliott, Geo. H. Ellis, C. Findlay, A. E. Gardiner, Wm. Goldie, Charles Graef, Joseph Gibbs, P. G. Goldsmith, J. J. C. Gibson, N. B. Gwyn, A. J. Grant, V. G. Harcourt, W. J. Henderson, C. M. Heydon, F. W. Hodgins, A. G. Hodgins, E. S. Hicks, George V. Harcourt, W. W. Jones, J. F. Kelly, J. P. Lee, D. P. Lynch, George Musson, J. S. Morris, J. A. Marquis, J. A. Malloy, W. J. O. Malloch, A. H. Macklin, H. G. Murray, A. A. Metcalfe, C. S. McKee, A. S. McCaig, W. A. McIntosh, J. R. McRae, S. H. McCammon, J. F. McConnell, W. H. Nichol, J. H. Oliver, J. R. Phillips, J. W. F. Purvis, E. L. Robinson, J. H. Rivers, E. L. Roberts, J. A. Rannie, H. H. Ross, Christine Sinclair, J. A. Sutherland, I. G. Smith, F. C. Steele, W. J. Stevenson, C. H. Thomas, N. J. Tait, J. S. Thorne, Annie Verth, A. Webb, S. H. Westman, E. B. White, B. E. Webster, W. H. Weir.

In cases of severe injury to the fingers by laceration or contusion, put the entire hand into a very ample soaking-wet dressing. Do not even trim off a piece of flapping skin. Incision for drainage is all that is allowable until healing is very well under way or even quite complete. You may then look over the ground and see whether it is worth while to sacrifice anything. A half inch of *boneless* finger may be of incalculable value to its possessor.