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epilated. After this has been ane unguentum resinol should be applied. Experiments have shown that it rapidly destroys the parasite, without producing irritation.-Ancrican Journal of Dermatolegy and Geni'o.Crinary Diseases.

Ciesarean Section: Deformity from Stays: Diffuse En-CHONDROMA-Poncet, of Cluny (Ant. de Gynéc.) reported to the Académie de Medicine in the spring a very complex case, which ended fatally. The patient was twenty-three, a very big woman, and exceedingly vain about her figure. She laced tightly, kecping her waist under eighteen inches in circumference. She seems to have continued the practice through her pregnancy. Premature labor set in on the 25 th day. On exploration the vagina was found blocked with enchondromatous tumors; the cervix could not be reached. Similar



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now growths were detected in the right labium majus, the right breast, and the abdominal walls in the right lumbar regions. The patient was in bad general healtin; still, nothing could be done except delivery of the fuetus by abdominal section. Cæsaraen section was performed with eviry precaution, but the child was dead when delivered, and the mother cxpired four hours later. Pinart rejected Poncet's theory that tight lacing could cause new growths to develop, but insisted that Poncet clearly did his duty in performing Cæsarean section.-Br:t. Med. Sour.
"Grir:"-C. A. Bryce, A.M., M.D., Richmond, Va., Editor of The Southern Clinic, in writing upon the above subject, during an epidemic of la grippe, said: "For the past four weeks or more we have met with five times as much grip as anything else, and the number of cases in which
the pulmonary and bronchial organs have been very slightly, or not at all, involved have been greater than we have noted in former invasions. On the contrary, grippal neuralgia, rheumatism, hepatitis and gastric congestions have been of far greater frequency, while in all the nervous system has been seriously depressed. The fatalities from pneumonia, meningitis and other complications have been fewer, showing plainly that we are gradually gaining an immunity from this zymotic invader: With each succeeding visitation of this trouble we have found it more and more necessary to watch out for the disease in disguise, and to treat these abnormal manifestations ; consequently we have relied upon mild nervous sedatives, anodynes and heart sustainers, rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encourage action of

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when examined with a lens. In cross secticn the guard cells appear more shrunken than in the dorsiventral type, and the thickness of the outer wall of the epidermis, inclusive of cuticle and wax, is from $15 \mu$ to $20 \mu$, whereas in the dorsiventral form they measure from $4 \mu$ to $5.5 \mu$. The isolateral leaves also have palasade tissuc on each side, the spongy tissue being practically non-existent, and represented by the loosely united cells lying between the palisade tis-sucs.-Journal of Pharmacology, iv., 169.
R.-Tuberculin in Phthisis.Spengler, of Davos (Deut. med. Woch.) has employed Kuch's new preparation in fifty-nine cases, administering 18 I c.cm. or 1810 mg . in y 22 injections, and without a single unpleasant incident, though reaction was occasionally
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bottle is usually administered. In both instances the serum used was of Gibier's make, the product of the New York Biological Institute. The manufacturers give directions to the effect that the entire conients oí one botile should be used every six hours until improvement sets in. In both cases two bottles were used, and all the serum was absorbed within six hours. There were no rise of temperature, no abscess and no eruption of any character. Immediate improvement resuited after each injection, and this was made more noticeable by the fact that the children were at the worst in the morning. The convulsions therefore appeared in the morning, since the children had received no injection daring the night. During the day both children rested well. Their convulsive muvements, or convuls:ons, were the first symptoms that yielded. In addition to the serum, both children were given

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-Tourn. de Pharmi. [6], vi., 79 after Berichte.

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Vol. VIII.
TORONTO, NOVEMBER, 1897.
No. 5

## ORIGINAL ARTICLES.

No paper published or to be published cisewhere as original, will be accepted in this department.

# THE SURGICAL TREATMENT OF OBSTRUCTION OF THE BOWELS. * 

Ey Hal. C. Wyman, M.S., M.D., Prof. Surgery in Michigan College of Med. and Surg., Detroit.

Gentlemen,-The title of this paper implies treatment of obstruction of the bowels by abdominal section and such treatment of the bowels as is needed to restore the intestinal stream. An obstruction of the bowels may be due to one or more of the following causes, viz. : Foreign body or a tumor in the cavity of the intestine, which should be treated by abdominal section, incision of the intestine to remove the body or tumor, and subsequent suture of the intestine and abdominal wound. (2) Paralysis of a loop or loops of intestines with impaction of fecal contents, which will require abdominal section and removal of impacted feces by manipulation. (3) Localized inflammation in any part of the peritoneal cavity, where it is possible for the products of inflammation to come in contact with the intestine may terminate in obstruction of the bowels. This is sometimes called obstruction by (4) bands or adhesions, but I think a distinction should be made which will enable one to consider such obstructions in a separate group, because they always imply a previous inflammation which may not have obstructed the bowels at the time of its occurrence. Localized inflammation of the peritoneum, as a cause of obstruction, means an acuteness of the attack quite overwhelming in its character and requires very prompt treatment by incision. of abdomen, and separation of loops of intestine, which are adherent and immobile. All unorganized products of inflammation must be removed and the field of operation must not be abandoned until the contents of the intestine are observed to move freely toward the rectum. If a movement of the bowels follows the operation, the patient is quite likely to recover. In some

[^1]cases the surgeon will find very extensive adhesions of loops of intestine apparently filling the abdominal cavity with more or less organized inflammatory deposits. His patient may be too weak to endure the shock which woull result from separation of the adherent and obstructed coils of intestine. In such a case he should grasp with his ring forceps the loop of bowel above and nearest to the obstruction and drag it gently forward into the abdominal wound, where it should be securely sutured so that it may grow to form a fistula. It should be incised after the abdomen has been carefully closed, so that the escaping contents of the intestine cannot enter the wound. This fistula may be expected to perform the duties of an artificial anus, until the inflammatory deposits binding the coils of intestincs together have been absorbed and the contents of the bowels are discharged per vias naturalis. Then the fistula may be expected to close spontaneously, but in case it does not. it may be made to do so by a special operation. It is quite important that the causes of localized peritonitis be sought for and embraced in the operative proceedings undertaken for the relief of obstruction. The perforated intestine should be carefully closed. The leaky fallopian tube should be treated. The diseased appendix veriformis should be removed. A case which came under my care two years ago will surve as illustration. A young married woman, aged twenty-faur, mother of two children, the youngest aged two years, was suddenly attacked with obstruction of the bowels. She had suffered great and constant pelvic pain, in the right side, for more than a month. This had lately become much worse, with fever and vomiting. Catl artic, failed to move the bowels. The vomiting became fecal in character. 1 opened the abdomen from umbilicus to pubis; pus ran out. The pelvis and lower abdomen were filled with inflammatory deposits. A loop of small intestine was found greatly distended. It was sutured to the peritoneum at the upper angle of the abdominal wound. The adhesions were so common that freeing of all the obstructed coils were impracticable. The cause of the inflammation was found in an abscess of the right fallopian tube. This was treated by incision and evacuation of the pus and mopping of the abscess with iodoform. Then the margins of the wound were turned into the abscess cavity in the tube and the peritoneal surfaces stitched together. The abdominal wound was now closed with interrupted sutures and sealed with compound tincture of benzoin. Then the loop of intestine fastened in the wound was incised. More than a quart of dark intestinal contents were at once discharged. An absorbent dressing was applied and the patient put in bed with warm water bottles to her chest and lumbar region. Her symptoms improved directly. Her bowels did not move naturally for more than a week, but there was a constant, more or less, fecal discharge from the fistula which diminished from day to day as the evacuations from the rectum became more frequent and natural and ceased entirely within tiwo months. This patient has had no illness since.

Intussusception, hernia, volvulus, diverticula, stricture, are all terms used t. d denote a condition which lead to symptoms of intestinal obstruction, if they are not speedily corrected.

Before operating for obstruction of the bowels due to any cause, some surgeons advise washing out the patient's stomach so that particles of feces may not be thrown into the lungs during anasthesia, and cause death by s.eptic pneumonia. Many of the cases, however, will be vomiting freely beíore the operation is undertaken, and will have their stomachs about as freely cleansed as it is possible to do it with the stomach tube and water. In the rriter's experience, it has been much more important to devote the time which might be used in washing out the stomach, to the arrangement of an
apparatus for keeping up the bodily warmth of the patient. The fact that the temperature is likely to be subnormal in nearly all cases of obstruction to the intestinal stream, makes it very important as a preliminary to any operative procedure, to raise the temperature by the application of external heat. This is best done by applying hot-water bottles to the epigastrium and hypochondrium over both liver and spleen, and, if opportunity presents, it is a very good plan to have the patient rest on a hot-water bed before and during the operation. An operating table with tubes for hot water is not always available when this operation must be performed, but an improvised bed can be made by a dozen flat pint flasks, of a good glass sort, which can be filled with hot water, securely corked, and placed between blankets. They will hold the heat and give it off into the patient's body gradually, and are among the best resources, in his judgment, for this purpose.

In dealing with cases of obstruction of the bewels, duc to local peritonitis, after the abdomen is opened and before an enterostomy is made, it is necessaiy to remove all the products of inflammation that can be readily removed. The use of water for this purpose is in favor with some operators, but water, under these circumstances, is not only a vehicle for the diffusion of pathogenic organism to every part of the peritoneal cavity and a sine gua non for the growth and multiplication of such organism, therefore why not abstain from its use in making the toilet of the peritoneum? Gauze of good absorbent propertics can be easily steriiized, and it will rapidly soak up all fluids in the field of operation, if placed in contact with them. It can be used with such gentleness that it will not abrade any part of the peritoneum. As a wick drain protruding from the abdominal wound for a few hours (six to twelve), it serves a useful purpose in aiding the recovery of the patient. After six to twelve hours, however, it is of no use as a drain, and s,nould then be withdrawn as a dangerous foreign body. If quantities of fluid continue to discharge from the wound, water may now be used with safety to wash out the space occupied originally by the gauze, as the tissucs which are capable of infection are securely walled off by deposits of organizable lymph.

It is sometimes an interesting and difficult question to determine what most seriously threatens the life of the patient who has an absolute arrest of movements from the bowels. Whether death is most likely to be caused by absorption of noxious substances which escape from the peritoneal cavity into the general circulation, or whether the poison which kills is absorbed from the cavity of the obstructed intestine, is still a mooted point. On its settlement much in the line of treatment depends. If we deside that our patient's life is in jeopardy, not only because he has an obstruction of the bowels, caused by a hernia, an inflammation, a volvulus, a perforation, or an inflammatory adhesion, any or all of which may be readily corrected in accordance with well-known mechanical principles, but because a poison is being absorbed from the obstructed intestine, our course of treatment becomes very clear. We must, first of all, neutralize the effects of this poison by introducing into this intestine some agent which will act as an antidote; but in case we know of no substance which, by force of either chemic or biologic properties, can antidote the poison, we must do the next best thing and let the poison out of the intestine through an incision. This is always easy to do after the abdomen is opened and the seat of obstruction ascertained. If the quantity of intestinal poison is too large to cscape readily through the downward course of the fecal matters, through the rectum and anus, after the obstruction has been removed, the excess can be drawn off through an incision in the intestine. The cavity of the bowels and the valvula coniventes can be washed clean with normal salt solution and in the place of heart depressing
poison, stimulating bouillon can be absorbed from the mucous surface of the bowel.

On the other hand, if we decide that the danger to life lies in the inflammatory products which are found in thr: peritoneal cavity and which have reached that place through perforations of the intestinal wall, which have enabled pathogenic organisms to multiply under conditions unfavorable to the life of the host, our patient, we have enly to open the abdomen, evacuate the inflammatory products, sew up the perforations, restore the continuity of the alimentary canal and our case is in the most favorable condition for recovery. The character of the ubstruction, under this plan of reasoning, becomes the most important feature of the case, but we think otherwise, and believe that much vaiuable time will be lost and damage done to the patient in endeavoring to learn whether the obstruction is due to a band, a diverticulum, an appendix or an elongated mesentery. It is better to proceed at once into the cavity of the abdumen the moment an obstruction is recognized, without regard for the character of the obstruction, than to endanger the life of our patient with technical yuibbling dbuut particular kinds of obstruction. A patient unce came under my care for ubstruction of the bowels. Her family physician told me he had sume years before reduced a small strangulated femoral hernia by taxis and relieved her of similar symptoms. But now both groins contained small tumors which did not feel like hernia but enlarged glands. I did not think either was a hernia. To relieve the obstruction of the bowels I opened the abdomen, followed down a greatly distended coil of small intestine and found it obstructed by a very small hernia of the left femoral ring. After the hernia was reduced and the continuity of the canal re-established, I could find no difference in the enlarged glands in either groin. Clearly, further delay befure opening the abdomen to make a diagnosis would in this case have resulted in rupture of the intestine close to the femoral ring and collapse would, perhaps, have quickly followed. As it was, I was ubliged to resect the strangulated knuckle of bowel and make an end-to-end anastomosis.

Some writers upon the subject of obstruction of the bowels lay great stress upon what they call symptums of strangulation, and as this term implies softening and perforation of the obstructed bowel, I do not see the need of its use in view of the definite impurt of the symptoms of intestinal obstruction. When a patient has these symptoms, absolute constipation as to gas as well as feces, subnormal temperature, vomiting which has passed the bilious stage, more or less pain in abdumen, and is generally sick enough to call a physician, I can see nu need of any other adverse symptoms being allowed to develop in the case befure a diagnosis is made and a plan of surgical treatment undertaken. There is already evidence enough for a laparatomy, and after it is performed the sy:nptoms of strangulation and collapse, which are pretty nearly the same, can be anticipated by the removal of the toxines from the mucusa, and of the obstructing deposits, bands, diverticula, hernix, etc., from the peritoncum. I would summarize my views as to the surgical treatment of acute obstruction of the bowels in about the e terms: Operate as soon as ycu are satisfied that there is an absolute constipation to both gas and feces, and when you operate be sure that the poisonous contents of the intestines will be discharged either through the natural channel or through a fistula-enterostomy. The location of this fistula should be as near the iliocucal orifice as possible, if in the small intestine, and as near the rectum as possible if in the large one. Chronic obstructions of bowels I have purposely left out of this paper, and have endeavored to prepare for discussion these facts as to acute obstructions.

# SOME INTERESTING SURGICAL CASES.* 

By James Neweli, Ph.B., M.D., Watford, Ont. President of the Lambton County Medical Society.

I have thought that perhaps the recital of the fullowing cases might prove of interest to this Society, and from the discussion that may ensue we might gather information which would enable us to the better meet and combat such cases if they should be again encountered.

Miss R., aged forty, female, consulted me regarding a pain in ovarian region, and ill health which had come on some months previously.

Without a physical examination I diagnosed ovarian with probably tubal disease. Tried the usual remedies without producing only temporary relief. As medical treatment was unsatisfactory, and after a physical examination operat:n was advised and assented to. On opening the abdomen, the pelvic organs were found adherent and bound down. Separating the adhesions I liberated the ovaries, ligated and cut them off. They were found densely cirrhotic. Contrary to expectation the tubes were quite healthy. Recovery was uneventful, the temperature not rising above 100 .

Subsequently in about two months she had a flow of bloud which resembled the catamenia, but as it became hemorrhagic in character and gave forth a foul odor, I made a vaginal examination. I then discovered that there was carcinoma of the anterior lip of the cervix of the anterior vaginal wall.

From this on the progress of the malady was quite rapid and very painful, requiring large doses of opium to ease the pain. She had no more bleeding, but died about four months after.

Mr. K., aged thirty, laborer, male. Case of recurring appendicitis treated by another practitioner. Had two attacks, laying him up from work for six weeks each time. The patient in the interval consulted me and requested operations. On making the usual incision over the appendicial region I found the offending organ. There were few if any adhesions. I ligated the appendix and its mesentery separately with silk, excised, dropped it and closed the abdominal incision with silkworm gut. Recovery was rapid and complete. Temperature never rose above 99 except the first night, and was then due to distension of the bowels with wind and which an injection of warm water and turpentine relieved. In removing the sutures I overlooked one, and which I did not discover and get away till three months afterwards when the man called my attention to a small point of ulceration of the skin. The result of the operation has been all that could be desired.
C., aged forty-eight years, male, farmer. Saw this case in consultation with a brother practitioner, Dr. Gibson, at I I o'clock at night on third day of illness. Found the patient restless, with an anxious look; temperature 100 and pulse 96. He had fecal $i$, aiting and obstinate constipation. Diagnosis, intestinal obstruction, and advised operation. Assent to operate in the morning if the constipation was not then relieved was given. Saw the man early next morning and found the condition much the same; pulse 96 , with an occasional lost beat.

On opening the abdomen the strall intestines were found distended and congested down to a certain point and beivw that flaccid and empty. The obstruc-

[^2]tion was fuund in the ilcum and was due to a volvulus. It was quite easily untwisted. The injured intestine and mescntery were carefully examined and wiped off with a sterilized towel in hot carbolic water and replaced in the abilomen. The wound was closed by suture with silkworm gut anc' the patient put into bed. Hot blankets and water bottles were kept applied. He came out of the chloroform very well. Next day I saw him with his physician, and found him guite casy ; temperature 100 and pulse 96 , with the lost beat as before. Strychnia had been advised for this condition before operation and was continued. Second day; the second after operation, collapse set in quite suddenly and he died shortly after. There had been a small fecal passare. Two things were vividly impressed on my mind, one that very probably the twist or volvulus of the intestines nad returned, and the other that the chances of recovery would have been much enhanced by an earlicr operation.

Mr. B., ased forty-nine, farmer. Saw this case on the 3rd or 4 th day in consultation. Case was in every respect similar to the preceding. A history of colicky pains, obstinate constipation and ending in fecal vomiting. The diagnosis of intestinal obstruction made by the attending physician was confirmed, and immediate operation strongly urged. Assent was not given fur some time, and when it was, the condition demanded that the patient's bruther, a physician living 100 miles away, must be sent for and be present. The danser of delay was pointed out but was futile. By lamplight ten hours afterwards, and with a temperature of 100 and a pulse of 96 , in which every sixth beat was missing, I operated. I fuund the intestines adherent in many places from previous inflammatory attacks, and after a search, and one of the must trying I ever made, I discovered the cause of the obstruction to be due to a fibrinous band over the transverse colon behind the stomach. This I loosened with my finger by stripping up from the intestine. As there was considerable evidence of shock or collapse I douched out the abdominal cavity with a warm saline solution, and leaving considerable inside sutured up the abdominal wound. He rallied well from the operation and was left in charge of his brother the doctor. Next day when I saw him with his physician he was quite easy, had rested very well; still the puls? was 96 with the lost beat. I advised the continuance of strychnia in 30th gr. doses hypodermically. There had been no movement of the bowels. On the second day he had three copious fecal passages, with flatus, but on the morning of the third day collapse came on and quite suddenly ended his existence. In this case I believe the man's chances of recovery were much lessened by delay in operation.

Mr. K., aged sixiteen, farmer's boy. Saw this case in consultation with Dr. Copeland; found he had been sick two or three days with appendicitis; temperature ico, pulse 96 . Not much tympanites, but soreness and hardness over the appendix. Had a chill twelve hours previous. Operation advised, assented to and proceeded with instanter. Making the usual incision, I found a jelly-like substance in and around the transversalis fascia. On opening the peritoneum, a very unpleasant odor soun made itself apparent, followed by pus. This I wiped away and washed out with a fountain syringe filled with a normal saline solution. After a caieful hunt I brought the appendix into view, having first found a concretion, three-quarters of an inch long and one-quarter of an inch in diameter, of a grey yellowish color. The appendix was acutely inflamed, swollen larger than a thumb and perforated by a large opening which would admit the point of the finger about the middle of its leng $t h$ where it was doubled on itself. I ligated the appendix and its mesentery separatcly and
cut them off; wiped out the stump ad touched with pure carbolic acid. The wound was sutured with silkworm gut, except at the lower angle where I placed a rubber drainage tube of good size. The recovery was uninterrupted except for a stich abscess. I heard the other day from his physician and recovery was assured. I was not sure that the abscess was walled off from the abdominal cavity, nor did I take inuch trouble to ascertain for fear of breaking down the thin wall of partition, if such existed.

Miss O., aged forty-two, never married. Saw her for what was called by her sister, "inflammation of the bowels." I found her with a temperature of 100 , and pulse of 84 . There was an enlargement of the abdomen, having every appearance of pregnancy at the seventh or eighth month. I strongly suspected such, but was assured to the contrary. On vaginal examination, the os was found high up and quite soft. I made a noncommittal diagnosis of a tumor of some sort. Under rest, appropriate treatment, the soreness partially isappeared and the temperature fell to normal. I advised operation, and on opening the abdomen a large tumor presented itself, which was found to be a solid fibroid of the uterus. Erlarging the incision, I drew the tumor outside the abdomen, and putting a strong piece of rubber tubing around the lower part of the uterus, I incised the peritoneum, and stripping it down for about three-quarters of an inch, I removed the fundus of the uterus by a wedge or $V$-shaped incision. I then ligatured the uterine arterics with silk, and finding the right ovary enlarged and inflamed removed it also. I covered the stunp of the uterus with the peritoneum which I had stripped down and united its edges with fine silk interrupted sutures. It was then dropped into the abdomen, the toilet completed, and the incision was closed by silk sutures. Not over two nunces of blood were lost during the operation. Recovery was uneventful, except that next morning there was considerable shock and which I found the nurse, a most intelligent and excellent one, was combating with injections of strychnia and warmth to the extremities. The temperature remained below 100 till the besinning of the third week when it tose to 102, owing to an attack of diarrhcea produced by failure to digest and which yielded to a close of salts and peptonized milk. The tumus was a solid tibruid of the fundus uteri and weighed seven pounds.

Case 5.-Mrs. B., married, aged forty-two, and mother of eight chil.lren. I was summoned by telegraph to see this case, as she lived twenty miles away. On arrival I found she had been taken three days befure, after having done a large washing, with intense pain in left side of the abdumen. Her physician informed me he had to give morphia, both per os and hypodermically, to relieve the pain, and had administered a cathartis which failed to act. For the past two days she had occasional attaclis of vomiting, but not fecal. I found her with an anxious expression; temperature ivo, and pulse 86. On abdomina! inspection and examination nothing special could be discovered. I diagnosed intestinal obstruction, due most probabiy to a volvulus or intussusception and advised immediate operation, and which being agreed to, I opened the abdomen by the usual incision. The intestines were found to be very congested and the abdomen filled with effusion. After considerable search I brought the appencix in view, and finding it highly congested I thought it advisable to remove it, which I did by ligaturing with silk, and having severed it, cleaned the stump and touched it with pure carbolic acid. Having not yet found the obstruction, I procecded on my search and found that a knuckle of the ileum was incarcerated in the right femoral ring. By conjoined pressure on the outside, and drawing on the intestine inside, the imprisoned gut was liberated. Two-thirds of the lumen
of the ilcum had been grasped by the constricting femoral ring and it presented a very dark and inflamed appearance. I wrapped it in a towel wrung out of a hot carbolic solution and when I found the circulation established I doucherl out the ablominal cavity with a normal saline solution and closed the incision with silkworm gut. Leaving her in charge of her physician, Dr. Brown, I heard from her every day for a week. Recovery was uneventful. Temperature did not touch 100, and in two days the pulse fell to 70 , and she had ten copious fecal evacuations. The strange thing about this case was that the intestinal obstruction was due to occult femoral hernia on the right ride, while the seat of pain was in the left side of the abdomen. She denied all knowledge of ever having suffered from previous abdominal pain or knowing that she had a hernia. She now wears a truss. She was gone two months in pregnancy at the time of operation, and was delivered at full term of a healthy child.

## Reports of Societies.

## LAMBTON COUNTY MEDICAL ASSOCIATION.

The regular meeting of this Association was held on October 13 th. There was a very large atten.dance, it being one of the best meetings ever held. Among those present were: Drs. A. S. Fraser, F. B. Wilkinson, W. Logie, D. B. Bentley, A. McLean, J. G. Morrison, Sarnia ; A. E. Farvey, J. Newcll, Brodic, Wyoming ; A. S. McAlpine, R. M. Calder, Petrolea; James Newell, T. A. McLeary, Watford ; A. G. Fisher, Brigden ; Crawford, Courtwright; P. McG. Brown, Camlachie; Watson, Arkona ; J. J. Bray, Chatham; Palmer, Patrick, Port Huron, Mich., and Hal. C. Wyman, Detroit, Mich. This was no dnubt largely due to the fact that Dr. Hal. C. Wyman, of Detroit, was announced to read a paper at the ineeting. After the regular routine business had been gone through with the papers were taken up.
The first paper read was the President's, Dr. Newell, of Watford. (See page 845 .)
Dr. Harvey had seen most of the cases with Dr. Newell. As regards the one with the fibroid tumor he did not believe he had ever seen a case with conditions more unfavorable to operation. In reference to the femoral hernia case, it was often very difficult to detect this in a fleshy woman with pendulous abdomen. He had a case which he failed to diagnose, sent it to the hospital; it was returned, and some time subsequent found femoral hernia.
Dr. Fisher complimented Dr. Newell, and said in reference to the case with pus in the peritoneum he had had a case in which, with all care walling off cavity with gauze, patient speedily collapsed. He thought in some cases it might be well to wall off cavity for twenty-four hours for
adhesions to form, and then operate on abscess.

Dr. Wilkinson said in reference to first case that he had often noticed the rapidity witl: which malignant growths extencled after interference, and also the great difficulty of diagnosing malignant growths of any internal organ, and he thought the weight of experience was toward leaving malignant growths alonc unless most complete extirpation was practised. In reference to flushing, he thought that the method pursued at Johns Hopkins Hospital of tu:ning out the intestines on ase,tic towels, and carefully wiping off all ymph, was the best.
Dr. Palmer said that he thougit evcry doctor was handicapped in attempting surgery outside of the hospital, owing to the great difficulties and lack of facilities in this class of work. His experience was that death from secondary conditions were much more liable to occur in country practice. He had enjoyed the paper very much.

The next paper was by the guest of the meeting, Dr. Hal. C. Wyman, of Detroit, on (See page 84:).

## Discussion of Dr. Wyman's

## Paper.

Dr. McLean said that he had merely risen to state his appreciation of the paper. It was evidently written by a man who thoroughly understood what he was writing about, and had given us the results of his practical experience.

Dr. Newell (Wyoming) said he had seen a somewhat similar case at Grey's Hospital, and, as in Dr. Wyman's case, the fæecs at first passing largely by the artificial annus, but as the natural method was established the other lessened and closed.

Dr. Bray desired to compliment Dr. Wyman most heartily on his paper, and was sure that every one must be forced to agree with his exceedingly practical and logical
derluctioms He urged the early recrgnition of these cases.

Dr. Watson said that we were all under a great compliment to Da. Wiyman. He had reall some of his work before, and was most ansious to hear him in reference the early operations. He was sure that the chieflesson to be drawn from the remarks in reference to carly interference, was, that young practitioners must make themselves competent to perform the operation as it is often impossible to obtain assistance. As for the difficulty of operating, he recalled the remarks of Dr. Wycth that it was possible to do work successfully under any ordinary home enroundings.

Dr. Watson wished information from Dr. Wyman as to the best methods of suturing.

Dr: McAlpine said he had no criticisms to offer; he was sure that all were at one with him in their pleasure over the paper. Personally, in his many years of practice, he had not had the necessity for all the important operations that he was accustomed to latterly to hear so much about. He thought the pendulum was swinging too far one way. He had been in practice for a quarter of a century, and had not had a case of appendicitis which died, and never had one operated on.

Dr. Wilkinson said he rose with much difficlence to criticise, or rather not to criticise; he was sure that the paper read was too complete for that. He trought the first thing to do was to make a certain diagnosis. In reference to hospital and home work, he would say that he operated in a hospital for ten years before starting active practice and in the subsequent ten years had to operale in private homes and thought it was quite possible to do good work in active practice without hospital facilities. He would like to know how Dr. Wyman ascertained the position of the obstruction before stitching to the wall.

Dr. Harvey would like to know
the advantage of fistula over Murphy’s button.

In reference to Dr. Bray's remark that the doctor postpone the operation. it was not the doctor who delayed. but the patient's friends

Dr. Bray said this was right, but as far as the remarks that the doctor had as good a chance outside as in the hospital, he would mention two cases he had had:

Finst Case of Cimarian Section.
About ten years ago, some thirtyfive miles from Chatham, on a cold winter's night, thermometer down to zero, in a $\log$ cabin abundantly ventilated by holes between the logs, with an old cooking-stove as a heatcr, for light two tallow candles and a small coal-oil lamp, two medical men beside myself were assistants, nurses, stokers and general atility men. It was impossible to keep towels warm for more than half a minute at a time, and as the intestines persisted in coming out, it took one person all his time to heat the oloths to kecp the bowels from frcezing. Contrast this with a like operation in a well-appointed hospital with good nurses, electric light, steam heating and every necessary appliance.

Second and third operations-amputation of both thighs; the one in a shanty on the prairies, with the thermometer $95^{\circ}$ in the shade; and the other in a country hotei, with dirt in every corner, no nurses, no sprays or douches, or any of the essentials found in a hospital. What would some of the surgeons in Johns Hopkins, the Royal Victoria and hospitals of that class think if they had to operate urider such conditions as I have stated? And yet some surgeons seem to think the results in private practice should equal or excel those in hospital practice. True, the cases I have cited were extreme ones, but they were all cmergency cases, and such as are liable to happen to any country practitioner at a moment's notice.

The President (Dr. Neweil) said that he could reiterate that delays were dangerous. As Dr. Park says, If you wat until you have a positive diagnosis you lose 60", of your cases. A point that had been in his mind was, when you lose your patient after relieving the obstruction, what is the cause, is it development of toxins, or what? He was satisfied tiat whea there was mechanical obstruction there was only only one thing io do. and that is to operate. The paper :s the most importani and interesting that has been read before our Association. There is nothing more important from the nature of the case than full information for prompt action.

Dr. Wyman, in closing, said he was very gratified with the reception of the paper. He thought it was most important never to state that death was due to the operation without being more positive. It produced a bad impression in the mind of the lay public and often was the cause of denying many cases the bencfit of operation. He referred to Dr. Wilkinson's operation, and drew attention to the fact that his paper dealt chiefly with iocalized peritonitis as a cause of obstruction. When you find the point where you judge the chief inflammation is and open the abdomen, you are nearly at the point which will most ciearly indicate by the flatulence the particular coil involved. Methods of anastomis.-He preferred a running stitch, getting peritoneal surfaces approximated from mesentery on the right to mesentery on the left; you were sure then that the mucus surface was inside. He used silk chiefly, also tendons of blue heron, had used kangaroo tendon, used a round needle and just went through muscular or middle coat, but did not penetrate mucous membrane. His observation was that no contraction occurred. Thought in reference to sutures that too much attention had been given to materials and methods; he had never known a suture to give way.
$A$ vote of thanks was extended to Dr. Wyman for his exceedingly able and intcresting paper.

After the meeting adjourned, the local plysicians entertained Dr. Wy. man and the visiting brethren with an elegant supper at the Belchamber. After a thoroughly enjoyable time the physicians trook leave of one another to the strai is of "Auld Lang Syne."

## THE TORONTO MEDICAL SOCIETY.

The regular meeting of the Toronto Medical Socicty was held in the Council Dulring, October 2 ist, 1807.

Present, Drs. Oakley, Parsons, Carveth, Chambers, A. Wright, Bryans, W. J. Wilson, Machell, Greig, Hunter, Alcxander, Scadding, Hamilton, R. J. Wilson, E. Clouse, Webster, Ross, C. J. Hastings, G. Gordon, Rudolph, Cameron, J. N. Brown.

The following gentlemers were elected members of the Society: Drs. Herbert Bruce and David K. Smith.

Dr. Graham Chambers presented a patient with leucoplakia buccalis. The patches were multiple and had lasted for six months. Twenty-five years previous the man gave a history of having a chancre which he healed himself. There was doubts as to its being sypnilitic. The patient was a mild smoker: Dobell's solution was being used as a mouth wash. In reply to a question the speaker said it had no relation to psoriasis.

Dr. Adam Wright then gave a demonstration on breach presentations. The subject, he said, was of importance because the infant mortality in such cases was high. He preferred to keep the patient in the dorsal position. Walsh's position, in which the patient's hips were drawn out over the edge of the bed and the legs allowed to hang down loosely, was said to increase the conjugate diameter of the pelvis from two-fifths
of an inch to one inch. The membranes should be intact as long as possible in these cases so as to dilate the onft parts. No trachon should be made for fear of producing cxtension of the head or of the hands over the hearl. If the breach is arrested high up, chloroform should be administered by an assistant, and the work of delivery gone about in a systematic way. The finger may be introduced into one or the other groin and an attempt at extraction made. One might use a blunt hook, a fillet, forceps, or bring down a leg. His practice was to bring down a leg. There was a difference of opinion regarding the use of forceps Some ruthorities would not use them ar all. He thought they were of lidic use when the pelvis of the child was at the brim, tut where the breach was well down into the pelvic cavity they were of use irı a proportion of cases. His mode of applying them (which he demonstrated on the phantom) when the transverse demater of the breach lay antero-posteriorly or obliquely was to apply one blade over the sacrum, and the other over the convexity of the most accessible thigh.

There were threc dangers to be avoided, pressure on the cord, premature respiration, and separation of the placenta. To avoid attempts at jespiration by the child, which would likely recur through reflex stimulation of cold on the body already delivered, a warm cloth might be wrapped around it. The four or five minutes after the delivery of the body were critical. The great point was to maintain flexion of the head. His plan was to place one or two fingers of one hand in the mouth and pull; and with the fingers of the other hand press on the back of the head. If this was not sufficient, he shoved the fingers of the one hand up by the side of the nose, still pushing over the nape of the neck with the other. If this was not sufficien ${ }_{l}$, he would grasp the legs of the child and pull forwards at right angles,
using the other over the nape of the necck as before. Another plan was to place one finger in the mouth and exert pressure over the uterus externally with the other, or forceps might be applied to the head.

Dr. Machell said that the first method he tried in extricating the after-coming head was the third described by Dr. Wright. It seemed to him the simplest. If that failed he tried the Smellie method. This failing he adopted the Prague method.

Dr. Hastings corroborated the points brought out by Dr. Wright.

Dr. Oakley described a case in which, during delivery, the head became separated from the body and had to be extracted subsequently.

Drs. Hunter, Scadding, Ross and Greig spoke briefly on the question.

Dr. Wright closed the discussion. The demonstration of occipito posterior presentations was postponed until the next meeting

## THE HURON MEDICAL ASSOCIATION.

The regular quarterly meeting of this Association was held in the House of Refuge, Clinton, on Wednesday, October I3th, President, Dr. Mackay, of Searorth, in the chair. The minutes of last regular meeting being read and approved, the President called upon Dr. Gunn, of Clinton, who gave a most interesting address on Nervous Diseases. He gave a brief account of the anatomy of the brain, and presented for the bencfit of all present a sheep's brain neatly dissected, and showing in a satisfactory way the different portions affected by some of the diseases peculiar to the nervous system. He then, by means of charts, showed the various columas of the spinal cord, and in a mos'. interesting and practicul manner explained the various diseases produced by lesions of these different tracts. To illustrate his
address the following cases were presented: I. Locunotor ataxia, two cases, exhibited by Dr. Shaw. Clinton. 2. Amyotrophic latera: sclerosis, Dr. Amos, Exeter. 3. Compression myelitis (cervical region), Dr. Gunn, Clinton. 4. Brachial neuritis, Dr. Case, Dungannon. 5. Anterior polio myelitis, Dr. Mackay, Seaforth. 6. Paraplegia (lumbar region), Dr. Turnbull, Clinton. 7. Spastic paraplegia (primary, secondary, infantile), Drs. Gunn, Clinton, and McKenzie, Moncton. 3. Raynaud's disease, Dr. Wood, Mitchell. 9. Paralysis agitans, Dr. Kennedy, Wingham. io. Chorea (Huntington), Dr. Taylor, Goderich.

He clearly showed the most prominent symptoms to be looked for in each of the foregoing cases, and by contrasting one with the other how to differerciate between them and arrive at a positive diagnosis. Too much credit cannot be given Dr. Gunn for the able manner in which he disposed of his subject, and the many practical hints gained by the different members present clearly demonstrate how carefully the doctor prepared his work, and how much he labors for the good of the profession.

In addition to the cases bearing upon Dr. Gunn's address the following were presented to the Association: I. Anginapectoris, exhibited by Dr. Amos, of Exeter. Several present examined patie:1t and no organic lesion of heart was discovered. The chief drug used in treatment was nitroglycerine. 2. Dr. Bethune, of Seaforth, presented an interesting case of "cornu cutaneous." The cornu was a most interesting onc, and was examined by several prominent physicians present. 3. Dr. Stanbury, of Bayfield, showed a peculiar case of blindness, following an attack of acute conjunctivitis, due to cold. Dr. Kennedy, of Wingham, presented a case of recurring lupus of arm. Treatment consisted in curetting and iodoform.

Dr. Beattic Nesbitt, of Toronto, Editor of the Dominion Medical

Monthly, was present and was elected an honorary member.

Moved by Dr. Shaw, seconded by Dr. Agnew, that diseases of stomach be considered at next meeting, and that the medical staff of Goderich prepare the programme.-Carried. The meeting then adjourned.

## BAY OF QUINTE ASSOCIATION MEETING.

The Bay of Quinte Medical Association held their semi-annual meeting at Napanee, Ont., on October 2 th, uit. The meeting was very successful, a large number of the profession attending. Papers were read by Drs. Alger and Simmonds, of Frankford, and Dr. Ward, of Napance. On the conclusion a complimentary dinner was tendered to the visitors by the local members of the profession. The next meeting will take place at Belleville, May, 1898. The officers of the Association are, President, Dr. W. J. Gibson, Belleville ; Vice-President, Dr. J. D. Bissonette, Napance; Scc-Treas., Dr. H. A. Yeomans, Belleville, Ont.

The Use of Hypodermoclysis in the Treatment of Cholera Infantum and the Hemorrhage of the Menopause.-In the Journal de MTédecine de Rordeaut for April, 1897, Durodie considers the value of artificial serum injections in these conditions. He first cites some of the original literature in regard to their employment, particularly concerning the strength of the solutions that should be employed. In pressing cases intravenous injections are to be resorted to. As a rule one and a half quarts is quite a sufficient quantity either for hypodermoclysis or intravenous injections, whether the condition be one of hæmorrhage or one of shock or toxemia.
[This quantity has usually been found quite sufficient in our experi-ence.-ED.]

## Special Selections.

## THE CHARITY ABUSE.

With the commencement of the college terms and with the necessarily more active clinical work in the metropolitan hospitals the struggle for clinical material will be proportionately manifest. Thus it is to be reasonably expected that the old abuse of medical charity will boom along as destructively to the higher interests of the profession as ever, and will revive the old complaints against the atrocious unfairness of the entire system. It is some comfort to know, however, that the large majority of a suffering profession is still on the side of radical reform, and has not yet lost heart in its efforts to right a most grievous and far-reaching wrong.

In witness of this indication we note that one of the papers which called forth a very extended discussion at the meeting of the State Medical Association was upon the subject named. Dr. Wiggin certainly handled the abuse of charity in a straightforward, sensible, and practisal way. It was the old story retold, but it always bears rehcarsal at a time when the young practitioner is wearily waiting for business and weighing his chances for ordinary success against very heavy odds. The fight against the abominable evil of indiscriminate medical charity is now one for actual existence as a profession. Think of the statistics quoted by Dr. Wiggin from Dr. Stephen Smith's report! Either we are living in an age of pauperism or clse charity, pure and simple, is an outrageous lie! What answer is there to the statement, founded on the study of the present dispensary and hospital systems, that fully fortynine per cent. of the entire population of New York are actually unwilling to pay for private medical attendance? It is not difficult to explain the reacon for this when we look into
the outrageous methods of free treatment as carried on at the Vanderbilt Clinic for all classes of pretended paupers, and when we note the gross wrongs connected with the welladvertised bids for pay patients at the Roosevelt and uther ostensibly charitable institutions. Even the Sloane Maternity levies a mortgage on the good intentions of the coming mother by offering to care for her during her confinement, for sums varying from fifteen to twenty-five dellars for her entire term. How about the new lying-in hospital founded by a multi-millionaire for so-called charity, which institution, to prove its reason for being, must have its beds filled at any cost to the self-respect of the patient or the ultimate impoverishment of the doctor? The boards of managers draw the line between the propriety and impropriety of the thing, and the profession is expected gracefully and resignedly to toe the mark. But we still maintain that there may be hope for us yet.

The best of all indications is, that the public in general is beginning to understand the true situation of affairs. The daily press and the pulpit are inclining to attack the questionable motives of the so-called Christian philanthropists. The more the subject is ventilated the better will it be for the real truth. It is quite true, as claimed by one of the speakers at the meeting in question, that the profession is very much to blame for tacitly submitting to the present tactics of charity. The only way to reconcile differences in regard to mooted points of responsibility between managing boards and medical staffs is to create an authoritative bureau of arbitration, as endorsed by the speaker in question and often enough advocated before. Dr. Wiggin covers this and many other essential points in his summing up of remedies. In fact, this was the central idea of the bill which passed the legislature last winter, but which
failed to become a law because of the weal-kneed condition of our present governor, who was persuaded to miss the opportunity of gaining the good will and support of the medical profession by listening to the arguments of two or three gentlemen who represented merely the college interests as to clinical material. But, as we have already said, the profession is still earnest in its endeavors to right the monstrous wrong and will again be heard before the next legislature, college or ino college, governor or no governor. It is simply a question of right and fair play, and we can afford to wait and have still courage to fight. The Medical Record has always been on the side of the great majority of the profession in this matter, and is more than ever determined to do its best to bring this bitter, burning wrong within the pale of candid and fearless discussion.-Editorial in Med. Record.

## THE FUTURE OF THE ARMY MEDICAL SERVICE.

We learn that the rumors as to a new Royal Warrant for the Army Medical Service are somewhat premature, but we inderstand that the War Office authorities have been, and are, seriously considering the possibility of overcoming the present regrettable deadlock in respect of recruiting for the Army Medical Staff by so altering the conditions of organization as to permit of some kind of return to a regimental system. From the information which reaches us we gather that the proposals put forward by the late Adjutant-General on behalf. of the War Office to secure this end were extremely crude, involving practicaliy a return to the old regimental system. Whilst fully recognizing the value and importance of establishing a closer bond of union between the medical personnel and the fighting units, we think it our duty emphati-
cally to intimate to those advising the War Office in this matter that no system of reorganization can succeed in practice or be acceptable to the medical profession which in any way perpetuates the present conditions in the medical staff in respect of army rank. The medical officer in respect of army rank must be on an absolute equality with his non-medical brother. The mere fact of a man having taken a medical degree or qualification should not penalize him in the military hierarchy. An experienced correspondent suggests that if it be desirable to revert in some way to a regimental system, there would be no inseparable difficulties in the way of its introduction, provided that unambiguous army rank were given to the medical officer, such rank, however, not to carry powers of command over men not belonging to the medical establishment. Once that were given, our correspondent continues, "it would be quite possible to organize a true medical or technical corps, having a fixed establishment, and composed of officers of a certain seniority, say from ten to twenty-five years' service; the duties of such a corps would be to run and organize all the various hospitals, whether garrison, general, or field. This corps should include the men of the present Medical Staff Corps, and should constitute an integral corps of the army, being organized upon similar lines to the Army Service Corps. Such a corps should be recruited as vacancies occur in it from medical officers in and belonging to fighting units. The probable period of service at which men might expect transference from their units and ipso facto promotion into such a technical corps would be about the tenth year. From this medical or technical corps should be selected the medical officers for staff employ, and these men would be the really only true medical staff. These medical staff officers would be the principal medical officers of districts, and as such should be known
as deputy assistant adjutant-generals, issuing orders as to matters concerning medical and sanitary arrangements 'by order.' The rank of these staff officers would necessarily be that of colonel. If the medical service of the army could be organized on lines similar to these, some of the best medical talent and material of the country would be attracted to military service. Their younger years would be put in as officers of corps having the finest military tradition, while in their later years they would either be officers of a purely technical corps, or serving as staff officers for technical purposes. From the first day of service to the last, they would be soldiers, and the branch of the army to which they would ultimately belong would soon be as much respected and sought after as it is now shunned and avoided." These proposals are certainly worthy of the most careful consideration by the military advisers of the War Office, as they appear to offer a way by which conflicting views, prejudices, and interests can be reconciled.Brit. Med. Jour.

## INDIGESTION OF BREAST-FED BABIES.

It is stated in the Archives of Pediatrics that for many reasons less attention has been paid to the gastrointestinal affections met with in breast babics than in those nursed artificially. Breast milk is the natural and ought to be the sole food of the infant, under physiological conditions, during the first year of life. Unfortunately there is too often a departure from the normal state, and the child, perhaps also the mother, may suffer during the lactating period. The natural pride and instinct of the mother are apt to lead to the presumption that all is going well with her and the infant, when in reality she is not a good rurse, and the child
is suffering more or less. In America the question of infant-feeding in all its aspects has received the attention which it deserves, and which it has not met with in England. The greater prevalence of diarrhœal disease during the tropical summer of the American continent has stimulated study and research on this important subject. Milk laboratories have been established in the larger cities, and the feeding of infants has been placed on a comparatively sure and scientific footing. Owing to the researches of such men as Jacobi, Rotch, Holt, Lewis Smith, Meigs, and others, we are now furnished with scientific data to guide us in the study of the subject. In the writer's own country the subject of milk supply is receiving some attention from sanitarians, but there is as yet no ready means available to the general public of obtaining pure or properly sterilized milk in quantity, nor of having milk analyzed or tested in laboratories established for the purpose. Whenever the milk of the mother is defective in quantity or quality, the child is apt to suffer. It does not thrive or grow at the normal rate. Instead of being plump and firm and happy, it is soft and flabby, and is alwavs crying, and never appears to be satisfied. Its skin is harsh and dry. The tongue is somewhat red, often slightly furred. Vomiting from gastric catarrh is not unfrequent. The stools are unnatural, and present various appearances depending on the quality of the milk. They are generally loose, and seldom have the natural mustard color or consistence ; but are usually pale, and often of an ashy gray color, sometimes greenish, or mixed gray and green. The soft curd of the mother's milk is present undigested in little granularlooking masses. There is an excess of mucous secretion, sometimes there are little streaks of blood. As a rule, indigestion of mother's milk is more fiequently intestinal than gastric, diarrhœa being more common than vomiting. This appears to be largely
due to indigestion of the fatty and proteid elements of the milk. Infants, in regard to their digestive capabilities, are but little men and women, and it is certain they have their idiosyncrasies likewise. The milk of a mother seems to be suited to her own child under physiological conditions. Irregular suckling is one of the commonest causes of indigestion in babies. It produces a milk too concentrated, which inevitably causes indigestion in the child. Regulation of the suckling is generally sufficient to give relief. Irregular mokling may be due to two principal causes. It may occur in cases in which the milk is normal in quantity and quality, from bad habit on the part of the mother in being over-anxious about her child, and carelessly giving it the breast at irregular times or whenever it cries. The more frequent cause, however, is deficient quantity of milk. In this case the child is unsatisfied and gets the breast too frequently in consequence, with the result that the milk becomes too concentrated and causes indigestion. The remiedy is the addition of some substitute feeding. Inseparably connected with the question of maternal feeding is the no less important one of the artificial rearing of infants who are unable to obtain breast milk. The huge mortality of infants under one year is hardly reduced to a lower level than it was half a century ago, when in England and Wales no less than 76.328 children under twelve months died, out of a total of 350 , IOI deaths in one year. Want of breast milk and bad artificial feeding are largely responsible for this Surely it is our duty, as a profession, to try and stem this tide of mortality. There is no way to attain this end but by education; and let us hope in the near future that we will be in a better position in this respect, and have sreater facilities for showing good results in what, it must be admitted, is an important branch of preventive medicine too much neglected.-Medical Record.

## METHYLENE BLUE IN THE DIAGNOSIS OF RENAL PERMEABILITY.

Drs. Archard and Castaigne (Le: Bulletin Médical, June 23, IS79) have appiied the methylene-blue test to fifty new cases. In twenty-two cases in which the elimination of the blue was normal, five autopsies have shown the integrity of the kidney. Out of twenty-eight cases in which there was a tardy elimination, lesions of the kidney were found at thirteen autopsies. In this series three cases of urinary infection with suppurative pyelo-nephritis were found, one case of interstitial nephritis with considerable atrophy of the kidneys, cystic kidneys in a cardiac case without albuminuria, and a kidney presenting evidences of obstruction in a woman who died of uramia. It was also noted in the case of circumscribed lesions of the kidney that the permeability remains normal if the $r$ emainder of the parenchyma is healthy. Variations of permeability and a return to the normal after recovery from acute disease, as in pneumonia, were noted ; again, after finding a normal permeability in the tuberculous $\mathrm{F}_{\mathrm{r}}$ ratient, there would be a sudden delay and albuminuria and anasarca would come. on. This test is useful not only in medicine, but also in surgery, as it indicates whether the kidneys perform their functions in a normal manner. Dr. Schwartz reports a case of hydronephrosis in which catineterism permitted the urine from each kidney to be examined sepatately. The blue did not pass from the hydronephrosic side, and it flowed with some delay from the supposedly healthy side, from which side, too, the urine showed traces of albumin. Epithelial nephritis gives rise to an excessive permeability, according to Dr. Bard, who has not demonstrated this statement anatomically; however, the facts agree with the experiments of the authors. Relative to the variations liable to
occur from a defective absorption of the blue, it is found that even considerable cedema does not prevent the normal appearance of the blue in the urine and does not detract fiom the results of the test. To verify the state of absorption, injections of twenty grains of chlorate of sodium may be given, this substance being eliminated by the saliva and the urine at the same time, and possessing the advantage over iodide of potassium of producing no pain and nolocal irritation. The appearance of the chlorate in the urine is slower than in the saliva with subjects in whom defective permeability is also attested by methylene blue. As regards the technique of the procedure, it is advisable to make deep injections in order to avoid the formation of indurated nodules. It is also absolutely essential to employ methylene blue, since the other aniline blues do not give the same results. Methylene blue can be distinguished by examining a dilute solution with the spectroscope; it gives a dark line in the red portion, which the other blues of commerce do not give. Drs. Hauser and Voisin have inquired concerning the colorless derivative of methylene blue in the urine of patients submitted to the test. This colorless compound of methylene, when heated in urine with acetic acid, becomes green. This chromogene can be separated, as it is insoluble in chloroform. The colorless methylene above mentioned is not the same as methylene white. The chromogene can be tansformed into the blue and administered in this state. In twenty-nine subjects a comparative study of blue and chromogene have bec! made. In nine instances the two substances appeared simultaneously after the normal delay of one hour. In nine patients there was an equal delay for both the blue and the chromogene. In cases having more or less profound lesions of the kidney as demonstrated by autopsy, the chromosene passed before the blue. The chromogene seems to be more dif-
fusible and to traverse the diseased kidneysooner than the blue. In eleven cases there was a delay of the blue only, the chromogene appearing normally. Several clinical facts of this kind scem to show that in such cases there arc functional disturbances of the kidney, two autopsies have shown degenerative lesions of the epithelium. To sum up: A delay of the same time in both blue and chromogene is a sign of defective permeability; a delay of the bluc only is met with when the trouble with the permeability is less pr found; functional trouble of the kidney may be the cxclusive cause of a delay limited to the blue alone. A number of cases are cited, showing how useful this test may be in difficult diagnosis.-MEed 2 cal Record.

## THE VALUE OF DOVER'S POWDER.

In the Jnurnal dts Praticiens for April, IS97, is an article by Liegois upon Dover's powder. He first points out that this substance will very frequently relieve pains and cure, at least for a considerable period of time, muscular rheumatism; the doses varying from five to ten grains for this purpose. Many years ago French physicians were in the habit of administering from one to two grains of this powder to children of four to six years who were suffering from subacute articular rheumatism. He also believes that it is a remedy capable of doing very great good in measles and scarlet fever since, by the perspiration which it induces, it aids in the development of the rash, and quiets the fever and nervous agitation. In certain cases it is well to administer it with sulphur. Thus a prescription may be written containing Dover's powder and washed sulphur, of each two or three grains. This will tend to move the bowels and will also exercise a favorable influence upon any catarrhal process
which may be present in the body. In cases of influenza Liegois believes that Dover's powder is exceedingly useful in relieving the pain and inflammation of larynx and bronchi, the pain in the limbs, and many of the other characteristic concomitant symptoms. As a rule it is sufficient to administer two to three grains of the Dover's powder three times a day. Sometimes the following prescription is advisable :
lk Dover's powder.
Sulphate of quinine, of each 2 to 4 grains.
Powdered hyoscyamus leaves, 1/4 grain.
Make into a pill or cachet and administer one or two each day.

In case of pulmonary congestion complicating the eruptive fevers, the internal administration of small doses of Dover's powder is very bencficial. Again, in certain cases of diarrhœa in adults or children, particularly if they have been exposed to heat, the combination of Dover's powder and mercury with chalk is uscful. Thus we may prescribe Dover's powder one grain, mercury with chalk one grain, and extract of rhubarb one or two grains. A pill containing these quantities of these ingredients may be given three or four or more times a day. In diarrhœa dependent upon tubercular enteritis cachets containing the following prescription may be uned:
$\mathrm{l}_{\mathrm{k}}$ Dover's powder, $21 / 2$ drachms.
Compound chalk powder.
Calumba powder, of each 5 drachms.
To be made into $\sigma c$ cachets, and two or three are to be taken each day. -Therapeutic Gazette.

## PLAGUE IN INDIA.

The Indian Gevernment has asked for twelve medical men to be sent out from this country to the Bombay Presidency for duty in the plaguestricken districts. The conditions of
engagement are: $£ 25$ for cxpenses previous to starting, a free passage to Bombay and back, and 500 rupees a month. Preference will be given to candidates holding a Public Health diploma. They are expected to sail for Bombay on Friday, October Sth. We congratulate the Indian Government on the wise step they have taken. By many it will be regarded as an attempt to lock the door after the danger is over. We would, however, warn the critics to study more carefully the history of plague, and to try to digest the fact, which has so often been stated in the Britis/h Medical Journal, that plague in its most mild form is a lingering epidemic, that relapses and recrudescences are part of its natural course, and that until the time for their reappearance is over the authorities dare not relax in their strict sanitary measures. The plague returns for the week ending September 3oth show that sixty deaths occurred from the disease in Bombay. From Karachi there would seem to be evidence of a true recrudescence, as the plague had wholly disappeared from that place some time. The reappearance seems to have caused alarm in the district, but those who are surprised must have been wrongly instructed in regard to the course of plague. That plague can be stamped out is wellnigh an established fact, but it requires strict surveillance for a period of at least two years-a surveillince so rigorous that but few municipalities have either the money, the men, or the tenacity to carry it through successfully. In India this seems more difficult than in this country, as is testified by the most recent news from the village of Ghoti, near Igatpuri. At this place Dr. Kapadia (a native practitioner, be it observed) and four (native) plague officials were interfered with by the villagers, and not only so, but the party were attacked and clubs freely used. Dr. Kapartia and one of the officials were clubbed into insensi-
bility. If this takes place with native authorities, whu were able to reason with the people in their own language, how much more is it likely to happen with Englishmen, upon whom the native looks askance when questions of sanitation arise.-Edtt. in Brit. Med. Jour.

## A RESEARCH UPON AN/ESTHESIA.

In the Journal of Experimuntol Midicine for March, 1897, Wood and Carter publish the results of a research, and conclude:

1. Lowered arterial pressure has a comparatively feeble effect upon the respiration, but when the pressure falls sufficiently, respiratory ciepression does occur.
2. Even excessive lowering of biood pressure primarily stimulates the vaso-motor centre, the sensibility of the centre being cvidently necessary to the automatic regulation of the circulation.
3. The circulation recovers itself more slowly after profound etherization than after a like chioroform narcosis.
4. It is possible for ether as well as chloroform to produce death some hours after the cessation of its administration, at a time when the cerebrum has long fi.ed itself from distinct evidences of the narcotic, so that consciousness and intellectual action have been restored.

In applying thsee conclusions to the subject of practical anæsthesia, it is evident that the depression of the circulation produced by chloroform has effect upon the respiratory centres only when the pressure has fallen very low, and whilst it may be a factor in the production of respiratory failure during chloroformization, the failure must be chiefly due to the direct influence exercised by the drug upon the respiratory centres.

Clinical experience shows that naseau and general depression are
more pronounced after the use of cther than after the use of chloroform, a difference which is strongly insisted upon by the advocater of chloroform as an important agent in favor of that anasthetic. Our research confirms clinical observation, and experimentally shows that the depression of the circulation produced by ether is more permanent than that caused by chloroform, the reason probably being the large amount of ether which is necessary to produce profound narcosis, with lowering of the arterial pressure-an amount so large that it can neither be burned up in the system nor yet eliminated in the time which would be necessary for the much smaller amount of cliloroform to be gotten rid of after chloroformization.

## PARALYSIS AFTER CHLOROFORM.

Tasse has recorded two cases personal'y observed by him, in which paralysis followed chloroform narcosis. He believes that such paraiysis arises [from several causes : First, from the position in which the patient is lying, whereby pressure is exercised upon a supplying nerve, or as a result of tractions on the arm or leg of a violent nature. Second, the employment of impure chloroform, which seems capable of poisoning the nervous system and producing such paralysis, at the same time developing transient or perinanent albuminuria. He also believes that in some rare instances the chloroform renders the patient susceptible to microbic intoxication, with secondary paralysis from this cause.-Therapentic Gazette.

Dermoid Cysts of the Anterior Mediastinum - Pianz (reprint from the Zeitschr. f. Heilkunde, describes a case occurring in a young man, aged 21. In August, 1894, he complained of difficulty of swallowing, and later of pains in the ears and
shoulder, and a swelling above the right clavicle. On admission seven months later, the region embracing the manubrium stemi, inner parts of the first two ribs, and clavicle on the right side, was pushed forward. There was absolute dulness over the upper portion of the sternum and adjacent parts. Above and external to the right stemo-clavicular joint there was a fluctuating swelling as large as a nut. The radial pulses were equal. The larynx was healthy, and there was no hoarsencss, palpitation, or vomiting. Temperature normal. Exploratory puncture of the swelling yielded pus. Incision and drainage was practised. The patient was discharged when the wound had healed, but three weeks later the swelling again appeared and was again incised. It was then found that the cavity extencled downwards into the chest. Hair, epithelial masses and fat were syringed out, showing that the discase was a dermoid. The patient again improved, but later it was found necessary to trephine the sternum. The cyst was thus opened and drained, and subsequently the patient made a good recovery, but he returned to America with a small fistulous opening. The author gives details of twenty-four cases collected from literature. Males were affected in about equal proportion to females. The cyst usually occupied the upper part of the anterior mediastinum; and extended upwands or more frequently downwards and to one side, so as to compress the lung. The size varies, but in one-half the cases it was very considerable. Adhesions to adjacent parts were common. Sometimes only a few cysts are present, but at other times the tumor may be formed by a complicated multiloculated cyst. The cyst wall usually corresponded in structure and function to ordinary ski:. These dermoids have been known to be complicated by ma!ignant disease. As regards the origin of these dermoids, the author says that they are to be referred to the
thymus gland, including the third branchial cleft. This origin explains the presence of ciliated and cylindrical epithelium. So-called dermoids of the lung have really extended secondarily into the lung. Venous engorgement, so characteristic of mediastinal tumors, is absent. Proof of a dermoid is furnished by external rupture or perforation into a bronchus. Exploratory puncture is a safe means of diagnosis. Incision and drainage constitute one method of treatment. A piece of the sternum or ribs may have to be removed. In cysts opening above, a counter opening must be made in the sternum, as in the above case. A total extirpation of the cyst is one of the most difficult and dangerous of operations. The bony chest wall would have to be removed to a large extent, and injuries to nerves, vessels, as well as wounds of the pleura and pericardium are almost unavoidable.-Brit. Med. Jour.

Lumbar Puncture.-Thicle (Deut. med. Woch.) relates his experience in $v$. Leyden's clinic as to the value of this procedure. The material includes thirty-two cases with sixty punctures. There was no unpleasant after-effect, and this was chiefly to be ascribed to the fact that the puncture was practised with the patient on his side, and that only one case of cerebral tumor was thus treated. There were three cases of epidemic meningitis, two of which werc fatal. There was no room for doubt as to the diagnosis in these two cases, but in the third case, which recovered, there was considerable difficulty. Here at any rate an earlier diagnosis was made possible. The meningococcus was found in the fluid, and was also cultivated from it. There were seven cases of tuberculous meningitis all fatal. Lumbar puncture was here often of diagnostic value. Only twice was the tubercle bacillus found, but the fluid presented in general characteristic appearances. It was clear or only slightiy opales-
cent, contained an increased amount of albumen, and was more or less rich in cells. A table is appended giving the details of these cases. In four cases the diagnosis of serous meningitis (Quincke) was made. Here lumbar puncture was uscful in the diagnosis. The nature of a case of hemorrhagic pachymeningitis was made certain by this proecdure. In the remaining cases lumbar puncture did not assist the diagnosis, and it had no clear therapeutic effect. These cases included apoplexy, cerebral tumor, uræmia, cerebral syphilis, ctc. In one case there were symptoms of a spastic bulbar palsy, and after death thrombosis of the basilar artery was found. A pressure of 220 was present at the commencement of the puncture, and of 50 at the end. The fluid was clear and measured 40 c.cm. In another case of spastic paralysis in all four extremities, in which the condition of the head made a chronic hydrocephalus probable, six punctures were practised. From 6 to $20 \mathrm{c} . \mathrm{cm}$. of clear fluid were drawn off. The spasm appeared to be less, but any permanent improvement was doubtful. In two cases of chlorosis with cerebral symptoms spinal puncture was also practised. The patients improved, but it could not be said with certainty that the improvement was due to the puncture. The author concludes that spinal puncture is a valuable exterision of our means of diagnosis, and that some therapeutic value is probable in cases of serous and sero-purulent meningitis, as well as in the cerebral disturbances of chlorosis.-Brit. Med. Jour.

Treatment of Coryza.- The treatment of a "common cold" is one of the minor opprobriamedicince. Some hints on the subject from Sir Thomas Watson were lately given in this column. In the following abstract of a recent paper by Dr. Lermoyez, a well-known Paris laryngologist, the practitioner may possibly find a suggestion that may be useful to him at
the present time. Lermoye\% holds that proper treatment (i) can abort coryza at the outset; or (2) it can in a great measure palliate the uncomfortable phenomena; or (3) it can prevent the serious complications which frequently linger after the coryza has ceased. The abortive treatment consists in local treatment. If it is instituted at the very begrinning, excellent results will be obtained; but if at the cnd of two or three hours a cure is not effected, it must be relinquished for it will then cause an cxacerbation, and prolongation of the coryza. The following formula gives the best result:
B Carbolic acid.
Ammonia. . . . . $\bar{a} \bar{\eta} \bar{Z}$ jss.
Alcohol........ 3 iij
Water ......... 3 iv.
M. Sig. Ten drops are let fall on blotting paper and the mixture inhaled through the nose for a minute or tivo.

For a powder to be used as a snuff, the following is excellent:
$\mathrm{B}_{\mathrm{B}}$ Cocaine . . . . . . . . . gr. gr.
Menthol. . . . . . . . . . gr. iv.
Salol .............. 3 jss.
Boric acid ........ 3 iij.
M. Sig. A small pinch can be drawn into the nose every hour. This powder will at first cause an abundant nasal discharge, but this will soon cease and be followed by a complete cessation of the secretion. Internal abortive means are not so certain. Large doses of tincture of belladonna and aconite sometimes prove successful. A profuse sweating from a vapor bath will sometimes abort an attack. If these primary trcatments fail and the complaint is complicated by ear and bronchial congestions, it is necessary to act in a less heroic manner. The patient should be put to bed ; a profuse transpiration must be solicited by hot baths, with internal use of ammonium acetate and Dover's powders: Finally, if the
coryza docs not yield to treatment, palliative means to relieve the urgent symptoms must be instituted. To re-establish the permeability of the nose, each side must be sprayed with a one per cent. solution of cocaine ; or the cocnine can be incorporated in an antiseptic powder as follows:

$$
\begin{aligned}
& \text { B. Cocaine. ......... gr. y. } \\
& \text { Minenthol....... gr. ij } \\
& \text { Bismuth salicylate, } \\
& \text { Milk sugar ...... aĩ } \overline{\mathrm{j}} \text {. } \\
& \text { M. }
\end{aligned}
$$

If there is reason to fear a toxic effect from cocaine, a misture of olive oil and menthol can be prescribed. This should be well projected into the nose with a spray. To calm the trigeminal neuralgia and to combat the general prostration from infection, it will be well to prescribe quinine and antipyrin. To prevent the crythema of the orifices of the nose, which will be caused by the contact of the secretions, a liberal amount of vaseline should be kept on the parts. -The Practitioner.

Cirrhosis of the Liver.-J. Barr (Liverpool Med. Chir. Journ.) publishes a clinical lecture on cirrhosis of the liver, •illustrated by two cases recently under his care. The first was an advanced instance of the disease, the second an early stage, and Barr emphasizes the importance of diagnosing this-as, indeed, all other affections-at the earliest possible period. As regards the etiology of hepatic cirrhosis, Barr considers that it arises chiefly in those who drink strong and spirituous alcoholic liquors apart from meals and in an undiluted form, wines and beers being more frequently associated with gout and granular kidneys. The disease is most common in middle-agedmales, but Barr refers to a case fatal at two and a half years, and one of his own in a patient aged eight years, both of which were due to alcohol. With re-
gard to the relation of hypertrophic and atrophic cirrhosis, he does unt consider hyperplasia of round cell; and connective tissue sufficient to account for the increased size in the former, which he prefers to attribute to engorgement with blood, following tricuspid regurgitation due to cardiac asthenia. Later comes the cicatricial contraction of the newly-formed connective tissue, leaving the hobnail granulations of more or less healthy liver. Diminished functional activity of the gland leads to lessened formation of bile, which never deposits gall stones. With regard to symptoms, Barr remarts that the earliest are those of aicoholism, while gastric catarrh may precede, accompany, or succeed the liver disturbance. The liver is often large at first; the primary atrophic liper is attributed by the author to the absence of cardiac asthenia with tricuspid incompetence. As regards other symptoras, he lays particular stress on dehydration and wasting as a consequence of mechanical obstruction in the liver. With resard to treatment, after excluding the rarer etiological possibilities, Barr recommends that alcohol should be interdicted and the gastritis treated ; further, that a large sinapism be applied over the epigastrium and liver. He advises restriction of the fluid ingested if there is portal obstruction, aiming thereby at lessening the work of the heart. As regards drugs he employs calomel to relieve the hepatic and portal engorgement, but protests against the use of hydragogue cathartics for the purpose of reducing ascites. As diuretics he recommends digitalis with a little nitro-glycerine to diminish peripheral :3sistance, or salines; copaiba he has found usele-s. He recommends that paracentesis, if necessary, should be done early, bcfore the abdominal walls are relaxed; if they are allowed to become so, tapping is followed by distressing meteorism. In certain cases venesection and the establishment of a collater I circulation may also be of use.

Theatment of Infantile pak. Atress.-Lanat gives the result of his experience ( /rurn. de lised.) of the treatment of this disease. Ite says that no matter how grave the case may be i:1 appearance, electricity must be cmplosed, and that as soon abliagnowis is made. The chicf point i, the method empioyed. Faradisation in not only uselces, but positively harmful, for every time a muscle in process of atrophy; and which clocs not respond the the current, is faradised the tendency to atrophy is increated. It is, therefore, the continled curicnt which should be used, ant the folloning is the metiod reco:nmended by the author, which has the advantage of being quite painless -a point of great importance in children affected with any nerve lesion. A large dise of tin, the size of the palin of the hand, is covered with chamois leather. This, which should be moistened with tepid water (not salt solution) is placed over the cer-vicu-dorsal region in the case of an upper limb paralysis, or over the dorso-lumbar resion when a lower limb is affected. The disc forms the positive pole of the battery. The negative pole consists of a small disc placed in a basin of tepid water in which the extremity of the affected limb is emerged, hand or foot as the carc may be, and the ankle or wrist murt be covered by water. A current of form cight to ten mi." impères intensity is passed for about ten minutes. With so large a surface of application the density of the current at any particular point is very slight and the pain wil. After ten minutes the current is interrupted a few times, and it is alsu advisable when interrupting to reverse the current. In this way theee interrupitions should n't exceed the number of 100 , and sh puld be made slowly. Later on, when the disease is subsiding, the number of interruptions may be increased and the interval between them th rtened. The author points out the wily too common fallacy of doing too
much in the early history of the case. This treatment must be carried out with great patience, and no decided result must be expected for a long time. The slightest infantile paralysis will require a ycar's treatment, a bad case several ycars, but the carlier the treatment is begun the better, and the electrical intervention in the very beginning, especially during the feimile period, is of the very greatest importance. The author does not mean it to be supposed that certain cornual cells which bear the full brunt of the disease will subsequently recover, but he is firmly of opinion that the discase is a sclective one, that is to say; that side by side are cells scvercly affected or disorganized, and others only slightly so. These latter may become affected or escape, and this result will depend on clectric application. Hence the importance of carly treatment.

Serlm Treltment of Difh-Therla.-Gavrilof ( ${ }^{\text {r}}$ ratch ) records the result of the serum treatment in $\pi, 273$ cases of diphtheria, treated and reported by thirty-seven medical men during the epidemic of 1896 in the Penza Government, Eussia. Of these 7,273 (3,720 males, and 3,553 females) 856 , or 11.77 per cent., died ; 415 of the fatal cases, or 10.50 pcr cent., being males and 441, or 12.41 per cent., females. As regards age, of S31 children under two years, 198 , or 21.27 per cent., died ; of 1,847 between two to five years, 299, or 16.5 , per cent., died ; of 2,405 patients betwcen five to ten years, $2 \% 4$, or II. 39 per cent., died, and of 2,069 patie its above ten years eighty-two, or 3.98 per cent., died. Thus the age most affected with diphtheria was between five to ten years; the percentage of mortality decreased with progressive age. Rcgarding the time from the beginning of the disease till recuvery or death, there are statistical observations only of $\mathrm{I}, \mathrm{I} 97$ patients. In the time between the first and the third day, twenty-seven of them recovered, four-
teen died ; on the fourth and fifth clay; 33 recovered, thinty-three died; betweren the sixth and tenth day; 633 recovered, forty-two died; later nine-ty-four recovered, sixteen died. In milder cases recovery has been noticen to occur at an carlier period of the disease, and death to take place later, whilst in severe cases recovery occurred late and death took place at a relatively earlier period. The number of injections and the total amount of scrum injected did not influence the issue of the disease. In 6,312 cases the injections were made once, in 858 cases twice, and in seventy-one cases three times and more. Gavrilof is not much satisfied with the results of antidiphtheria serum treatment in severe cases. If the powerlessness of the serum cannot fairly be complained of in severe cases of diphtheria, where besides the specific bacillus other pathogenic bacteria have been found, its impotence in se rete cases of "pure" diphtheria suggests a doubt as to its usefulness.-Brit. Mred. Jour.

Diphtileritic Affections of THE HEART.-Mollard and Regaud (Ann. de l'Institut Pasteur) record the effects upon the heart of fatal doses of diphtheria toxin injected into dosi, rabbits and guinca-pigs. True myocarditis was never observed, and cardiac symptoms were, as a rule, obscured by paralysis and other more marked affections, nor were the macroscopic lesions observed at the necropsies ever unassociated with disease of other organs. The naked-eye appearance of the myocardium did not suggest any microscopic changes such as were actually found. Further examination showed that in every case (eighteen in all) of experimental diphtheritic intoxication the myocardium was affected. The affection invariably started in, and was sometimes confined to, the muscular tissue, and it commenced in the contractile substance as an impairment of the normal striation, and later attacked the nucleus and protoplasm, leading
eventually in some cases to complete destruction of the muscular substance. Lesions of the myocardial vesso.s were very frequent, the muscular cont of the arterioles being particulatly affected; the changes in the smooth muscle were strictly comparable to the contemporary alterations in the cardiac muscular fibres. In acute and subacute cases (surviving at longest seventeen days) no hyperplasia of the connective tissuc clements was observed, the sole important change in the connective tissue being leucocytosis. This diffuse interstitial leucocytosis appears to have been no more than a phase in the gencral leucocytosis which is constant in diphtheria. The nodular interstitial leucocytosis is in relation to the foci of muscular disintegration. The primary muscular lesion leads to leucocytosis. The leucocytes absorb the muscular débris, particularly the sarcoplasmic cxudations. The foci and disintegration become the foci of phagocytosis. The whole process is similar, both in symptoms and pathological appearances, to that found in human diphtheria.

Etiology of Lead Poisoning. - Pel (Centralbl.f. inn. Med.) draws attention to several cases in which the source of the lead poisoning was exceptional aud misleading. Case I occurred in a shoemaker aged 19 , who worked in a factory in which tin na:ls were used for the boots. The patient was in the habit of putting the nails into his mouth. Tin contains lead, and hence the poisoning. Besides pallor and the blue line, he had pains in the abdomen, spine, shoulders and testicles. It must remain unsettled as to whether the testicular pain was a manifestation of the intoxication, and hence a genuine plumbic neuralgia. (2). A man aged 44, a cigar roller, presented the blue line, constipation, pallor, pains and neurasthenic symptoms. The board used for rolling the cigars on was covered with tin. The patient cut the cigars with
a knife, which he held in his mouth, as it worked best when moistened. The metal cover was indented with the cuts of the knife. Another possible cause of the poisoning lay in the contamination of the hards from the tin, and the conveyance of the poison to the mouth in this way. Case 3 occurred in a diamond worker. Owing to a failure of eyesight he was obliged to adopt another occupation, and five months later he showed signs of acute lead poisoning, consisting of vomiting, colic, constipation, indrawn abdomen, increased vascular tension, typical urine. A blue line was present, as well as bluish black spots on the buccal mucous membrane. The source of the poisoning must be looked for in his previous occupation. Some diamond workers have to fix the small diamonds in a mass of lead. This lead is worked with the fingers, which are moistened from the mouth. There was no other source of lead poisoning in this case. It is a striking fact that the patient who had been working in the diamond trade for 15 years, should only develop symptoms five months after he left this occupation. The poison must have been stored away somewhere in the body, and then at length it found an entrance into the blood, from which it was excreted into the alimentary canal. Lead poisoning is rare in the diamond workers, but is known to occur in them. It is noteworthy that at times very small quantities of lead will suffice to produce symptoms of $i$ risoning, whereas at times large doses are inefficient.-Brit. MIed. Jour.

Premonitory Symptoms of Puerperal Infection. - Ferré (L'Obstétrique) lays stress on the success of intrauterine treatment for puerperal fever. This success stands in direct ratio to the earliness of intervention. Hence very careful clinical researches have been made in lying-in hospitals in order to detect true prodromata. The true rigor, local. pains, and conspicuous pulse
and temperature are known to all, and when combined indicate more or less advanced infection. Ferré denies that these symptoms ever come on suddenly, though certain milder ty'pes of infection now observed may represent sepsis modificd by antiseptic agents. These milder types, however, will assuredly develop into deadly septic infection if neglected. Ferré finds, after long clinical re search, that even the severest form is preceded for a day or two by distinct elevation of temperature and pulse, and by insomnia. An evening temperature of about $100^{\circ}$ in the axilla, with a fall of about a degree in the morning, without a corresponding drop in a somewhat rapid pulse, is a distinctly suspicious symptom. The rise in the pulse often precedes the rise in the temperature ; the observer must therefore make sure that acceleration of the heart's action is accounted for even in a patient who seems otherwise convalescent. Reaction after the fatigue of labour, hæmorrhage, and emotions all send up the pulse. Insomnia, Ferré has noted, is often observed in the earlier stages of infection, distinct want of sleep without restlessness is usual for a day or two before bad septic symptoms. The lochia may remain free from odor in the premonitory stage of puerperal septicæmia, nor are the discharges aiways futid when the disease is established. -Brit. Med. Jour.

Some Points of Preventive Treathent in the Diseases of Women.-Dr. A. E. Giles, writing in the Hospital, says that the first question here is of over-study. Probably the average girl can acquire as much learning as the average boy; but to do so she requires bodily health and strength equal to his. Now the boy and girl work under different conditions, which if ignored lead to disaster. Let girls pursue their study, but more leisurely; they will arrive at the same goal, but a litile later.

Physically and emotionally a girl arrives at womanhood earlier than a boy arrives at manhood; this necessitates a corresponding saving of energy in some direction, and the direction in which this economy of encrgy is to be sought is in intellectual activity. Secondly, it should be impressed upon parents that premature emotional excitement is bad; sensational love novels should be avoided, and the "sex question" left dormant as long as possible. The idea that marriage is the only goal of a girl's existence should be discouraged, for while it may be true that in the role of wife and mother the average woman is seen at her best, the preparation for this position is best attained, not by directiy aiming at it, but by the development of physical health, by the training of the mind, by breadth of thought and widening of interests.—Meäucui Recorá.

The Behayiour of Human Milk to Diphtheria Toxin.-Schmid and Pflanz (reprint from Wien. klin. Wochenschrift, I896, No. 42) have investigated thequestion whetherhuman milk contains any substances antagonistic to the diphtheria poison such as are found in the blood of newborn children. Ehrlich and Wassemann had previously shown that the milk of immunised animals was antitoxic to the extent of $\frac{1}{15}$ to $\frac{1}{30}$ of the power of their blood serum. The authors compared the results obtained from human milk with those resulting from the use of the serum of the placental blood, as obtained through the cord immediately after birth. These were mixed in varying amounts with lethal doses of diphtheria toxin in order to ascertain the quantity required to prevent the fatal issue. The results of six series of experiments showed that protective substances pass from the blood into the milk of puerperal women, but that the quantity therein present was much less than in the placental (that is, maternal) blood, and that a correspondingly larger
amount was required for immunisation. It is well known that infants at the breast seluom contract diphtheria, and it is interesting to ascertain how much of this immunity is congenital and how much derived from the mother's milk. Eirlich showed that the offspring of a mother immune against abrin retained its resisting power for six to cight weeks. while antitoxic bodies introduced into the organism were get iid of at longest within thirty-four days. The prolongation of the immunity must therefne be attributed to the milk, and the intcresting deduction follows that the antitoxic substances taken in with the milk must pass unchanged from the alimentary canal of the infant into its blood. It must hence be concluded that in newborn children, and especially in the offspring of a mother whose blood contains diphtheria antitoxins, there is provided a store of these antitoxins accumulated during uterine life, and that this is replenished from the mother's milk so as to render them less susceptible or even immune to diphtheria. It need hardly be pointed out that this gives a breast-fed child a great advantage over those brought up by artificial means.-Brit. Med. Jour:

The Plague.-Ogata (Centralb. f. Bakt.) records an important series of observations made on behalf of the Japanese Government during the recent epidemic of plague in Formosa. In the town to which he went there were 132 cases in a month, with 56.4 per cent. of deaths; the outbreak was apparently preceded by an epidemic of rat plague. Ogata tabulates the differences between the plague bacilli described by Yersin and Kitasato, which must obviously be quite different in nature. His own observations, conducted.upon twenty-seven patients and bodies, revealed the presence of a bacillus corresponding to Yersin's, and therefore not to Kitasato's. It was pathogenic for micc, rats, rabbits, guinea-pigs, and cats, while dogs,
fow's, and pigeons were refractory. He demonstrated its presence in rats dying during the cpidemic and in the flea. infesting them, but never succeeded in obtaining it in the blood of a living patient. It could be found in the lymph glands of living sufferers, and in the blood and internal organs of the dead. In susceptible animals it invariably p:oduced a plague-like disease. He isolated it from the urine of one plague patient, and from the bile and urine of two subjects dead of the disease. It appeared mustly to be conveyed by fleas and musquitos. The blood, lymph glands, and internal organs of patients and corpess often contained other microorganisms, particularly staphylococci. The bacillus had but little power of resistance to antiseptics. It was killed at once by I in 20 carbolic acid; in 1 in 200 it survives five minutes, but after fifteen it can no longer grow on nutritive media. In I in 1,000 sublimate solution it perished at once, in I in to 000 not for five minutes. Saturated lime water for five minutes stops its growth permanently, while suniight kills it in less than four hours. The author could not detect it in the walls of plague houses.-Brit. AIcd. Jour.

Nertous Complications of in-fluenza-Feinberg (Veurol Centralbl:) reports two cases of influenza in which nervous complications occurred: (1) A man, aged $3 S$ years. on the eighth day after onset of influcnza, was suddenly seized with stiere pain in back of neck, shoulders, upper part of chest and right upper limb; there was complete loss of movement in the right arm and some paresthesia over the whole of the affected part. There $n a$ a no affection of cranial nerves. The pain lasted four months. On examination a year and a half later, there was marked wasting of the right upper limb, pectoral and trapezius muscles, and also of the sterno-mastoid. The right palpebral fissure and pupil were
smaller than the left, and the right eye was shrunken, evidently owing to the communication of the sympathetic nerve with the first dorsal root. There was paralysis of the muscles supplied by the musculo-spiral and median nerves, and weakness of those supplied by the ulnar. Electrical reactions were much diminished, but there was no reaction of degeneration, The case was considered to be one of neuritis of the brachial plexus, toxic in origin, and due to the influenza. (2) A man, aged 40 years, five days after the onset of influenza, became suddenly delirious with loss of consciousness, trismus, rigidity of the nech which was slightly retracted, and some rigidity of the limbs. Delirium continued and became very wild; there were frequent tonic spasms of the limbs. After three days improvement began, consciousness returned, and in a few weeks the patient was quite well except for weakness of the right upper limb. The writer considers it almost certain that this was a case of hæmorrhagic encephalitis.

A Llmbo-iliac Incision in the Treatment of Suppurative Ap-pendicitis.-Grinda (Méd. Mod.), at the ivioscow International Congress, discussed the indications and advantages in the treatment of suppurative appendicitis of an incision made along the external border of the sacro-lumbar mass of muscle, and extended forwards at the lower extremity parallel to and at a distance of about an inch from the crest of the ilium to within a distance of about an inch and a quarter from the anterosuperior iliac spine. This incision, it is held, is indicated in every case in which the local signs suggest the existence of a retro-cæcal appendicular abscess. The diagnosis of a purulent collection of this kind would be based on tenderness over the triangle of Petit, there being but little, if any, pain at McBurney's point, on marked fulness and a sensation of resistance
in the right flank, and on a clear sound on percussing the right iliac fossa. In cases in which the situation of the purulent collection is not clearly indicated, the surgeon might still perform the lumbo-iliac incision. If the appendix, instead of being placed behind the cxcum, be found on one side or in front it may still be readily exposed, thanks to the iliac position of the incision recommended by the author. This incision, he states, exposes the cæcum and appendix by the most direct and sure way. It is less likely than the ordinary incision to result in infection of the peritoneal cavity, and it enables the surgeon to avoid the dissectionoften difficult and dangerous-of any loops of small intestine which may be found interposed between the cæcum and the anterior wall of the abdomen. The situation of the wound allows perfect drainage and tends to secure the patient against the subsequent risk of hernia.-Brit. Med. Jour.

Brewer's Yrast in the TreatMent of Diabetes Mellitus.According to M. Beylot, in the Revue des sciences médicales for July $15^{\text {th }}$ (Lyon MTedical, August Ist), hydroch-- loric acids favors fermentation; sodium bicarbonate has no action. Fermentation occurs in the presence of gastric juice obtained from fistule. The yeast acts almost as well on the sugars produced by diastasis at the expense of the hydrocarbonates as on the manufactured glucose. By attacking the sugar thus formed, in the dog, the alimentary glycosuria was diminished in a notable manner. The saccharomyces became accumlated in the intestine and continucd to act forseveral days after the ingestion of the yeast. Diabetes, under the influence of the yeast, in doses of from one to three teaspoonfuls, increased in weight and regained their strength, and the sugar generally diminished. The yeast, however, acts only on the sugar pro-
duced by alimentation; it cannot act on the sugar which is produced in patients at the expense of their tissues. Yeast is not an article of medical treatment for diabetes; it is an indirect means of applying Bouchardat's diet without depriving the patients of the useful principles which accompany the hydrocarbonates in Pr uscribed foods; it has furthermore, eupeptic properties.-N. Y. Medical Jonrnal.

Operative Treatment of Chrunic inflammation of the Midile Ear.-Malherbe (Rev. de Chir.) having observed much improvement of hearing after free exposure and scraping of the mastoid antrum and auditory meatus in cases of chronic suppuration of the middle ear, has been led to apply a similar treatment with certain modifications to patients suffering from dry chiminic otitis. Five cases are reported in which the results of this treatment proved so satisfactory as to favor the assumption that exposure of the antrum and middle ear is indicated in cases of non-suppurative chronic otitis, which has not been relieved by other means. The main objects of the operation advocated by the author are free exposure of the mastoid antrum, which usually in cases in which such treatment is indicated, is contracted and surrcunded by eburnated bone; and removal by gouge and mallet of the bone between this. cavity and the middle ear. Any adhesions that may be found are carefully divided, so that the chain of ossicles may be set free. No attempt, it is stated, should be made to detach the base of the stapes from its normal connections. The following rules have been suggested to the author by the experience hitherto acquired of this treatment: Operative treatment, he holds, should net be attempted on patients of advanced age. In cases in which the operation is indicated, it should be performed early, before deafness has become pronounced, and
subjective noises have increased to such a degree as to be almost intolerable. It would be useless to operate in cases in which there is no longer any cranial perception of sound. One ear only, and that in which the trouble is more scvere, should be treated at the first operation. Experience has shown that an operation on one ear may be followed by an improvement on both sides.-British Medical Jutrnal.

Aortic Aneurysm.- Gerhardt (Dcnt. med. Woch.) draws attention to two points in this disease emphasized in recent years: (I) The comparatively frequent latency of aortic aneurysm, the disease then giving rise to very few and indefinite symptoms. A paralysis of the left vocal cord may constitute the first means of recognizing the aneurysm. Auscultation of the upper part of the left interscapular space may reveal an arteriodiastolic murmur not heard elsewhere, or there may be here, or in the neighborhood, a systolic murmur due to the beating of the aneurysmal sac on the left bronchus. (2) The relation of syphilis to aneurysm. Gerhardt refers to M. Schmidt's cases where recovery followe 1 antisyphilitic treatment, In 25 cases of aneurysm in the author's clinic there was past syphilis in 9 out of the 17 men . Of other causes traumatism was present in 5 , alcohol in 2 , overexertion in 3 , and anxiety and care in 1. In 8 cases there had been previous rheumatic manifestations. Opposite the third and fourth thoracic vertebræ the large air passages, arteries, and the œsophagus cross. These structures are exp sed here to various movements, including the movement downwards of the bronchi owing to the descent of the diaphragm. Here a portion of, the aortic aneurysms occur. Syphilitic disease of the air passages is chiefly situated here. Sometimes aortic aneurysm and tracheo-bronchostenosis occur together. The author also refers to the frequency with which val-
vular disease, and especially aortic regurgitation, complicates locomotor ataxia, itself very often a parasyphilitic disease. A predisposing rôle must be allowed to syphilis in the causation of aneurysm. It has yet to be shown when the treatment by iodides shouid be supplemented by mercurial inunction.

Action of the Bacteriun Coli Commune on the Endometrium. -T. Morisani has investigated (Arclivio di Ostetricia) the action of the bacterium coli commune on the lining membrane of the uterus. He first experimented with cultures of the microbe on the uninjured uterine mucous membrane, and after from four to twenty days got negative results. Then he experimented on an irritated endometrium. The irritation was either mechanical (a probe), thermal (hot water), or chemical (nitrate of silver) ; and the result in every case was death after from fourteen to fiftytwo hours from endometritis and septic peritonitis. It is, therefore, evident that the cultures of this bacterium do no damage to an unbroken endometrium ; whether this result is due to the uterine secretion which prevents the growth of the microorganisms, or to phagocytic action is left uncertain. When, however, the mucosa is irritated, a locai and general form of infection is set up. Morisani believes the changes to be due to the bacterium and not to the irritation, for in a test case he applied nitrate of silver to the endometrium without the presence of the bacterial culture, and the result was temporary destruction of the tissues without any trace of endometritis or suppuration. In another group of cases the cultures were introduced into the rectum, and in some of these the uterine mucosa was irritated, in others it was not. All the animals died, but only in those with a damaged mucosa were there signs of endometritis.-Brit. Med. Tour:

Hydramnion and One-Yelk Twins. - Maygrier (L'Obstétrique) writes full notes of a 6 -para, aged 32 , who began to swell rapidly in the fourth month of her seventh pregnancy; there were also severe pains. There was no doubt of pregnancy. The uterus at the fifth month was very much larger than in normal gestation, and fluctuation was marked, yet no outline of any part of a foetus could be felt, hence twin pregnancy and hydramnion were diagnosed. Labor occurred at the end of the sixth month and a cord prolapsed. The membranes were ruptured with the precautions demanded under the circumstances. Maygrier was surprised to find that only a moderate amount of liquor amnii escaped. A dead male fottus was delivered. The uterus still felt very large, like a cyst. The cord of the delivered foetus was traced to the cervix, then another bag of membranes, very tense, was detected. This was carefully ruptured. Over fourteen pints of liquor amnii cscaped. The patient felt exireme relief. A male foetus was delivered spontaneously within an hour after the first, and lived for a few hours. The placenta bore two cords ; their vessels anastomosed very freely. The still-born fœtus was practically normal; the second was big, and its heart was greatly hypertrophied. This condition chiefly involved the right ventricle; the liver was very large. Abnormality of one foetus is usual in one-yelk twin pregnancy, of which hydramnion is a most important symptom.

Goat's Milk as a Food for Children.-Since the observations of Schwatz have been published, considerable interest has been taken in the spread of tuberculosis by the use of cow's milk, and as a remedy it was proposed that all such foods should be boiled before being used by the infant. Since that dictum was promulgated, further chemical analysis
of boiled milk has shown that the nutrition of the fluid is greatly reduced. Keer has demonstrated that fresh unboiled cow's milk contains fat globules with granular contents, which are immediately taken into the blood to build up the cellular structure, while cosking totally destroys this constituent; the fluid albuminoid constituent is also so much transformed that it is difficult to dissolve and assimilate in the alimentary canal. He is persuaded that milk should not be boiled when its nutritious value is required, and he therefore proposes the milk of goats for the feeding of children, as this animal is immune from tuberculosis. He further proposes the precaution of having the vessels containing the milk sterilized and covered to prevent aerial germs from infecting the food. Another advantage in the goat's milk is the constancy of its constituents, owing to the animal carefully selecting its own food and avciding a great quantity of fluid matter. It can be fed in the stall with the same ease and satisfaction as the cow.-Vienna Cor. Med. Pressand Circular.

Intestinal Antisepsis. - Dr. Heinrich Stcin (Centralblatt fur die gesammte Therapie, 1896, vi., 321) enumerates the various agents by means of which intestinal antisepsis can be obtained. In abnormal acidity he recommends calcium carbonate (two and one-half drachms per day in one-grain doses) or magnesia (ninety grains per day). Creosote, guaiacol and resorcin are useful ; their action is shorter but they may act after absorption on distant areas. Menthel (one and one-half grains twice or thrice daily), naphthalin (one and onehalf to seven grains at a dose or seventy-five grains per day), thymol (one and one-half grains several times daily in alcoholic solution) ; this latter is an excellent parasiticide. Since absorption limits the action of the drug in the intestine various antisep-
tics have been prescribed with insoluble substances: salol, parachlorsalol, kresosalol, beta-napintholsalol, or betol, the latter being slightly poisonous. These are broken up in the intestine by the action of the pancreatic juice and by unformed intestinal ferments into salicylic acid and irresol, etc. Other substances proper for this purpose are benzo-naphthol, ammonium sulpho-ichthyolate, solophen, etc. The absolutely insoluble antimicrobic remedies can be given in much larger doses; such are phenolbismuth (fifteen to forty-five grains per day), the same dose for kresolbismuth, chlorophenol-bismuth, bismuth, salicylate, zinc salicylate, trioxymethylen. For irrigation solutions of salicylic acid in sterilized water (one to two parts per thousand), silver nitrate (two-tenths to five-tenths per thousand), boric acid (five-tenths per hundred), creolin (one one-hundredth to two one-hundredths per hundred), tannin (two to five per hundred). Applications of an insoluble antiseptic powder, as afforded by the bismuth preparations may be used during irrigation.-Medical Record.

Testing Egg Albumin.-The value of albumin as a clarifying agent is so great, and its technical application so wide, that it is important to have practical tests to determine the value of commercial samples, which have been found to vary greatly in purity and effectiveness. The following test by Carles will be useful: Two grammes of the albumin are weighed out, mixed thoroughly with a little water, then more wate: is gradually added, with thorough agitation, to bring the volume to $200 \mathrm{c} . \mathrm{c}$. If the albumin is free from coagulated particles, this solution will be clear. Io0c.c. of it are taken and 35 c.c. of a one per cent. pure tannin solution are added to them, together with a pinch of potassium bitartrate. After brisk shaking, 10 or 15c.c. are thrown on to a small filter, and the filtrate divided into two equal parts
in twin tubes. To one of these a few drops of tannin solution are added, to the others a little five per cent. solution of transparent gelatin. If neither tubes show a precipitat the sample is of a good quaiity. If the gelatin solution gives a precipitate from tannin still being present, it shows that the albumin is weak, either from being overheated or from admixture with inert matter. If, on the other hand, tannin gives a turbidity, it shows that a gelatin having a higher precipitating $w$ wer for annin than egg albumin present. If the presence of gelatin or other bodies is suspected, they may be proved by gradually warming a solution of the sample on the water bath to $100^{\circ} \mathrm{C}$. The whole of the egg albumin is coagulated, white gelatin, dextrin and other bodies are unaffected and may be found in the filtrate.-Sourn. de Pharm. [6], vi., 102.

Two Hundred Cases of Serum Diagnosis.-Dr. Gasser reports in La Presse Médicale, June 26, 1897, that he has had occasion to use the serum diagnois of Widal in two hundred cases. In each of these the diagnosis of typhoid fever was questionable on the first day of clinical observation. He has constantly used Widal's extemporaneous process with a mixture of one to ten. In one hundred and twelve of the doubtful cases the reaction was positive. This reaction took place in one case on the third day, once on the fourth day, twelve times on the fifth day, and on the eighth to tenth day in the others ; that is, from the time that the patient entered the hospital. In one case the reaction did not take place until the twenticth day. Dr. Gasser was able to test on himself the disappearance of the agglutinative poiver. He entered upon his convalescence May 29, 1897, and October ist his serum was still agglutinative, but it was no longer so on November 1st. He has tried
the reaction in a large number of cases suspected of being typhoid fever, complicated in fifty-two cases with gastric fever, in thirty with continued marsh fever, in five cases with phthisis, in one with generalized subacute tuberculosis, and in two with true pneumonia. In all these cases the reaction was negative save in the two pneumonias. In these two instarices the measure of the agylutinative power was nut known. For one of the cases the reaction was sought by the slow process; the clarification of the tube was observed after boiling a mixture of one part of serum to twenty parts of bouillon. Perhaps these two patients had been under the influence of a frustrated typhoid infection. One of them lived in a locality that had furnished a certain number of typhoid cases, the other had suffered from diarrhcea for a short time before entering the hospital. In a large number of cases examined the diagnosis was difficult and doubtful, and the reaction of Widal has proven a very useful guide. -Medical Record.

Development of Fruit Fla-vours.-Some very interesting and suggestive results have been obtained by Jacquemin, who finds that by the addition of the leaves of fruit trees which in themselves have no marked flavour, to saccharine solutions undergoing alcoholic fermentation, a very marked bouquet of the fruit is developed. Thus by immersing pear or apple tree leaves in a ten or fifteen per cent. solution of sugar, and adding a pure yeast, which by itself gave rise to no marked flavour, after fermentation a liquid was oḅtained which had a strong odour of pear or apple respectively and an excellent flavour, and on distillation gave an alcoholic distillate in which this aroma was still more marked. Vine leaves act in a similar manner, and the author suggests that it may be possible to improve the bouquet of a poor vintage by the addition of some
leaves during fermentation. It is notevorthy that the results are far more marked when the leaves employed are from trees in which the fruit is approaching maturity. The author infers that the flavours of fruits are due to a body elaborated in the leaves, possibly of a glucosidal nature which is not transferred to the fruits until the latter approach maturity, and is then acted upon by the special ferments contained in the fruit juices and devclops distinctive flavours. The matter would appear to be of considerable practical importance.Comptes rendus, cxxv., 114.

Intubation in the Treatment of Diphtherla in Children.A very interesting book, or rather a series of papers collected during recent years by Dr. Nester Tirard, at the Evelina Hospital for Children in London, and put together into book form, has just been issued. Dr. Tirard urges that in cases of diphtheria, where antitoxin has been used and where surgical interference is necessary, that intubation should beresorted to rather than tracheotomy. As Dr. Tirard has lad very considerable experience his words should carry much weight. In the Evelina Hospital tracheotomy is now rarely performed, the results from intubation having of late proved by far more satisfactory. That throughout Great Britain intubation has fallen greatly into disuse is more due to the fact that hands manipulating the intubator have been unskilful than the operation has been shown to be inferior to tracheotomy. It should be remembered, too, that in England conservative prejudices are apt to linger for a long time, and that until a fresh mode of treatment has been proved beyond the shadow of a doubt to be superior to an existing one, that this new method will be regarded with more or less distrust. Dr. Tirard's decision in favor of intubation is therefore the more gratifying Pediatrics.

Somatose in the Treatment of Persistent Yomiting of Pregnancy or apter Anestiesia. In the Journal di Medecint de Paris of April 18, 1897, Lutaud records his experience with somatose in the treatment of these conditions, first calling to mind the fact that somatose is not a medicament but is intended for nutritive purposes. Thus in one case a woman at the fourth month of preguancy vomited with such persistence that grave cmaciation and exhaustion came on, and it was thousht that it would be necessary to bring on labor. Nothing remained on the stomach, and finally nutritive and rectal injections were resorted to and artificial serum was also given. At this time the idea occurred to the writer to use somatose. At first a small teaspoonful diluted with a small quantity of water was well borne, and gradually the quantity was augmented until, after a week, four teaspoonfuls of somatose could be taken. Vomiting stopped, the stomach began to be able to retain various liquids, and finally it was possible to administer milk, cocoa, and various soups which had been fortificd by the addition of somatose IIe then details four other cases of a somewhat similar character, concluding with one in which there was grave ancemia folluwing loss of blood due to metrorrhagia and traumatic hemorrhage. Lutaud believes that this form of nutrition is valuable in many of these cases.-Therafeutic Gazette.

Tife Treatment of Hydrocele with Carbolic-acid Water.That appears to be both a simple and an effective method of dealing with hydrocele, says the Lancet for August 7 th, has been practiced for the last two years by Dr. Pilate and Dr. Tissemans in the Orleans Military Hospital. It consists in the washing out of the cavity of the tunica vagi-nals-after evacuation, of coursewith a weak solution of carbolic acid. The surface is first cleaned with soap,
and brush and then washed with a solution of bichloride of mercury. The trocar is then inserted, and after the scrous fluid has been drawn off warm carbolic acid water of the strength of three per cent., which has been previously boiled, is injected. This is allowed to come out, and is seen to be torbid, containing fibrinous flocculi. The washing out is repeated four or five times until the liquid emerges from the cannula quite clear. The instrument is then withdrawn and the puncture closed in the usual way, a suspensory bandase being put on. Owing to the anæsthetic effect of the carbolic acid the patient feels no pain. Some further effusion into the sac usually occurs in four or five days, but this soon subsides and the patient can resume his ordinary work. He is advised, however, to continue to wear the suspensory bandage for a time. This treatment has proved quite satis factory, but is recommended only in simple cases occurring in young sub-jects.-N. Y. Medical Journal.

Chemical Examenation of Human Breast Milk.-Adriance (Pediatrics, vol. xiv., No. 2) sums up a report upon the chemical examination of two hundred specimens of human breast milk as follows: I. Excessive fats or proteids may cause gastro-intestinal symptoms in the nursing infant. 2. Excessive fats may be reduced by diminishing the nitrogenous elements in the mother's diet. 3. Excessive proteids may be reduced by a proper amount of exercise. 4. Excessive proteids are especially apt to cause gastro-intestinal symptoms during the colostrum period. 5. The proteids, being higher during the colostrum period of premature confinement, present dangers to the untimely born infant. S. Deterioration in human milk is marked by a reduction in the proteids and total solids, or in the proteids alone. 7. This deterioration takes place normally during the latter months of lactation, and, unless proper additions
are made to the infant's diet, is accompanied by a loss of weight ot again, is below the normal standard 8. When this deterioration occurs earlier, it may be the forcrunner of the cessation of lactation, or well-directed treatment may improve the condition of the milk.-Medical Record.

- Formaldehyde for the Disiffection of Apartments, Etc:The following methods are recommended as the result of experiments carried on at the Stockholm Hygienic Institute:-1. Spraying:-The walls, furniture, etc., are thoroughly sprayed with a two per cent. solution of formaldel:yde, and the room is then kept closed for twenty-four hours. From 60 to 70 cc . of this solution are sufficient for every square metre of surface. 2. Evaporation from sheets.Sheets impregnated with a solution of 500 grammes of calcium chloride in one litre of a thirty-five per cent. formaldehyde solution are hung up in the rooms, which are then closed for twenty-four hours. Two square meters of sheeting are sufficient for eight cubic metres; one cubic metre requires from 60 to 70 cc . of the above solution. Formaldehyde is particularly useful for treating furs .and bcoks, and the spray method of treating dwellings is quite inexpensive. Care must be had, however, during its use. The eyes should be protected by suitable glasses, the mouth and nose by masks of cotton, and the hands by means of gloves or a coating of vaseline.-Niles Englund (Pharm. Centralb., xxxvii., p. 305).

The Treatment of Chlorosis. -In the Revue de Therapeutique Médico-Chirurgicale is a paper by Huchard upon the treatment of chlorosis. He points out that these chlorotic cases can be divided into three classes: Those in which iron is absolutely useless; those in which
it is fairly valuable; and those in which it is an absolute necessity. The cases in which it is useless are those which have been deprived of fresh air and sunshine, and only need proper food and outdoor life, with stimulant treatment, to regain their health. Those in which it is moderately valuable are the pscudo-chlorotics who have as an underlying cause a tendency to develop tuberculosis with general debility; but as a rule the mure dyspeptic the patient the less good will iron do. The cases in which the iron is most useful are those in which the patients are devoid of dyspeptic symptoms, when any one of the common iron preparations may be given in large or small doses with advantage. Should there be a syphilitic dyscrasia underlying the ancemia, mercurials should be administered in addition to the iron, preferably the bichloride of mercury.

Nervous Diarrhesa in Preg-NANCX.-Condio (Centralbl.f. Gynäz) has published a monograph in Italian on an interesting complication which he considers to be related to hyperemesis gravidarum. Whilst the latter is more frequent in the higher ranks of life, diarrhcea seems commoner amongst poor pregnant women. Obstetricians note its occurrence in lyingin hospitals in cities where it is hardly ever seen in private practice. Out of 3,674 pregnant women in the Turin Maternity, nervous diarrhcea was observed in thirty-five. No fewer than twenty-one of these cases occurred in primipare. Temperature has little influence on this affection, but errors of diet are more probably among its causes. Nervous diarrhœa begins about the fifth month, and may become formidable; it has been found to continue even in childbed. Nerve tonics are indicated, and as in hyperemesis, premature labor must be induced if the diarrhcea persists and the patient becomes seriously debilitated. -Brit. Med. Jour.

The Toad and the Salamander As Drogs.-Hewlett (Science Progress, July; Lancet, July 3rst) shows that the old practice of prescribing prepared preparations of the toad as remedics for dropsy was not so absurd as might at first appear, for, as he has shown, a substance is secreted by the toad's skin that is very like digitalin, and hence may have a favorable effect in cases of cardiac dropsy. It would appear that the active principles of the venoms of the toad and salamander are totally different substances from those of snake vanom, the former being alkaloidal, whizit the latter are proteid in nature. Curiously enough, the venom of the toad and salamander is fatal to the animal which secrets it only in comparatively large amounts. The salamander appears to be remarkably refractory to certain poisons: it is only completely "curarized" by forty-three milligrams of curare, while morphine is apparently quite inactive. It has been demonstrated by actual experiment that the salamander's blood and blood serum act as an antitoxine toward curare. The article seems to show that the belief of the ancients in the venomous nature of the toad and salamander was not altogether devoid of foundation. - N. Y. Medical Journal.

Aidhesive Plaster for A"Stitchi In THE Side."-Solberg (Norsk Magazin for Laegevidenskaben, 1896, No. 6; Deutsche Medizinal-Zeitung, August, 1897) teports that, in a case of pneumonia with severe pain in the tide in which he could not resort to the injection of morphine, he applied a strip of adhesive plaster and the result was surprisingly prompt, as in cases of fracture of a rib. He has since employed the plaster in six other cases of severe pain in the side occurring in the course of pneumonia. In four of them, in which the inflammation was in the lower lobe, the improvement was notable. In another
case, in which the "stitch" was really in the sapular region, allevation was effected by applying the strip of plaster directly bencath the axilla. In the sixth case, in which the "stitch" was not severe and the strip was removed at the end of a lay because the patient felt a little constrained by it, it was applied again at the patent's request. Even the dyspnœea and the cough seemed to be mitigated, according to Sulberg's observation and the patient's own statements. The strip used was of American adhesive plaster, not more than an inch and a half wide, applied as in cases of fractured ribs.-N. Y. Medical Journal.

X-Ray Tubes.-J. Wimshurst points out that when X-ray tubes are very highly exhausted they become capricious, sometimes doing good work and at others refusing to illuminate. This difficulty he overcomes by coating the kathode end of the tube with tinfoil, leaving about a quarter inch gap between the tinfoil and the kathode terminal of the tube. A tube thus treated illuminates with certainty and with a much shorter spark-length than formerly, when it was uncertain with a six inch spaiklength ard frequently required heating. In fact, a highly exhausted tube can then be easily and well illuminated with an influence machine which has seventeen-inch plates.Nature, lvi., 364.

Oxidising Power of Animal Charcoal.-Dupuoy demonstiates the oxidising power of animal charcoal by the addition of a few grains of that substance to a few c..c. of fresh tincture of guaiacum. An immediate intense blue colorat:on is produced in the cold. Wood charcoal does not give this reaction. It is thought that probably to this oxidising poer is due the beneficial effect of animal charcoal on ulcerations and granular wounds.-Bull de la Soc. de Pharm. de Bo "deaux, xxxvii., 17 I .



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## A WORD TO THE MEDICAL STUDENT.

Now that the medical schools are in full blast, a word to the student may not be amiss.

Firstly, the student should, we emphatically assert, look after his physical health. It is a notorious fact, that too many of the students find early graves or become chronic invalids, as the result of too close confinement and over-work. It is generally agreed that the young medicos are the hardest worked class of students. The majority of them are such because they are in love with their chosen calling, and anticipate their responsibilities sio !.eenly. They seldom require any stimulus from their professors. We believe many students do not know how to study. They are unable to concentrate thoroughly ; they do not know how properly to divide their time in proportion to the importance of the subjects, and they hear too much from professors and read too much in books.

Anyone who has closely watched final medical men, will find that the majority of them spend a minimum amount of time alone at the bedside, quietly investigating for themselves. We do not say that they have not clinics enough. We think they have; perhaps fewer and more individual work would be better. To illustrate-the student has paid his twenty-five or thirty dollars for hospital privileges. So he should feel that at least during certain hours of the day he is perfectly at home in the public wards. Having seen a small red kidney at a post mortem, he has decided to study Bright's disease. (He may leave typhus fever, leprosy and the like until he gets through his course.) Suppose on looking around he finds several alleged cases. First, let him allow his patients to relate their principal subjective symptoms, which he may note. Then let the neophyte use his eyes, ears and fingers to record the prominent
objective symptoms, cxamining carefully the circulatory, the integumentary, the urinary and all the other systems of the body. By the time he has finished his five cases by this method, the big clinical points of nephritis will be indelibly stamped on his mind. His interest is awakened, his curiosity is aroused. He goes home with a burning desire to sec what Osler, Roberts, Fagge and Loomis (and cven Bright, maybe) have to say on the subject. When the time for the clinic has come he will enjoy it thoroughly, likely. But if he is off for a ten-mile walk it will not often matter much. But, if in obedience to his professors, he has read the subject up for the clinic, without having made any unaided observations, and likes being told things which he can find out for himself, and likes to jam in among five other men who are all at once listening with clashing stethoscopes to the hypertrophied heart for a minute and a half, he may do so; but he is not getting up the subject in the right way. If the student will take some time to enquire what tc study, and how to study it, he will be enabled to save time by doing work judiciously, and to have time to take some of "God's medicine" himself.

## PERFORATING OF TYPHOID ULCER.

Dr. George E. Armstrong, in the Montreal Medical Journal for February, I897, reports an interesting case of perforation of intestines. The patient, male, age twenty-eight years, was admitted to the General Hospital, and at the time had a temperature of $104^{\circ}$ to $105^{\circ} \mathrm{F}$., which baths faileci to control. On seventh day after admission, and probably tenth of the disease, perforation occurred; operation performed eighteen hours after perforation ; perforation found without diffi-
culty, fecal smell and some yellowish fecal-looking fluid and serum and sero-purulent liquid. The opening in the ileum was closed with a double row of Lembert sutures and the abdomen washed out with hot sterilized normal saline solution. Free drainage was provided by strips of iodoform gauze introduced in all directions between the coils of the intestines and a large glass open-ended drainage tube passed down to the bottom of the pelvis. The case for the next three weeks progressed after the manner of severe typhoid, its course apparently not affected by the operation. On the twenty-fourth day after the operation another perforation occurred, which was closed. Four days after this another perforation occurred accompanied by a very considerable loss of blood; this was also closed, but patient died on fortieth day after the first operation. Autopsy showed complete closure of first perforation. There were indications of septic trouble set up by succeeding perforations and ulcers still present in lower ileum, and colon showed the intensity of the disease. Dr. Armstrong says, " when a patient makes satisfactory progress for four weeks after an operation for the closure of a typhoid perforation, the surgical treatment of the condition for which it was undertaken can hardly be calleci a failure." He urges operation as giving more chances to the patient than any other mathod of treatment. Only when symptoms point to a perforation of the colon would one be justified in advising delay. Do not operate when fratient is in state of shock, but the sooner after reaction is established the better. He advises first a hypodermic of morphia, as it lessens pain, quiets the nervous system and, most important of all, arrests peristalsis, and by so doing limits spread of the septic fecal matter. After closure of perforation with double row of Lembert's sutures, the abdominal cavity if thoroughly cleansed with sterilized normal saline
solution (as this is least irritating to the peritoncal epithelium) by means of a soft rubber tube which can be carried into either loin or the pelvis, the return washing out the septic matter. Any attempt to wash out the cavity with a pitcher will result in failure. Thorough drainage with iodoform gauze as clirected above with a large rubber or glass tube reaching to bottom of Douglas pouch. Dressings frequently changed during first twenty-four or forty-eight hours, for which a nurse thoroughly trained and alive to antiseptic surgery is essential. He concludes, "although the results so far are anything but satisfactory, the surgical treatment of this condition is based on sound principles and it is to be hoped that better results will be obtained in the future than have been in the past."

## THE URATES OF ORGANIC

 bases, SOLUBLE IN WATER.The organic bascs, which form with uric acid salts, soluble in water, can, according to C . Geldsmidt ("Chem. Ztmg." 21 XXI, 1897, No. 54, page 544), be divided into first, those giving t.rate only soluble in hot water (as: methyiamine, benzylamine, nicotine, tetrahydroisoquinoline, and a large number of other inorganic salts; we can class here also piperazine, as the urate of piperazine is only slightly soluble in water), and second, those urates which dissolve easily in cold water, as piperidine, ethylamine, and propylamine. These last bases are those which present the greatest interest to the therape:tist. Piperidine being toxic and propylamine of such higl price, ethylamine alone remains for us to use for the treatment of gout and the dispulving of vesical calculi. Following the observations of F. W. Tunicliffe (Brit. Med. Jnl., January 20th, 1897), the
solubility in water at 17.C. of the urate of piperidine should be $53-10 \%$ that ethylamine approaches nearly the same amount, whilst propylamine is still soluble. It is noticeable that the urate of methylamine is less soluble in water than the higher members of the serics. The solubility of the urates of the primary amines in water secens to increase proportionally to the number of the methyl groups.

## PROPERTIES AND THERAFEU- <br> TICS OF TAKA-DIASTASE.

Nouveaur: Reme'des (September Sth, 1897) snys this enzyme is formed by the action of a mold (aspergillus oryzae of Cohn) known in Japan as "koji" and used in the preparatio:. of the national stimulant, " sake."

Taka-diastase is a yellowish white powder, very hygroscopic, which can in ten minutes transform more than one hundred times its own volume of starch into maltose. It differs from ptyalin in that it manifests its action in acid mediums, which is not the case with the latter, according to Leo ("Ther. Wehnschrft," 10, 1897, No. 28, page 712 ), taka-diastase acts beneficially in certain disorders of digestion. It is especially indicated in the case of insufficient secretion of saliva (first months of life, diabetes, fever, chronic atrophic nephritis, after profuse diarrhceas, etc.), also in hyperacidity of the stomach.
Taka-diastase sb-uld be given during the meal, in doses of one to five grains according to the following formula:

> Be Taka-diastase . .... grs. 35 . Div. in pulv. x .
S. Take during the meal one powder dissolved in water. In case of hyperacidity the taka-diastase sl:ould be taken with the starchy foud at the beginning of the meal.

## EDITORIAL NOTE.

We regret to announce the sudden death of the wife of Dr. iv. D. Richards, Warkworth, Ont., October 2Ist, 1897.

The new wing of the Carlton County Protestant Hospital, Ottawa, is nearly finished. When this is completed tl:is hospital will rank among the finest in the province.

Ottana boasts of two active Medical Associations, viz.: The Ottawa Clinical Society and the Ottawa Medical Society. Officers, President, Dr. J. F. Kidd ; Secretary, Dr. M. O. Klatz ; Coroners, Sumerset and Keat. Both Societies are in a flourishing condition.

In Dr. Hall's paper on "Vaginal Section, Clinical Report," in our October issue ( p . Si3, 1. 22), we wish to make the following correction. The sentence, "These cases, for the most part, ran on a febrile course," should have been, "These cases, for the most part, ran an afebrile couse."

## Personals.

Dr. R. W. Garrat, Kingston, is very ill.

Dr. E. A. Vrooman, formerly of Little Britain, Ont., has removed to Lindsay, Ont.
D. W. J. Willoughby, M.P.P., of Colborne, had a narrow escape a few days ago, caised y a runaway.

Ye Editor, Dr. Beattie Nesbitt, is a present working in the Physiological Laboratory, Johns Hopkins University.

Dr. F. J. Brodd, of Omemee, Ont., has sold his practice to Dr. Cameron, of Yarieer, Ont., and has taken up his residence in Feterboro', where he will practise.

Dr. Geo. Ferris, of Cobourg, was married recently to one of Cobourg's fairest daughters, Miss McCallum. We extend our congratulations.

Dr. D. Cunningham, one of Kingston's brightest men, has been compelled to relinquish practice for the present on acr.ount of ill health. Dr. Cunningham has gone to Colorado.

Dr. R. H. Preston, ex-M.P.P., formerly of Newboro', Ont., has purchased the handsome residence on the corner of Metcalfe and Maria Streets, and will practice his profession in the Capital. He has associated himself with his nephew, Dr. R. Preston Robinson.

## The Physician's Library.

Twentieth Century Practice. An International Encyclopædia of Modern Mcdical Science. By leading authorities of Europe and America. Edited by Thomas I. Stedman, M.D. In tiventy volumes. Volume XI. Diseases of the nervous system. New York: William Wood \& Co. 1897. Pp. v-3 to 962.
The first half of this volume is devoted to the consideration of the diseases of the cerebro-spinal and sympathetic nerves, by Dr. James Hendrie Lloyd. This a, hor reviews the anatomy, physiology, and pathology of the nerves, the disorders of motion, sensation, nutrition, and the reflexes, and then takes up the subject of diseases of the cranial nerves. These are discussed with as much fuliness as conforms to the scope of the work. The disease of the spinal nerves are described, and in a separate section is given a very thorough review of our knowledge of multiple neutritis. In his remarks on Morvan's disease the author refers to its resemblance to anæsthetic leprosy, but he makes no mention of Zambacao Pasha's is tigations in Brittany, which seeme 1 to identify
the condition described by Morvan with the lesions of the form of leprosy mentioned. The section on trophoneuroses is by Dr. Charles K. Mills, who describes with terseness the more common phases of such disorders, while Dr. F. X. Dercum has written the paper on sclerodermia, acromegaly, and adiposis dolorosa. Dr. L. Bruns, of Hanover, and Dr. F. Windscheid, of Leipsic, are the authors of the section on diseases of the spinal cord; Dr. P. J. Mobius, of Leipsic, has written that on tabes dorsalis; Dr. A. Strumpell furnishes that on hereditary ataxia and hercditary spastic spinal paralysis; and Dr. Lightner Witmer contributes the section on pain. The latter author considers the subject from a psychophysiological standpoint. He holds that there is no evidence of the existence of peripheral-pain nerves, while there is some reason to believe in a pain centre. The general plan of the work has been continued by the writers for this volume, and their names afford evidence of the satisfactory character of the information it conta. 2s. It is unfortunate that such a work has so meagre an index.

Lec:ures on Malarial Fever. By William Sidney Thayer, M.D. - Cloth; small Svo ; pp. 326. New York: D. Appleton \& Co.
This is a very valuable contribution to the study of malarial fevers, and is apparently a summary of the lectures delivered by the author at Johns Hopkins University. The first chapter deals with the Development of the Pathogenic Agent of Malarial Fevers, and then follows Methods of Examination of the Blood and Descriptions of Hemocytozoa; General Conditions Under Which Malarial Fevers Prevail ; Clinical Description of Malarial Fevers; Types of Fever with Period of Incubation; Intermittent FeversTertian and Quartan, etc.; EstivoAutumnal Fevers with Long Intervals; Combined Infections; Masked

Malarial [nfections; The Renal Secretions in Malarial Fever ; Sequeire and Complications; Morbid Anatomy; Cirrhotic Processes and Malaria; Malarial Pigment. The last two chapters are in a measure a summary of the conclusions drawn from the foregoing - viz., general pathology, infection with multiple group of parasites, mechanism of defense, phagocytosis, prognosis, treatment and prophylaxis. Altogetherthere aretwentytwo plates descriptive of the text. This is a valuable work and of especial interest to those who desire to study malarial fevers, and while we do not personally agree with the author in all his conclusions, the work is one which medical men cannot afford to ignore.

## Appleton's Popular Science Monthly. Price, 50 cents; $\$ 5.00$ per year. New York: D. Appleton \& Co.

The November number opens with "Principles of Taxation" (XII), by David A. Wells: "Semon's Scientific Researches in Australia" is by E. P. Evans; "The British Association at Toronto," by Daniel S. Martin ; The Racial Geography of Europe" (x), Germany, by William Z. Ripley; "Burs and Beggar's Ticks," by Spencer Trotter;"ExpertTestimony in the Behring Sea Controversy," by T. C. Mendelhall; "Natural and Artificial Perfumes," by M. Jacques Passy ; "Archæology and the Antiquity of Man," by Sir J. Evans; "An Experiment in Citizen Training," by Winifred Buck. There are the usual departments.

A Text-book of the Practice of Medicine. By James M. Anders, M.D., Ph.D., LL.D. Cloth, Svo., pp. 1287. Price, $\$ 5.50$. Philadelphia: W. B. Saunders.
The important additions made within the past few years to our knowledge of the practice of medicine in general and of the diagnosis and treatment of disease in particular have created a need for thoroughly
up-to-date text-books by authors of wide experience. The present work gives in a comprehensive manner the approved results of the latest scientific studies bearing upon medical affections, and portrays with rare force and clearness the clinical pictures of the different diseases considered. The practical points, particularly with reference to diagnosis and treatment, are not only completely stated but are presented in a most convenient form ; for example, the differential diagnosis has in many instances been formulated, no less than fifty-six diagnostic tables being given throughout the work.

## BOOKS RECEIVED.

Lectures on the Malarial Fevers. By William Syiney Thayer, M.D., Associate Professor of Medicine in the Johns Hopkins University. Small octavo, pp. vi., 326. New York: D. Appleton \& Co. IS97.

Truentieitil Century Practice. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M.D., New York City. In twenty volumes. Volume XII., "Mental Diseases, Childhood and Old Age." New York: William Wood \& Co. 1897.

Cutaneous Medicine. A Systematic Treatise on the Diseases of the Skin. By Louis A. Duhring, M.D., Professor of Diseases of the Skin in the University of Pennsylvania, etc. Octavo, pp. 223-494. Part II. Classification, anemias, hyperemias, inflammations. Illustrated. Philadelphia: J. B. Lippincott Co. I 898.

Spinal Caries. Spondylitis or l'utts' Disease of the Spinal Column. By Noble Smith, F.R.C.S., Ed., L.R.C.P., Lond., surgeon to the City Orthopædic Hospital, surgeon to All Saints' Children's Hospital, ortho-
predic surgeon to the British Home for Incurables. Second edition. 153 pages. Price, 5s. London: Smith, Elder \& Co., I 5 Waterloo Place.

Hand-book of Therapentics. By Sydney Ringer, M.D., F.R.S. Home Professor of Clinical Medicine, University College; physician to University College Hospital, and Harrington Sainsbury, M.D., F.R.C.P., ;hysician to the Royal Free Hospital and the City of London Hospital for Diseases of the Chest, Victoria Park. Thirteen edition, 746 pages. Price, Ios. London: H. K. Lewis, 136 Gower Street.

A Text-book of the Practice of Medicine. By James M. Anders, M.D., Ph.D., LL.D., Professor of the Practice of Medicine and of Clinical Medicine in the Medico-Chirurgical College, Philadelphia; Attending. Physician to the Medico-Chirurgical and Samaritan Hospitals, Philadelphia, etc. Octavo, pp. I,287. Illustrated. Price, cloth, $\$ 5.50$ net ; sheep or one-half morccco, $\$ 6.50$ net. Philadelphia: W. B. Saunders, 925 Walnut Street. I 896.

## College Notes.

## TRINITY.

By the time the Hockey maich comes off one of the freshmen predicts that the Trinity men will have become used to their new sweaters.

Dr. N. A. Poweli presented a case of pseudo-hypertrophic muscular paralysis to the class at the Children's Hospital. This case was one of interest, as they are not very common.

THE second general meeting of the Literary Society was held Tuesday evening, Nov. IGth. The turn-out was all that could be expected. The increased interest is a tribute to the efficient manner in which the executive performs its duty.

Mr. H. A. Johnston, '9S, left on Thursday evening for Los Angeles, California. The final class was at the Union Station to bid him farewell, and to wish him a quick return to health and strength. Mr. Johnston, by his kindly spirit, has made himself very popular, and will be missed in many circles.

Interesting and valuable papers were given on "Blood in Malaria" and "Malignant Endocarditis,"by Dr. Parsons and Dr. Anderson, respectively. The papers elicited much discussion. The musical part of the programme was ably maintained by Messrs. Johnston, Fallis and Walker. After two hours very agreeably spent in this way th. meeting dispersed at Io p.m.

The following are the officers of Trinity Medical Society: President, Mr. Jas. Hogg, $4^{\text {th }}$ year; Hon. President, Dr. Bingham; Ist Vice-President, D. J. McRobbie, 3rd year ; 2nd Vice-President, F. N. Davey, and year; 3rd Vice-President, H. R. Herriman, ist year. Representative of Toronto General Hospital Staff, Dr. McEachern, Sec.-Treas.; W. I. Taylor, . in year.

THE first general meeting for the session was held in the College on Tuesday, November 2nd, at 8 a.m. After addresses by the President and Honorary President, papers were read by Dr. Fotheringham, on "Hysteria in Children," and by Dr McEachern, on "Diabetis Mellitus." The papers were fuliy discussed by Drs. Bingnam, Arderson, Parsons, Shoultis, Large and Mr. Ashton. Musical selections were rendered during the evening by Mr. Johnston, Mr. Purvis and others.

Trinity Medical College Y.M.C.A. has commenced work very auspiciously. The first meeting, which was held October 15th, was well aitencled, and an admirable address was given by Rev. Wm. Patter-
son, of Cooke's Presbyte.ian Church, Toronto. At the opening of the session the Association presented each student with an excellent handbook, which is a credit to the Society and to the College, and is heartily appreciated by the students. The Society's prospects for the winter are very promising.

The Dinner Committee will comprise the following gentlemen: President, Frank Porter ; Toaster, C. E. Doherty; ist Vice-President, W. A. Kerr; 2nd Vice-Prosident, Joc McClintock; 3rd Vice-President, H. G. Jolnston. Committee Representatives: $4^{\text {th }}$ year, W. J. Taylor and A. Shepherd; 3rd year, Bob Palmer and P. Hazlewood ; 2nd year, J. McMillan and W. H. M. Kyle ; ist year, Mr. Fleming and Mr. Elliott. It is expected that the dinner of ' 97 will be one of the most successful in the history of the College.
B. Hazlewood, Sec.-Treas.

## MEDICAL FACULTY-TORONTO UNIVERSITY.

Considerable interest is always taken by the medical students of both colleges in the annual championship games. This year was no exception, and very few remained away from the contests. Of course, clinics and lectures were declared off by the boys, and the professors kindly informed of the arrangement. October 19th the baseball game was played. Some good hitting and fielding was done on both sider and at one stage of the game it looked ominous for Toronto; however, Trinity fumbled horribly during the seventh inning and gave the largest scone to our boys, 25 to 19. A week later the schools again lined up. This time football was tl e test, and the game was witnessed by perhaps a larger and more enthusiastic throng than had attended the base-
ball. The wearers of the red and black, still smarting from the previous defeat, were fully determined to regain their lost prestige; whereas victory had only increased Toronto's thirst for further laurels. The result could not be in doubt from the very start, as the Gerrard boys put up a much better team play and ended the game 2 to 0 , to their advantage. These two successes give Toronto the championship for the season, 97-98. The final game of the year-hockeywill probably be played off soon after Christmas.

The prognosis regarding our annual dinner this year is very bright, as an excellent committee has it in hand. The nominations were held, October 22nd, and Mr. J. D. Webster, B.A., was chosen President by acclamation. Mr. J. J. Walters received the gift of Vice-President in like manner. The other offices were well contested for, and at the eleetion on the 29th, the following gentlemen were chosen: 2nd Vice-President, E. J. Stubbs. Representatives to various dinners: McGill, A. D. Stewart ; Bishop's, R. Howey; Queen's, T. H. Lawrence ; London, F. J. Cawthorpe: Trinity, J. P. Mitchell: Dental, H. Walker ; 'Varsity, J. A. Baker ; Victoria, W. H. Bennett. The various years appoint their own members of the committee. Mr. H. I. Hewish, than whom no one is more capable, has been chosen Secretary.

For the second time in the history of our College the freshies were not "hustled" this year, and it seems as if, in Toronto Medical at least, this barbarous, though entertaining custom, is about to succumb to the advance of civilization. The Faculty have done much to this end, in that the seating and otr er accommodation of the lecture rooms have been so much improved that it is impossible to have one of the old-time all-alive scraps without doing a great deal of damage.

The opening games of the Mulock Rugby series were played Monday, 8th. The Primary and Final Meds. were scheduled for the lawn at 3 p.m. Both teams made a good showing, but the senior men were too swift for the "Primroses," and won easily. The winners play S. P. S. on Thursday. The latter at present hold the coveted cup, but the Meds. are very anxious to again get possession of it. They know its value, having won it in ' 95 and ' 96 .

Mr. C. C. Fissette, '98, who has had several attacks of appendicitis, decided that the offending member should be removed. The operation was performed by Mr. Cameron, assisted by Dr. Spencer. "Fizz," was pretty sick for a few days, but is now doing well, and his pleasant face will soon be with us again.

The Heart's Action in Exophthalmic Goitre.-From a number of grphic representations of the heart's action in subjects of exophthalmic goitre, Ferrari (Gazzetta degli ospedali delle cliniche, 1897, No. 25 ; Centralblatt für innere Nredicin, August 7,1897 ) infers that it is not the rhythm alone that is infected by the disease. He tinds that the curve corresponds to th:i shown by Stefani to indicate irritation ois the vagus. In one of the cases he mentions a change in the curveafter partial thyroidectomy denotes the cure of the disease. N. Y. Medical Journal.

## OBITUARY.

## DR. S. S. MURRAY.

We regret to chronicle the death of Dr. S. S. Murray, of Wahnapitae, who died suddenly on the 12 th of November. Deceased was a graduate of Toronto School of Mediicine, and had practised in Dorchester, Thorndale, Seaforth and Wahnapitae.


Valuable Literature. - The most recent addition to our literature on the Antitoxin Treatment of Diphtheria is easily the most complete and comprehensive yot issued. It is literally a multum in parvo production, and should be in the hands of every physician in the country. It is an en ely new brochure, entiticl, "The Present Status of Diphtheria Antitoxic Serum," and was recen ly issued by H. K. Mulford Company, of Philadelphia and Chicago. The brochure gives, in addition to a brief summary of the Methods of Producing Antitoxin, a complete treatise on How to Employ the Remedy, a Resume of what Writers of recent text-bouks say of the Treatment, and many other matters relative to the curative and immunizing value of the remedy, which cannot fail to interest every physician. The brochure is mailed gratis to any physician upon reccipt of address.

Tuberculosis of the Ovary.Orthmann (Centralb. f. Gynak.) endeavors to make this subject fairly clear from a clinical point of view. He has collected 177 cases. Only 57 were carefully stibmitted to microscopic research ; of these 48 seemed to be instances of pure ovarian tuberculosis,' sateral in more than half (27) the cases. The remaining 9 were tuberculous ovarian cysts. In spite of theories of infection from the outer entrance of the genital tract, and notwithstanding the tendency of pathologists to make out primary disease where it has not been detected before, Orthmann declares that primary tuberculosis of the ovary has never been satisfactorily distinguished in woman, though Acconci and Schottlander have experimentally produced it in animals. In the 48 cases above noted as pure tubercle of a previously sound ovary, infection was traced from the Fallopian tube in 26, and HIGHLY EFFICACIOUS for GOUT. RHEUMATISM and SKIN AFFECTIONS
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from the peritoneum in 22. The discase may appear as tuberculosis periiophoritis, disseminated or diffused, and as miliary tubercle of the substance of the ovary ( 20 out of 48 cases), cheesy tubercle or tuberculutis abscess. The two latter are about equally common. The former, much more frequent, may pass undetected by the naked eye, but the discase shows its features very characteristically under the microscope. In the 48 cases, tubercle bacilli were detected 9 times by the microscope and 4 times by experiments on animals. Orthmann describes 4 new cases under his own care. In one there was distinct tuberculosis of the yellow substance in a corpus luteum.-Brit. Med. Jour.

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of sanmetto has given excellent results. I have found it uncqualled in calies of cystitis and prostatitis, and all cases of irritability and inflammation of the genito-urinary tract. In many cases of gonorrhea I have used it with excellent satisfaction. I am pleased to recommend sanmetto to the profession as a preparation which has proven invaluable to me in treating the above-named conditions.

> C. W. Shaver, M.D.

Jackson, Mich.
Syphilis Insonticar . - Lesser (Berl. Klin. Woch.), divides unmerited syphilis into (1) congenital syphilis, (2) syphilis contracted in legitimate sexual intercourse ; ant (3) syphilis contracted by direct or indirect contact with the syphilis virus exclusive of sexual intercourse. It is the lastnamed group which Lesser chiefly describes here. Of course cvery extragenital chancre must not be placed in this group. The author maintains

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that in a large number of cases of syphilis apparently contracted in shaving, a wound has been subsequently inoculated by kissing. The last group of ummerited syphilis may be divided into that conveyed (1) by direct personal contact ; (2) by indirect means; (3) by and to medical men in their professional work. In the first group are included cases in which syphilis is conveyed from one child to another or from a child to an adult. Here kissing is the most impertant cause, but syphilis due to suckling also falls under this heading. Many objects may be the means of indirectly convey:ng syphilis, such as those used for eating and drinking purposes. On the tonsil it is not necessary to have a breach of surface for the infection to take place. In the third subgroup the medical man may be the means of conveying the disease, as in various operations, as by inoculation and injection, by
catheterisat:on of the Eustachian tube, by the use of caustics, etc. Medical men or nurses may contract the disease themselves as in syphilis technica. There are other cases in which the cause of the infection cannot be ascertained. The diagnosis in unmerited syphilis may be very difficult ; in the author's opinion the extragenital primary losion is in the majority of cases overlooked. Again, the non-recognition of the discase may lead to its further transference. Patients with ordinary syphilis mostly know the discase and are more or less careful not to convey it to others. Of course the disease is originally derived from an ordinary case, but unmerited syphilis may under conditions lose the character of a disease of the generative organs. Notwithstanding that the number of cases of syphilis contracted in the ordinary way far exceed those of unmerited syphills, yet something can be accom-

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plished in prophylaxis by speedy diagnosis and treatment, and especially by preventing the firthet spread of unmerited syphilis.-Brit. MCed. Jour:

The Treatment of WhoopingCough. - In La Médecine MIoderne of March 3, 1897, a quotation is made from a Russian journal in which the following methorls of treating whoop-ing-cough are advised: In some cases it was found that oxide of zinc in small doses with small doses of belladomna diminished the number and intensity of the attacks, but the cascs lasted from eight to eleven weeks. Out of twenty-five children treated with oxide of zinc two succumbed to bronchopneumonia. The author is therefore not inclined to regard the oxide as a specific in whooping-cough. In fifteen children from two tr, five years who received terpine hydrate
in fuil doses, the duration of the affection was seven to ten weeks. He conslders that the terpine is particularly indicated in those cases with bronchopneumonia. The bromide of sodium was prescribed in five cases in children from two to six years in the dose of forty-five grains to one drachm in a day. These cases lasted from seven to nine weeks. In eight cases antipyrin was given to children varying from three to six years. The dose was large-from thirty to fortyfive grains-and the attacks were not very materially diminished. In other cases antipyrin and codeinc were combined, and in fifteen of these cases the duration was from six to elcuen weeks. In five cases the author used sprays of corrosive sublimate in the proportion of 1 to 1000 in the phary.ix, with the result that the treatment extended only over three weeks. Ditel, the reporter, concludes that during the convalcscent

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period of the cough the bromides are the best treatment, and that they may be gradually replaced by codeine ; that if fever is present antipyrin is indicated, and if bronchitis is marked terebine is useful. He concludes that there is no specific medication, and that our treatment must be purely symptomatic.-Therapeutic Gazette.

Picric Acid Dressing of the Umbilical Cord.-Rochon (Rev: Obstet. Internat.) points out that three kinds of dressing are applied to the umbilical cord, the oily, the moist, and the dry. To the first he objects that it is imperfectly antiseptic, and is opposed to the keratogenic transformation of the young epidermic elements ; the secund (moist) method is sufficiently antiseptic, but it delays the fall of the cord, and often leaves an imperfect cicatrix ; while the third
(dry), by the rapid desiccation of the cord which it causes, produces the danger of premature separation and hæmorrhage. To meet these objections Rochon proposes the use of picric acid in solution. The cord is surrounded by a piece of absorbent cotton soaked in a 1 to 200 solution of picric acid. Thus the decompesition orthe cord is prevented and cicatrisation of the umbilicus is aided. A single dressing may suffice, but it is best to repeat it on the second or third day.-Bsit Med. Jour.

Extract from a leiter received from Dr. H. M. Starkloff, St. Louis, Mo., May 10th, 1897, says: "It affords me great pleasure to state that I have used campho-phénique, in its liquid and powdered form, very extensively, and it has given me more satisfaction than any other remedy, in all cases of wounds, ulcers, and carbuncles."

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3r.1. It has immediate anodynous effect, when applied to burns, inflaned ulcers, suppurating sores or wounds ; and. by aiding in the repair of any injury, it reduces inflammation rapidiy.
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oth. It has none of the hazards of strong solutions, or ointments, and can be used with absolute safety under all conditions.
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## HENRY IEVERS

Sound View Hospital, StamFORD, COSN.-Mrs. B-, of Boston, Mass.; age 40, German. Indolent secondary specific ulcers of head and chest. First seen and examined at office in New York, August 14th, 1897. The case requiring special and coristant attendance, patient was advised to enter the hospital at Sound View, where she was admitted August 20th, after intervening days of preparatory treatment. The patient's life was despaired of by a leading physician of Boston, who sent her to this hospital. The danger was almost inimediate that one of the ulcers would perforate the inner membrane of the chest wall, to which it had already eaten, and thus expose the pulmonary tissues and the blood to a fatal sepsis from the wound and germ-laden air ; the combined efforts of many Boston physicians having failed to arrest the steady progress of the disease to-
wards that now imminent termina:tion. The head ulcer swas an inch by an inch and a quarter in superficial extent, and had cut down almost to the frontal bone. The edges were indurated, and the sore gave a general appearance of malig. nancy. The chest ulcer was of the size of a quarter-dollar, similar in character to that on the head, and had cut down through the superficial fascia and almost through the bellies of the pectoralis major and minor muscies. Many and various treatments by a succession of physicians, had given no results whatever, and the condition was steadily growing worse and the prognosis more grave. The patient's general condition being miserable, she was put on preparatory treatment previous to administering :'ternal blood treatment. This consister of a calomel purge; followed by a drachim of phosphate of soda in $\mathrm{l}^{2} \mathrm{t}$ water, night and morning,


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of troubleineither the spine, hip or knee joint, or any trouble that can be treated with surgical appliances, the patient were advised to apply to a firm with experience and a reputation for fair, square dealing, it would be a lasting benefit to the patient, and add to the doctor's success. We have 35 years' experience as manufacturers of surgical appliances, artificial limbs, trusses, etc. Elastic stockings made to order. Crutches, etc.

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[^4]Ear_Oren D. Pomeroy, M.D., J. E. Sheppard, M.D. R. C. Myles, M.D.

Throat and Nose-D. Bryson Delavan, M.D; Jos. W. Gleitsmann, M.D., Morris J. Asch, M.D.
Diseases of Chilaren-L. Emmett Holt, M.D., August Séibert, M.D.
Diseases, of the Sxin-A. R. Robiṇison, M:D., Edward B. Brónson, M.D.
Nervaus Diseases-Iandon Carter Gray, M.D., B. Sachs, M.D.

Obstetrics-Edward A. Ayers, BI.D.
Intubation-Dillon Brown, M.D.
which was continued up to the time of entering the hospital. In addition, as the case gave every evidence of a specific character, alterative treatment was pursued throughout, consisting of one centigram protiodide of mercury every three hours. The preparation of the chest wound for blood treatment was a peculiarly delicate operation ; the close proximity of the inner membrane rendering the removal of the septic matter yery hazardous, so that curetting was out of the question; but bovinine followed by peroxide of hydrogen, was an invaluable substitute in such a case. The wound being then fully sterilized by washing out with Thiersch solution, the healing blood treatment was commenced by dropping bovinine frequently into the cavity, instead of packing it, through fear of rupturing the membrare, the patient being kept on her back in bed until a firm layer of healthy tissue was built up from the bottom. After
that, it was practicable to apply bovinine in gauze packs, changed twice a day. The blood treatment of the head ulcer was more simple and ordinary, and by August 25th it was reduced in size by cne-third, and presented a generally healthy granulating appearance. The chest ulcer, by the 20th, was half-filled up with sound tissue, and in a most promising condition. At this time, the patient felt it necessary to return home, and she was discharged under protest; but in a condition now free from danger, and without doubt of continued progress to speedy and entire recovery by the simple applications she was provided with and instructed to make daily. At the present writing, Oct. 5th, no unfavorable change had transpired ; but more detailed information will be obtained later.

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"Iron," says Lé Progres Mridical, "is one of the most import. nt principles of the organism, and the only metal the presence of which i- indispensable to the maintenance of life. It exists in all parts of the systeni, but nowhere does it acquire such importance as in the blood. The blood of a person in good condition contains about forty-five grains of iron; when this amount is diminished a decline takes place, the appetite fails, the stzength is enfeebled, and the blood loses its fine natural color and qualities. In a great number of diseases, such as anemia, chlorosis, bæmorrhages, debility, etc., it sometines happens that the blood has lost half its iron; and,
to cure these diseases, it is absolutely necessary to restore to the blood the iron which it lacks, and great care should be exercised that the most assimilable form of iton be used, one that penetrates ito the organism without unduly taxing the digestive tract or interfering with the essmitial qualities of the gastric juice." In chloro-anemia, Warner's pil: Chalybeate comp. regenerates the diseased red globules of the blood with a rapidity not before observed under the use of other ferruginous preparations; it adds to their physiolugical power, and makes them richer in coloring matter. Moreover, being neither styptic nor caustic, and having no coagulating or astringent action on the gastro-intestinal mucous membrane, this preparation of iron causes neither constipation nor diarrhœea; as it does not need to be digested in order to be absorbed, it gives rise to no sensation of weight

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in the stomach, or the gastric pain and indigestion occasioned by other preparations. In women who have not menstruated for many months, the amenorriuea disappears ; in others suffering from an anemic state of long duration, give Warner's Pil. Chalybeate Comp., one or two after cach meal, which will soon restore the bluod to its normal state. The small quantity of nux vomica is added to increase the tonic effect, sive tone to the stomach and nerves, and increase the appetitc.--Therapeutic Gazette, Nov. 1896.

An English Spa.- One of the must enterprising of the English Spas is Bath, situated in the Vale of Avon, sor.c twelve miles from the Cabot Menouria: Tower on Brandon Hill, Bristol. His Royal Highness, the Duke of Cambridge, has recently paid Dath a visit for the dual purpose of laying the memorial stone of the Victoria Art Gallery and of opening
the Pump Room Annex and Roman Promenade. The latter building serves a two-fold purpose. In the first place it enables the authorities io set apart the old Pump Room exclusively for the use of the ever increasing number resorting to the city for the water cure, and in the second it affords protection to the magnificent Roman remains. Some idea of the grandeur of these Roman baths may be found in the fact that they must have occupied from six to seven acres, and included all the requirements to be found in the grand baths of ancient Rome with pleasure gardens covering an extensive area. Five bathis have already beet. excavatcd. Apart from its archæological interest the great charm of Bath in summer or winter is its beautifui scenery, the most enjoyable walks and drives being obtainable within a very few miles, while the contour of the country secures a constant variety of views. An excellient band plays daily in the Pump Room Annex.

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