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Review

ol. III.

JANUARY, 1896.

No. 1

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Vol. III.

TORONTO, JANUARY, 1896.

No. 1.

Original Communications.

Diagnosis and Treatment of Chronic Suppuration of the Antrum.*

BY PRICE BROWN, M.D., TORONTO.

THE diagnosis of antral disease is frequently somewhat obscure, consequently a positive conclusion can rarely be arrived at upon the first examination. The presence in one nasal cavity of pus of a creamy color and possessing an unpleasant aromatic odor, while the other nasal cavity is free, is always sufficient to induce the impression that suppurative disease exists in one or other of the accessory sinuses.

The question is whether the disease is frontal, ethmoidal, antral or sphenoidal, and we must not forget that the muco-purulent discharge produced by the presence of polypi, associated with atrophic disease, sometimes simulates the pus of antral suppuration. Foreign bodies and rhinoliths may also give rise to a similar character of discharge.

Cleansing the nostril by mild sprays, and following this by the application of cocaine to the mucous membrane, will materially aid in diagnosis. Its astringent action on the blood-vessels will make the presence or absence of deep polypi certain; and the same truth will

^{*}Read before the Toronto Medical Society, December 19th, 1895.

apply, in large measure, to foreign bodies of whatever character. Even after this, exclusion, to ascertain positively which of the accessory sinuses is diseasedi is not easy. Still, it is satisfactory to know that the large majority of cases of chronic sinusites are those of antral origin. Some consider the presence of a drop of creamy pus in the middle meatus, just external to the lower border of the middle turbinated, to be of diagnostic value. If the pus is further back, and visible in the posterior nares, it is likely to be from the diseased sphenoid. If further forward, in the neighborhood of the infundibulum, it may arise from the ethmoid cells or frontal sinus; but in either of the latter the external orbit may likewise be affected, which is rarely the case in antral disease alone. When the quantity of pus is large, whatever its origin, it may extend to all these locations, and accuracy of diagnosis can only be obtained after thorough cleansing and shrinkage by cocaine; then by bending the head forward the exit of the pus from the ostium semilunaris, beneath the middle turbinated, can often be verified.

In my own experience, however, a serious difficulty arises here. During the last three years I have not had a single case of antral disease which was not complicated with chronic hypertrophy of the middle turbinated, and, with one exception, I had good reason to believe that the hypertrophy was the cause and not the effect of the sinusitis. In every case the turbinated was bathed in pus, and the enlarged body so pressed upon the ostium maxillare that it was impossible to find it until, by operation, a section of the hypertrophic enlargement had been removed.

The neuralgias which arise from sinusites, wherever located, are not of much diagnostic value. Still, there is an uncomfortable feeling, a sensitiveness on pressure and a tenderness of the affected jaw in closing the teeth during mastication, which sometimes arises from antral disease, but not from suppuration of the other sinuses.

Moreau Brown, of Chicago, gives one sign in diagnosis which in my own experience has been of little value. He says that after cleansing the pus away by a pledget of lint, pressure on the facial wall of the maxillary sinus would produce its reappearance. The maxillary bone I found to be too dense to be influenced by any pressure which it seemed safe to make.

Irrigation is also recommended as an aid in diagnosis; but it may be remarked that when the ostium is sufficiently available to admit of the introduction of the catheter, the pus can usually be seen issuing from it without the use of the instrument.

Perhaps the greatest aid to diagnosis is that of transillumination, introduced by Voltolini. It is of undoubted value, but the amount of

weight attached to it by different rhinologists varies very greatly. Gougenheim says that transillumination is often embarrassing. On using it he has found well-marked suborbital umbra indicating pus, and on opening the antrum found none, the darkening being produced by a thickened mucosa. Grant, on the other hand, thinks it may often be useful in a negative way. In several suspicious cases where pus was believed to be present, he found on transillumination the translucency so clear and perfect that empyæma of the sinus could be positively excluded and operation forbidden. These are only exceptions, however, and as a rule the use of the electric lamp in the mouth will induce an umbra of more or less density beneath the lower eyelid in every case of antral disease. Milligan tells us that he uses Voltolini's lamp in every suspected case, and that whenever it failed to produce a light zone beneath the eyelid and a red and luminous pupil, on opening the antrum pus had been found.

Greville Macdonald lays great stress on the fact that where we have suppuration with granulation tissue or polypi in the middle meatus, we can seldom be sure of the extent or severity of the disease. He says he has frequently seen cases where suppuration of the antrum was supposed to be the whole trouble, but in which it was afterwards proved that the ethmoid cells and the frontal sinus were just as seriously involved; while on the other hand, cases which had long been treated for so-called necrosing ethmoiditis turned out to be overlooked cases of profuse antral suppuration.

There is one other aid to diagnosis which has always received a certain amount of favor, that is exploratory puncture, either through the inferior meatus or the canine fossa. I have never seen a case requiring its use, and I doubt if it is often really necessary.

For several years I have used transillumination by the electric lamp in all cases of suspected antral disease, but I cannot say that the result was sufficiently marked to make the diagnosis positive by it alone in a single case. Although I have not opened an antrum without finding pus, still the umbra from transillumination was not marked enough, even with the darkened pupil added, to justify opening without the presence of more positive signs.

Treatment.—Bosworth tells us that "the essential features of the treatment of a case of suppurative disease of the antrum consists in opening the cavity for proper drainage, and subsequently its thorough cleansing and disinfection." In the latter clause all rhinologists agree. In the former they differ widely in their methods of procedure, while they unitedly accept as imperative the removal of any polypi, granulation tissue or hypertrophic condition of the middle turbinated which

might be pressing upon or obstructing the ostium semi-lunaris. The direct treatment of the suppuration may be conducted in one or other of the following ways:

- t. By direct irrigation through the ostium maxillare. Garel of Lyons is the great apostle of this method of treatment. He claims that it can be accomplished in a large majority of cases, and that the antrum can be washed out regularly and completely without any artificial opening whatever. Out of forty-four cases, he succeeded by this method in twenty-eight, or 66 per cent.; and of the twenty-eight, in only six did he require to resort to other treatment to obtain a successful result. The larger number were cured in a short time; some of them by only a few days' treatment. The fluid used was usually a warm solution of boracic acid. He uses a Heryng's catheter, and inserts it, with the point turned downwards, between the middle turbinated and the outside wall. Passing the instrument upwards to a position above the ostium, he turns the point outwards and gently engages it in the mouth of the cavity. This requires careful manipulation, as the point of the catheter is in close proximity to the orbit. At the first washing the discharge is purulent and fetid, and sometimes caseous; but before the irrigation is over the fluid returns from the nares perfectly clear. On each succeeding washing the pus decreases in quantity. After a very few, nothing comes away but a mass of gelatinous muco-pus, the water itself being quite clear. At each sitting the semi-solid mass discharged becomes smaller, and finally disappears—the patient being cured.
- 2. By opening through the inferior meatus, or Jourdain's method. Of this plan of reaching the antrum, Dundas Grant is a strong supporter. He claims that as the antrum communicates with the respiratory passages, and not the digestive, the more natural opening will be by the nose. After applying a 15 per cent. cocaine solution to the mucous membrane, he uses Krause's trocar and canula, penetrating the antrum through the wall of the inferior meatus. Withdrawing the trocar and leaving the canula in situ, he attaches to it the point of a syringe, and washes out the cavity with a warm solution of boracic acid, the fluid escaping through the natural opening. After each treatment the canula is removed. At the next sitting cocaine is again applied, the canula reinserted and the treatment repeated. Grant claims that although this treatment is somewhat difficult, yet the number of irrigations required being less than by the other methods will justify its use. Zeim of Dantzic, as late as October of this year, in a paper published in the London Journal of Laryngology, criticizes this method very severely. The difficulty of operating in this region, the

thickness of the naso-antral wall in many cases, inefficiency in drainage, and the impossibility of antro-irrigation, are among the points he emphasizes; and to these might be added the evil effects of a series of successive applications of cocaine.

- 3. By removing a tooth, if required, and opening into the antrum through the alveolus. This is Cooper's well-known method, and is warmly supported by such men as Zeim, Harrison, Milligan and Bosworth. When the teeth are sound Zeim condemns removal, and suggests perforating the antrum through the roof of the mouth in close proximity to the teeth, either between the second bicuspid and first molar, or between the first and second molars. The fact that the opening into the alveolus or floor of the antrum and the ostium maxillare are at the opposite ends of the same cavity, must be conceded as an advantage for purposes of irrigation, while the facility it affords for auto-irrigation should not be lost sight of. To keep the artificial opening clear, various silver and gold tubes have been devised for insertion during the period in which treatment would be required the tubes to be attached by silver wire to the adjoining teeth, and plugged to prevent the entrance of food into the antrum. Zeim does not use tubes.
- 4. Desault's plan of opening the antrum through the canine fossa appears to be steadily gaining ground. It is claimed that the patient can treat himself equally well in this way as through the alveolus, and that it will frequently prevent the sacrifice of a sound tooth. A tube with plate to fit the adjacent gum can be retained just as well, or even better, than in the alveolus, and there is, if anything, less danger of the passage of food into the antrum. Some operators have gone much further in this direction. They chisel away enough of the external antral wall to admit of the insertion of the little finger, and thorough digital exploration of the diseased cavity. The antrum is then curetted and washed out, and packed with iodoform gauze. This is changed regularly, the cavity being open until thorough healing takes place. Still, although revived recently, this plan is not new, for we read of La Morier as early as 1740 treating a case successfully in this way.
- 5. The Robertson plan of combining the chiselling of the canine fossa with the perforation of the inferior meatus in one or two places has many exponents to-day. Scanes Spicer of London strongly favors this method as the only one securing thorough and effectual drainage in many of the most difficult cases. He makes large openings in both the anterior and the internal sides of the antrum, and these openings are intended to be permanent. He then irrigates

thoroughly with boracic solution, and follows this by packing the antrum tightly with creolin gauze. This is left in for forty-eight hours and then removed. No form of tubage of mechanical drainage is used, but the cavity is syringed out thrice daily with a similar warm solution. The patient is also directed to blow out the cavity frequently from the mouth to the nose, and also from the nose to the mouth. He claims rapid healing by this means, and although the perforations contract, they usually remain permanently open to some slight extent without producing inconvenience to the patient.

This multitude of methods of treatment of antral disease, all practised to-day by leading rhinologists, each one preferring his own special plan as the best, while utilizing one or other of the remaining ones in exceptional cases, seems to prove that the results are not on the whole as satisfactory as we would like them to be. A tew cases are cured quickly. All are relieved, but the treatment requires to be carefully, systematically and persistently followed to obtain a good result. Often the routine has to be changed and more direct efforts applied, and even then a complete cure does not always follow. As the last four cases taken from my own case book differed materially from each other in several important points, I will close by briefly relating their history.

Case 1. July 27th, 1894. Mr. G. L., aged twenty-five years, lecturer. Operation by drill in the canine fossa for left antral disease. vious history: Three brothers and mother had died of consumption. I had previously treated him for nasal polypi and hypertrophy of the middle turbinated on the same side, accompanied by a large amount of purulent discharge. The removal of the two former did not produce any material improvement in the latter. I then tried to wash the antrum through the ostium, but the result was imperfect. and as the teeth were sound I concluded to operate on the date mentioned in the canine fossa. After the operation I irrigated the cavity and then plugged the artificial opening with cotton wool until I could get a silver tube made to fit. On the tube a flange cap was attached to the lower side to fit the gum. This kept the tube from slipping into the antrum, while the upper lip pressing the surface of the flange, retained it in position. A plug in the tube itself was never found necessary. From the first the patient practised auto-irrigation successfully. The relief was marked, and the pus for a while diminished materially in quantity, but when winter came on it increased again. From time to time the drug used was changed. Am. mur., pot, chlor, perox, hyd., boracic acid were all tried in succession, each failing in turn to suppress the pus formation. Once during the winter I

enlarged the opening slightly and curetted the antrum, putting in a new silver tube in place of the old one. In May last, as I was afraid of the development of tuberculosis, I advised the patient to spend the summer in the North-west. This he did, faithfully following out the treatment during his absence. He returned in September much improved in weight and general health, but without apparent improvement in the antral disease. I removed the old tube, and again thoroughly curetted the antral lining, once more putting in a new tube similar to the previous one. This time I prescribed a solution of resorcin as a wash. The improvement has been very marked. The discharge has greatly decreased, and there is a probability of complete cure, though no positive certainty, as the case has now been in active and regular treatment for over seventeen months.

Case 2. July, 1894. Miss A-, aged about fifty years. Operation by drill in canine fossa of left side. She had been troubled for several years with left antral and ethmoid disease. The former could be traced to dental caries. To relieve her, a dentist at the time had removed all her upper teeth. He told her that she was suffering from disease of the antrum. Nothing positive, however, was done beyond this until she came to me for treatment, in 1893. I then removed part of the middle turbinated, and by liberating the ostium maxillare from pressuretogether with the regular use of sprays, she was greatly relieved. The discharge diminished, and at times almost disappeared.' It finally got worse again, and she came for further treatment in July, 1894. One reason for operating in the canine fossa in this case was the impossibility of an alveolar operation on account of the absence of the teeth. the first irrigation a considerable amount of pus escaped through the ostium. The solution used was potass, chlor., about blood temperature. At each sitting the amount of pus discharged was less than at the preceding one. The patient was unable to perform the irrigation personally, and came once a day to the office for treatment. In the course of a month, by daily washings, the pus had entirely ceased issuing from the antrum, and in two more weeks the opening was allowed to close. A tube similar to that made for case No. 1 was used with this patient also. There was still some discharge from the ethmoid cells, of which the patient was relieved by the use of mild sprays. I saw her again in January of the present year, and there had been no return of the antral suppuration.

Case 3. April, 1895. Miss L. G—, aged thirty-three years; teacher; several members of her family had died of pulmonary tuberculosis. Has had catarrh of yellowish pus from left nostril for years. I found enlarged middle turbinated of left side completely

filling central part of nasal cavity, and pressing upon the septum as well as the outside wall. The enlarged body was bathed in creamy pus of that peculiar odor indicative of antral disease. On transillumination the umbra could be seen beneath the left lower eyelid. Although antral suppuration was evidently present, it took some time to sufficiently remove the turbinated to be able to irrigate successfully through the ostium. By June, however, the mucous membrane was healed, and on the 28th I washed out the antrum through the ostium semi-lunaris with a warm solution of resorcin. I used a Eustachian catheter, with the point bent to a right angle and attached to an ordinary rubber syringe. There was at once a very free discharge of offensive pus of a creamy color. The amount of fluid used at the time was nearly a quart, and before the whole of it had passed in and out of the ostium it was entirely clear of pus. 29th.—Irrigation repeated; fluid passed in and out freely, but contained less pus. 30th.—This time irrigation required more force; there was very little fluid pus discharged, but a number of small bodies resembling polypi were washed out. July 1st. -Removed with forceps a small slough from anterior border of ostium; washed antrum as before, bringing away some polypoid tissue with very little pus. After this I irrigated the antrum daily through the ostium with resorcin solution, with similar result. On the 8th, a very large mass, which I here present preserved in alcohol, was washed out, with absolutely no fluid pus. The accompanying microscopic slide is a section from the same. You will find on examination that it is not polypus at all, but consists of little else than a mass of pus cells. or what Garel calls a "mass of gelatinous muco-pus." Why under such circumstances it should assume such a peculiar form I will leave to the pathologist to define. In the case of this patient this was the last purulent discharge from the antrum. Although the cavity was washed out at intervals until the 25th of the month, nothing more came away; the antrum had been healed and treatment was discontinued. Three months later the patient returned, as there was again a slight discharge, though of a mucous instead of a purulent nature. It arose from a small angiomatous mass at the ostium, and on its removal, followed by two or three washes, the discharge ceased. With regard to the practicability of washing the antrum by the natural opening in this case, I may say that I inserted the point of the instrument in the reverse way to the one recommended by Garel. Instead of passing the catheter up to the ostium with the point downwards, as advised by him, I found that the best and easiest way was to slip it in with the point upwards until it reached the ostium, and then by turning it gently outwards to the angle of ninety degrees it became

engaged within the orifice. Several times before inserting it I applied cocaine solution on a pledget of cotton to the vicinity of the opening. Latterly I did not find it necessary to do so, as the operation could be performed without producing pain.

Case 4. June, 1895. Miss R. B---, aged twenty-five years; bookkeeper; applied for treatment. For several years she had been troubled with severe nasal discharge from the left nostril. On examination the indications were very similar to the others in regard to the condition of the middle turbinated and the presence of pus; there was likewise slight umbra. Some time after reducing the turbinated enlargement I commenced washing the antrum through the ostium semi-lunaries, as in case No. 3, with solution of resorcin. This was continued daily until August 10th, but although the discharge diminished, it did not cease, and I decided to open the antrum—this time through the alveolus - the chief object being to promote autoirrigation. A dentist removed the first molar, and after applying a 15 per cent, solution of cocaine within the alveolus, I opened the way into the antrum with a burr-drill. This, as in the other cases operated on, caused only slight pain. I made the opening pretty large, and after washing out the pus lightly curetted the inner surface of the antrum. I did not insert a tube, but directed the patient to wear a pledget of cotton in the cavity while partaking of food to prevent its entrance into the antrum. This she soon discontinued, believing it to be unnecessary. .She, however, washed out the cavity regularly twice a day with a solution of boracic acid. For several weeks the opening easily admitted the point of the syringe; then on contracting a little, it was under cocaine painlessly enlarged again. During the three months in which irrigation was required this had to be repeated twice only. Latterly, as the pus diminished in quantity the washings became less frequent. During the early part of November the discharge entirely ceased, and before the end of the month the alveolar opening was allowed to close. Since then there has been no discharge whatever of pus from the nares.

In closing the history of these cases in private practice, it may be noted that three out of the four, or 75 per cent., were cured, with a fair prospect of a good result in the remaining case; and also the unusual fact that they were all cases of left antral disease.

Society Reports.

Toronto Clinical Society.

President, Dr. GRAHAM, in the Chair,

THE regular meeting, December 11th, 1895.

Orchidectomy.—Dr. E. E. King presented a paper on Orchidectomy in Enlarged Prostate. The reader said that he had operated on five cases. The first case died from pneumonia on the third day. In the second case there was improvement within twenty-four hours, which continued. The third case recovered. The fourth he would refer to later in the paper. The fifth underwent removal of a portion of the vas deferens and was doing well. He said no satisfactory explanation had been given as to why this operation benefited these cases, but statistics proved that it did. As to the removal of a portion of the vas, in one of his cases it had proved satisfactory, but in the other the result remained to be seen. The reader then gave a description of the structure and the functions of the prostate. He discussed the various theories that are and have been held as to the causation of enlargement of the prostate.

Case 4. Patient aged sixty-five. Second wife hving. Well until five years ago. At that time he began to suffer severe pain in both testicles when the bladder was distended. It disappeared after It was especially troublesome at night. The urme flowed copiously at intervals. Was treated by a physician for a time for diabetes, although he was not told that there was any sugar in the urine. He suffered from constipation and had attacks of nausea. The urine passed invariably after the bowels would move. About two years ago he began to suffer from pain in the end of the penis and over the pubic region. There was a stinging pain at the neck of the bladder, at the end of micturition, for three or four minutes. Never suffered from retention. Could not retain more than half an ounce frequently. The patient was referred to Dr. King in September, 1895. There was no odor to the urine, and the amount of residual urine was small. Water was drawn when the catheter was introduced 101/2 inches. He advised removal of a section of the vas. Removed 215 inches from each vas. The portions removed were examined and their patency demonstrated. Patient was not allowed to urinate for two days; following this he urinated every three or four

hours, as compared with every half to two hours before the operation. The testicles atrophied considerably and became soft and flabby. Left the hospital in twelve days. He reported continued improvement for four weeks, when pain manifested itself again, and frequency of urination became more marked. In November, patient said he was able to have complete intercourse with ejaculation. for treatment just three months after his first visit. Urine healthy: flowed at ten inches. The prostate was much smaller and appeared tender in the centre. Patient had to rise four or five times during the Delay in starting the stream was marked. examination showed the bladder to be in a healthy condition. testicles were unequal in size, the left having developed to the size it was before operation. On incising, the vasi were found to be intact. A second operation was performed and improvement took place immediately and continued up to the present time, patient passing urine every seven or eight hours without any distress.

Case in Practice.—Dr. MEYERS presented a case in practice. The patient was a man aged sixty, whose health had been good up till eight years ago, when he was exposed to a draught through a window. This was followed by stiffness in the back. He also experienced some pain in the hip, especially when he would evert the foot. There followed marked diminution in the right thigh muscles and accompanying weakness in the legs. He found a good deal of difficulty in climbing up stairs. The reflexes of the leg were still preserved, but not very active; had a good deal of difficulty in crossing the right overthe left leg. In other respects the patient's health was good.

The Fellows then examined the patient.

Dr. MACFARLANE thought the symptoms resembled those of morbus coxe, which he detailed in full.

Dr. Graham thought the trouble was probably in the hip-joint.

Dr. MEYERS said that he had considered the question of hip disease but had thought it was more probable that the trouble was in the cord, in the anterior horn of the grey matter. He recalled a case like it he had seen before, which had been diagnosed as progressive muscular atrophy.

Notes in Three Cases of Pneumonia, by Dr. Graham.

Case 1. Ayoung man aged twenty-eight; always strong and healthy. Had a lobar attack on the right side. Crisis took place on the ninth day. No special treatment. Digitalis given the first day after the crisis, at which time there was a drop in the number of white corpuscles from thirty to sixteen thousand in twenty-four hours. He pointed out that the prognosis in pneumonia could he fairly arrived at by counting the

number of white corpuscles. The above case he said was a severe one, and the symptoms were very grave, the patient being an alcoholic.

Case 2. The patient, aged twelve, was brought to hospital November 23rd, in a very weak state. Family history good, and the patient's former health also good. On November 4th was taken with measles, and was in bed a week. Was delirious during this time. At the end of the week sat up; lost all power over the legs. By the twentieth of the month had become much thinner and was very irritable. twenty-first the pulse was 120, temperature 105°, respirations 26; delirium and muttering present; abdominal distension; tongue coated and foul; ochre-colored stools; pupils dilated; urine scanty and high-colored. On the twenty-second the temperature was 103; cerebral symptoms marked. Entered hospital on the twenty-third. Would not answer questions. Temperature 104°; almost pulseless. Strychnine and brandy were given. On the twenty-fifth the cheeks were flushed. the pupils dilated and inactive; tongue swollen and red with brownish coating. Remained on the back listless. Was very irritable if any examinations were attempted, crying out when the legs or body was touched. The legs could not be extended, being in a state of spasm; no desire for nourishment; constipated; knee-jerk and plantar-reflex increased: albumen in urine in considerable quantities; casts granular and hyaline; S.G., 1,020; urine by catheter; blood count, red, 5,800,000; white, 1,000; lungs negative; pulse weak and compressible. On the twenty-sixth the patient was a little more sensible; temperature 103°, pulse 100, respirations 27. On the twentyseventh, pneumonia developed in the left apex and then in the right, shown first in crepitant rales, and by tubular breathing. Blood count, white corpsules, 2,000. Post mortem showed a consolidation of both lungs; the kidneys very much enlarged, showing parenchymatous nephritis; intestines showed elevated Peyer's patches, showing the presence of typhoid fever. So that the patient was suffering from a combined attack of typhoid, pneumonia and nephritis, the kidney and lung symptoms being predominant. The reader then referred to the history of other cases of renal typhoid. In the case reported the pneumococcus was found in the lungs afterwards, and the typhoid bacillus was found in the spleen.

Case 3. Boy, aged sixteen, had inflammatory rheumatism a year ago. About four months ago came to the hospital with typhoid, and remained six weeks. For some months had been troubled with hacking cough; otherwise strong and well. Three weeks after his recovery from typhoid he went to work, his hours being from 5 a.m. to 6 p.m., and as his job consisted in pork-packing he was obliged to work in brine.

Some time after commencing work he caught cold. Cough increased. While working he cut his little finger with a knife. This healed up after suppuration. On December 2nd, while the scratch was still unhealed, he had a slight chill and complained of his ankle. He walked lame; remained at work, but did not feel as well as usual; had a pretty bad Beside the chilly feeling he experienced a sense of soreness. The pain was very bad in the left hip. On the 27th epistaxis occurred, and on the 28th he became delirious. On the 30th was admitted to the hospital. December 1st the ankle was incised, and the pus evacuated. Patches of pneumonia found in both sides, more particularly on the There was more or less pleuritic friction over the diseased patches. On the 2nd of December the following note was made: Patient well nourished, expression anxious, pupils inactive, mouth dry, tongue white and furred, no appetite, very thirsty, abdomen distended, increase in hepatic dullness. Spleen could not be made out. beat indistinct and feeble. Blood count, 4,000,000 red and 1,400 white. Patient had severe pain in the chest before he came in with dyspnæa; no pericarditis; trouble seemed to be limited to the pleura and the lungs. Urine acid, high colored, no albumen; but it was afterward found that the kidneys were in a state of disintegration. No sugar, no bile; S. G., 1,032. Chlorides not diminished. Suppuration continued in the joint. Patient continued more or less delirious. Pulse became weaker and weaker until the patient died. On post mortem lung found to be more or less pneumonic, with patches of pleurisy. Kidneys enlarged, softened and disintegrated in places. Liver not much softened. Cultures were made from the septic pus taken from the ankle by Dr. Hill, which showed pure cultures of the staphylococcus. No other organism found. The staphylococcus was also found in the lungs and in other organs and glands of the body. Injections were made into rabbits; they became similarly diseased.

Dr. Macfarlane discussed the surgical aspects of the case, particularly the differential diagnosis between osteo-myelitis and rheumatism, and pointed out that these cases are frequently taken for typhoid fever, especially where delirium supervenes.

Dr. Graham referred to the relative increase in the white corpuscles in the last case, due to the suppurative condition present.

JANUARY MEETING.

President, DR. J. E. GRAHAM, in the Chair.

Radical Cure for Hernia - Dr. A. PRIMROSE presented a patient upon whom two years previous he had done Halsted's operation for the radical cure of inguinal hernia on the right side. The patient was a boy aged thirteen, admitted to the Hospital for Sick Children in October, 1803. He had suffered from the hernia since infancy. He was a very active boy and would not wear a truss, obstinately pushing the pad off from time to time. As the hernia was increasing in size, operation was advised. This was performed on 26th October, 1893, under chloroform. An incision was made, beginning at a point 1 1/2 inches above the external ring to the internal ring, and carried downward and inward to the external ring. The incision was carried through the entire thickness of the abdeminal wall, laying bare the peritoneum throughout the whole extent of the incision and exposing the spermatic cord and the hernia. The sac was isolated from the cord; it proved to be an acquired hernia. The peritoneum at the neck of the sac was closed off by a series of matress sutures. The cord was dissected out. This proved to be the most difficult part of the operation on account of the smallness of the vas. The sac was cut away below the line of sutures. At this juncture the child vomited, and the straining caused the bowel to escape just above the uppermost suture, caused apparently by the splitting of the peritoneum upwards in the line of severance at the neck. To avoid recurrence, a suture was put in at the upper angle of the opening in the peritoneum in such a way as to include the angle of the wound in the loop of the ligature. The muscular wall of the abdomen was now united by matress sutures through the entire thickness, from the uppermost limit of the incision to the pubes; closing completely the old external ring. The cord was held aside during the procedure, and was allowed to make exit from the abdomen at the level of the internal ring between the first and second matress sutures. The cord now lay on the surface of the external oblique aponeurosis on its way to the scrotum. The skin incision was then united by continuous suture. The wound was dressed with a pad of iodoform gauze and absorbent wool and a firm spica bandage. The superficial stitches were removed on the fifth day after the operation. On the twelfth the wound was dressed for the second time and was found completely healed. The boy was then examined by the Fellows. The case seemed to be one where thorough radical cure had been effected. The cord could be recognized as making its way from the new external ring, which could be felt as a small opening above the centre of Poupart's ligament.

Dr. Grasett asked why Halsted's method had been adopted in preference to a simpler method. There was no doubt as to the excellency of the operation and the good results.

Dr. TEMPLE said that he had during the day assisted Dr. Ross to do an operation for the radical cure on a patient in whom the operation had been done before. The prior operation had not resulted satisfactorily because the patient had got up and walked the day following the operation. The second operation consisted in removing the old cicatrix, slitting up the sac, separating the cord, pulling out a portion of the sac from the abdomen, tying it off and allowing it to slip back, and closing the wound in the manner described in the preceding case.

Dr. Spencer pointed out the difference between Halsted's and Barker's method. The latter did not sever the aponeurosis of the abdominal muscles nor remove a portion of the veins of the cord.

Dr. PRIMROSE said that he had resorted to Halsted's method, because he had found, on examining Halsted's report of cases at the time, many of the cases in which he operated so successfully were in children even younger than the boy presented. He then made a comparison between this and McEwen's operation.

Gunshot Wound o. Abdomen. - Dr. F. LEM. GRASETT reported a case of gunshot wound of the abdomen. Patient, S.H., aged twelve; admitted to Toronto General Hospital September 9th, 1895. The patient had been cleaning a 22-calibre revolver in which three of the chambers were loaded. He was holding it between his knees while wiping it, and the cloth caught in the trigger, and the contents of one chamber entered his abdomen in the hypogastric region, passing through a double flap of the trousers and two shirts. Its point of entry was 31/4 inches from the umbilicus downwards and outwards, 11/4 from the median line, and 3½ from the pubes, and from a line drawn from the umbilicus to the anterior superior spine, the middle of the line being taken, 3 inches downward and inward. The wound at the entrance corresponded to the end of an ordinary lead pencil. was no external hæmorrhage. The powder had scorched the trousers for an inch in circumference around the opening through them. did not lose consciousness, being able to call for assistance. He had an evacuation of the bowels two or three minutes afterward. movement was not examined. Drs. O'Reilly and Teskey, who saw the patient immediately on his arrival at the hospital, advised that nothing in the way of active treatment be done. When seen by Dr. Grasett

on the next day the temperature was 07.2°, respirations 20, and pulse 84, which at 6 p.m. were, respectively, temperature ooo, respirations 20, and pulse 85; and at 0 p.m., temperature 100.2°, respirations 20. and pulse o8. In the latter part of the evening the patient began vomiting, and seemed drowsy. He complained of pain in the abdomen. He was given cracked ice. He vomited a little during the night. In the morning he was given one-half ounce of milk and lime-water, repeated several times. At noon he vomited again, when the nourishment was withheld till 5 p.m. The temperature ranged about 100° during the day. The urine became bloody and remained so for a few days. On the night of the 11th the temperature rose to 102.5° pulse 92. Patient complained of pain in the left abdominal region and over the left kidney. Morphia was given. The bowels were constipated. There was a certain amount of abdominal distension. On the 13th and 14th he vomited and complained of pain. Calomel was given, and after a free evacuation the pulse fell to on. The vomiting continued for some ten days. Patient was discharged cured at the end of six weeks. The reader of the paper then gave a resumé of the literature of the subject, and a discussion of gun-shot wounds of the abdomen. In such cases as the one reported, where the symptoms were not alarming, he asked the Fellows present their opinion about the indications for operative procedure. His idea was in the present case that the bullet had probably entered the abdominal cavity, wounded the peritoneum, and passing through the mesentery (escaping the intestine) had lodged in the kidney.

Dr. MACDONALD said that he did not agree that the bullet which Dr. Grasett had passed around as a sample of the one that had entered the patient was a 22-calibre, and drew attention to the two sizes of the twenty-two, the long and the short. The short would hardly more than penetrate the average abdominal wall; but the long, with its strong charge of powder behind it, would pass quite through the body. There is little evidence to show which was the exact direction the bullet took. It might have, as is often the case, circled around under the skin and not entered the cavity. In cases under his observation he had seen them act in this way. Such wounds often produced no symptoms. The speaker had confirmed these views from a personal experience, having been shot in the leg with some seventy-five pigeon shot.

Dr. Spencer said that he had watched the case and was convinced that the bullet had entered the abdominal cavity and entered the kidney. He could not see how it very well could go otherwise. There was evidence to show that the muzzle was pointing toward the

abdomen. There was the wound caused by its entrance, and there was the injured kidney. If it had passed through the intestine he thought it would have produced more shock; he thought it had probably passed through the mesentery.

Dr. Primkose called attention to the fact that the bullet could not pass through the abdominal cavity into the kidney without passing through the intestines. The mesentery lay behind the intestine. He believed the bullet had passed through the intestine.

Dr. BINGHAM thought indications for operating would be meteorism, hæmorrhage or protrusion of the viscera form the wound. It was very difficult where these were absent to decide whether to operate or not.

Dr. Graham said that bullets took all sorts of erratic courses, and he thought it was quite possible for the bullet to lodge in the kidney without passing through the intestine.

Ectopic Gestation .- Dr. TEMPLE reported a case and presented a specimen of ectopic gestation. Patient, woman aged twenty-four; mother of four children; youngest child was eight months old. was admitted to the hospital the 12th of December. On the 20th of November she expected her ordinary menstrual period. Got up at six o'clock, went to kitchen to light a fire. Suddenly she felt a severe pain in the region of the left side of the uterus and fainted. Did not recover herself until seven o'clock, no one coming to her assistance. All that day she felt very poorly, and sent for her physician who sent her to bed; he found there was some discharge from the vagina. She kept in bed three weeks, and was then transferred to the hospital. some few days he did not examine the case, as he was under the impression from the symptoms that it was a simple case of menorrhagia; but, upon examining, he found a cyst on the left side of the pelvis, and taking into consideration the history of the pain and fainting and the discharge, he came to the conclusion that the patient had a rupture of the ectopic cyst. Dr. Ross agreed with this diagnosis. An operation was performed, and a dark-colored mass was removed from the folds of the left broad ligament. An uneventful recovery followed.

Dr. Temple presented a specimen. He said that this was that form of ectopic gestation called the abdominal form, in which the development may still continue, even after rupture in the broad ligament. Its presence might even be overlooked and the case go on to a fatal issue. In reply to Dr. Bingham, the speaker said that he had had two cases in which diagnosis and operation had been made before rupture took place. An interesting feature of the case was the fact that the woman had probably been pregnant only four weeks when rupture took place. In reply to Dr. Macdonald, he said

the discharge was not, as is usually the case, shreddy. He agreed that the opinion advanced by Dr. Britton, that conception might possibly have taken place earlier than he supposed, the patient continuing to menstruate.

Spinal Drainage for Hydrocephalus.—Dr. Bingham reported two cases of spinal drainage for hydrocephalus. The first case came under his notice a year ago, in a child of twelve months. been called in after the child had suffered an attack of convulsions. He learned that the case was one of congenital hydrocephalus. Up till nine months there had been no increase in the size of the child's At that time there was a sudden increase in the amount of the fluid. The child at once became irritable; this was followed by strabismus and then by convulsions. He resolved to follow the course advised by Winter. He tapped in the lumbar region, and withdrew about four ounces of fluid, with happy results, all symptoms for the time disappearing. On the recurrence of symptoms, tapping was again resorted to. This was repeated five times during a period of three weeks. Subsequently the child died, but there was no return of the convulsions.

Case No. 2 came under his care in the Victoria Hospital, in September last. The child was aged 2½. One of the mother's brothers was insane, and her people were neurotic. A sister suffered from chorea. A year before this, when the child was eighteen months old, it fell down stairs, after which time it was never able to walk well, gradually losing power to walk altogether. There was a certain amount of curvature detected in the spinal region. When admitted the child was bright and intelligent. It was troubled with constipation. The appetite was large. The circumference of the head was twenty-two inches. The enlargement was symmetrical. Athetosis was well marked. There was constant rolling of the eyeballs. A few days after entering the child complained of pain in the head. began to grow dull and stupid. When moved, the child would cry, as though suffering much pain. A certain amount of opisthotonos was distinctly marked. There was a great deal of headache night and day. Under ethyl chloride the spinal canal was aspirated between the last lumbar vertebræ and five ounces of fluid withdrawn. After the withdrawal of the fluid there was a sudden fall of the temperature. The child's disposition changed completely. This improvement continued for about a week, when an increase of the fluid again took place, and the symptoms reappeared. Continuous drainage was decided upon under the strictest antiseptic precautions. This was unsuccessful. The temperature went up almost at once, and the child died in four

days. The difficulty in such a procedure seems to be the difficulty of securing perfect asepsis. If this could be secured, there would be some hope of doing something for these cases.

Dr. Grasett thought that perfect aseptic drainage could be carried out.

Dr. Primrose said in those cases where the pathological change was supposed to result from lack of support to the vessels through malnutrition of the bones of the skull something additional to the drainage would be necessary to secure a complete cure. He referred to the use of adhesive plasters to support the skull, and by pressure to promote absorption. But such treatment had proven a failure.

Dr. MACDONALD said that he had heard of favorable results by drainage. He thought continuous drainage could be carried on in a perfectly antiseptic way by some such process as was attempted in draining the pleura into a bottle attached to receive the fluid.

Dr. Britton reported aspirating in a case where spina bifida was present, his object at the time being to relieve the spina bifida. There was a relief of symptoms.

In our last issue we published in the proceedings of the Toronto Medical Society for October 17th, a condensed report of a very interesting case of suppurative cholecystitis with rupture of the gall-bladder, complicating typhoid fever, prepared by Dr. H. B. Anderson, one or two points of which should have been referred to a little more clearly. and accurately. Dr. Anderson obtained pure cultures, both from the abdominal cavity and the gall-bladder of a round-shaped bacterium, short, and with rounded ends, some slightly curved and apparently constricted in the centre. In places they were joined together, forming long threads. In morphology they corresponded to the bacillus typhosus, or the bacillus communis coli. The culture bouillion remained alkaline, and no indol was formed, both of which would go to prove that this was the bacillus of typhoid. He pointed out the rarity of this complication of typhoid, and that when present it was generally attributed to the bacillus communis coli, or to the staphylo-This was another example of the ability of the bacillus of typhoid to set up suppurative inflammation. He also noted the marked leucocytosis in the case, and considered its presence the result of suppurative inflammation rather than to the presence of typhoid. He alluded to the matter of leucocytosis in the diagnosis between typhoid and appendicitis.

Editorials.

The Digitalis Group in Treatment of Heart Diseases.

When Dr. George W. Balfour, of Edinburgh, speaks upon any subject of cardiac pathology or therapy, we are naturally disposed to listen. In the *British Medical Journal*, for 14th December, he has a lengthy article under the above caption. The digitalis group contains a number of plants, from the deadly up to the comparatively innocuous convallaria and adonis. These have an action on the heart more or less resembling the plant which gives its name to the group.

The fundamental action of this group is to increase the elasticity of muscular fibre. This causes the heart to dilate more slowly and to contract more firmly. The heart will thus be more fully emptied. The circulation through the heart muscle is a very short circuit, and consequently, the heart receives more blood than any other organ in the body in the same time. The arterioles are likewise richly supplied with blood, and are acted upon by this group of plants with considerable energy, but not so much as the heart, owing to the rapidity of the circulation through the heart. The effect of this is that every muscle in the body is flushed with blood, at an increased pressure and their nutrition greatly improved, including the myocardium.

The above is mainly the action of digitalis. The entire group act in a somewhat similar manner, with many differences special to each member of the group. Digitalis acts powerfully on the heart and arterioles; ergot on the uterus and bladder, and less on the heart and arterioles, while strophanthus acts with much energy on the heart, but slightly on the arterioles. This difference in strophanthus is of much importance. Any increased arterial pressure that comes from its use must be due to greater heart-action, and will not be as continuous as that in the case of digitalis, because of the absence of the resistance from the arterioles. The muscular system will not be so favorably affected. Thus, in the employment of strophanthus, the results must come from its action on the heart, and this explains why the dose has to vary so much, say from five minims every four hours to ten minims every two hours.

Strophanthus has two advantages that must not be lost sight of. It is readily soluble in water, and acts with great rapidity on the heart. Thus, where prompt action is imperative, and absorption by the stomach slow and uncertain, the hypodermic administration of strophanthin is

of great value. In such an urgent case, however, it is doubtful if the hypodermic injection of ether would not be of more use than either strephanthin or digitalis.

There is no more potent benefactor of mankind than digitalis. For more than a hundred years it has been regarded as a sovereign remedy for dropsy. There is an idea in the minds of very many medical men that it is a dangerous cardiac sedative. This is entirely erroneous. We now know that digitalis acts as a tonic on the muscular fibres of the heart and arterioles; and it is in its capacity as a tonic in this way that it does its work.

Digitalis in every form is absorbed with difficulty and slowly eliminated from the system. If the drug be given at too short intervals, it accumulates within the system, and toxic symptoms may very readily appear. This tendency to accumulate must be guarded against. It must never be forgotten that this drug is of special value in a class of cases where sudden deaths are liable to happen; and this has been unfortunate for the reputation of digitalis. With ordinary care no fear need be entertained on the ground of accumulation.

Thin and anæmic persons are more quickly saturated than plethoric people. The average tonic dose for most cases is one grain of powdered leaves every twelve hours. Such a dose may be continued as long as there is any need for the drug. Under such a dose the feeble heart slowly gains tone, and the weak impulse becomes a strong one. There is an increased sense of well-being.

In many young persons, after febrile or exhausting diseases, and when chlorotic or anomic, there are dilated hearts. Far too often these cases are regarded as merely functional and left to time and nature to cure. It is painful to find that later in life many of these persons are debarred from entering upon any active form of life, that a little timely attention and a course of digitalis would have cured and obviated a life of comparative invalidism.

Our forefathers gave as much as ten grains or twenty grains at short intervals in bad cases of dropsy. This would be followed in two or three days by diuresis. We now know that digitalis has no action on the kidneys, and the diuresis is due to the improved state of the circulation. As the arteries fill and the veins empty, the effusion is absorbed, the blood becomes more watery, and this excess of water is excreted by the kidneys. We should not run any risk by giving dangerously large doses; the good can be obtained by safe quantities of the drug. A dose of three grains every eight hours will be found efficient in cases of dropsy. The symptoms of saturation may be looked for when the patient has taken about thirty grains or forty grains. The symptoms are: Diminution of primary diuresis, slowing

of the pulse, nausea, or, more rarely, diarrhova. If the drug is stopped on the appearance of any of these symptoms, the patient will suffer no harm. When digitalis is pushed too far, complete suppression of urine may occur. Diuresis recurs and continues usually until all the fluid is drained off. Look out for symptoms of saturation after about thirty grains have been taken. The slow pulse of digitalis is devoid of danger: but the frequent pulse of the drug is not devoid of risk.

Digitalis may be given in all cases of heart tailure, whatever may be the cause or condition. In cases of valvular lesion with compensation there may be no urgent need for it, but it can do no harm in tome doses. In all such cases there is a steady heart failure, and to counteract this, the drug is of the atmost service. Some object on the ground that digitalis in such cases causes hypertrophy. This is an error. There are drugs that cause atrophy but none that produce hypertrophy. Hypertrophy in a muscular organ is due to a call for increased exertion. It is only when dilatation has occurred that the needful compensating hypertrophy follows. Digitalis increases the elasticity of the myocardium, and enables it to withstand the dilating influences to which it is subjected. Thus, digitalis, in due tonic doses, delays dilatation, and retards, rather than precipitates, hypertrophy.

Corrigan, long ago, and many since, raised a warning voice against the employment of digitalis in acrtic regurgitation. This was on the ground that it acted as a schative. This is incorrect. It is a tonic, and in this very form of heart disease is of the greatest service in resisting dilatation, and consequent sudden heart failure. In such cases the drug will even reduce much of the dilatation that may have taken place, as seen by the change in the position of the ages beat.

Digitalis disappoints us sometimes when we most require its assist-It has no action on the ingravescent asystole of the moribund ance. heart. We cannot always recognize this condition, and are bound to employ the drug as it is most likely to yield best results on general principles. When the limbs are solid with anasarca, we have little to hope from digitalis; but if the tension be relieved by purgation, then the digitalis acts well. In dilatation of the right ventricle, following stenosis of the mitral valves, or in pulmonary emphysema, we cannot hope for much from digitalis. When there is dilatation of the left ventricle from loss of elasticity of the arteries digitalis acts badly, and may increase the dilatation. If it is combined with some vascular stimulant it acts well. It is said that digitalis acts badly in the fatty heart. But as most hearts that are diagnosed as fatty are really weak hearts, it would be a great mistake not to employ it, and be guided by the results obtained from its administration.

Are Medical Officers of the Militia Ready for Active Service?

THE recent tension of relations with the United States, produced by the unreasonable and illogical message of President Cleveland, auggests food for thought on the condition of the medical service of the militia. It is apparent at the outset that we have no medical service properly so called. It is true we have a number of medical men attached to battalions and corps who are supposed to be military surgeons. Without wishing to disparage in any way the professional acquirements of any of these worthy and patriotic gentlemen, it may fairly be asked how many of them could pass an examination in Porter's "Surgeon's Hand-book"? How many of them know anything of ambulance drill? How many of them are there who could direct a field hospital or medical transport column? making these remarks we are not referring to any want of desire on their part to fulfil these functions, but the authorities ask for no other qualification for surgeons in the militia than that of being logally licensed practitioners. Yet in fact the medical service of armies has become one of the most specialized of specialties. Has not the time arrived when medical officers should pass a qualifying examination both for entrance and promotion? All medical officers in the English volunteers must now do so, and in consequence are considered and designated very properly as "efficient," and thereby gain for their corps an increased capitation grant. Is it not time that we woke up in this country to the fact that twice within three years there has been real danger of war, and that if such a catastrophe should arrive how utterly unprepared we would be.

In 1885 Surgeon-General Bergin submitted a complete scheme of medical organization to the Government. Since then the attention of the Government has been drawn to the subject. Individual writers have not been wanting to do their share in agitating for medical reorganization. What has been accomplished? Next to nothing. The authorities should take the present opportunity to purchase equipment for at least two Beaver companies. Public opinion is favorable to the increase of expenditure upon military account, and the men are ready to fill the ranks.

AMERICAN MEDICAL REVIEW.—This is a monthly journal of current medical literature. Dr. Daniel Lewis, of New York, is the editor. It is based somewhat on the plan of the *Review of Reviews*. The first number which is to hand is well made up. We wish the new enterprise all success.

KISSING THE BOOK.—The Medical Press calls attention to the dangerous practice of kissing the Bible in the courts. The greatest danger is from syphilis. The mere fact of having pressed a sacred volume to his lips never yet hindered a man, if he had previously made up his mind, giving false evidence.

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LODGE PRACTICE.—We understand that an agreement is in circulation, and is being very generally signed by the medical men of the western half of Toronto, against lodge practice. It is a condition that as soon as ninety per cent. of the medical men have signed the agreement, they will give up their lodges. We have often referred to the evils of lodge practice, and hope that the efforts now being made to remedy these evils may meet with complete success.

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Physicians and Fakes.— It is a matter for extreme regret that qualified medical practitioners sometimes enter into arrangements with advertising quack concerns and companies to give the latter a legal status. Some of the grossest outrages on the profession and the public have been in this way rendered possible. The severest punishment should be meted out to any registered practitioner who takes under his or her patronage any advertising fraud. They ought to be disqualified at once.

The Niagara District Medical Association.—A meeting of the Niagara District Medical Association took place at the G. and M. Hospital, Wednesday, January E.h. There were present: Dr. King, in the chair; Drs. Vanderburg, Merritton; Tremble, Queensten; Oliver, Niagara Falls; Campbell, Johnson, Thorold; Palmer, Toronto; Clark, Armour, Rykert, St. Catharines; Considine, Port Dalhousie. Dr. Armour read an excellent paper entitled, "The Rational Treatment of Typhoid Fever," which was then discussed by Drs. Clark, Tremble, Oliver, Vanderburg and Rykert. Dr. Palmer, Toronto, read a very interesting paper on "Suppurative Diseases of the Middle Ear." The Association then adjourned to meet at Niagara Falls, second Wednesday in April.

SURGICAL WORK IN KINGSTON.—In the Daily British Whig of December 21st we observe an account of a delicate operation, viz., removal of a cancerous breast, skilfully performed and entirely successful; and in the Canadian Freeman of December 18th appears the notice of two very important operations also performed at the Hotel Dieu Hospital—a cancerous growth weighing upwards of five pounds removed from the breast of Mrs. ——, and a large abscess removed from the abdominal cavity of Mrs. ——. We are happy to hear that both patients are now beyond all danger (where?). If the Kingston brethren have anything new in technique or antisepsis perhaps they would furnish details to the medical press.

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A New Journal of Experimental Medicine.—This month there will be issued the first number of the Journal of Experimental Medicine, a quarterly, to be edited by Dr. William H. Welch, of the Johns Hopkins University, Baltimore, and published by Messrs. D. Appleton & Co., of New York. The associate editors are to be Professor H. P. Bowditch, of Boston: Professor R. H. Chittenden, of New Haven: Professor W. H. Howell, of Baltimore; Professor J. George Adami, of Montreal; Professor W. T. Councilman, of Boston; Professor T. Mitchell Prudden, of New York; Professor John J. Abel, of Baltimore: Professor Arthur R. Cushny, of Ann Arbor; Professor H. C. Wood, of Philadelphia: Professor R. H. Fitz, of Boston; Professor William Osler, of Baltimore: and Professor William Pepper, of Philadelphia. A most valuable and scholarly journal may be looked for.

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WHITMAN'S PLATES IN THE TREATMENT OF FLAT-FOOT. — Dr. C. W. Wilson, of Montreal (Montreal Medical Journal, December, 1895) reports his experience with this method of treating flat-feet. The foot is reduced to its normal shape by pressure, under an anæsthetic if necessary. Then apply a plaster of paris case to the foot, and keep at rest for two weeks. This is removed and a plaster of paris mould made of the foot. Then sheet steel is hammered to fit this mould exactly. This is trimmed to fit from the ball of the great toe to the tubercle on the os calcis, and from the level of the tubercle on the scaphoid to the outer border of the foot. This gives the foot the best possible support and is comfortable. These plates can be worn with any boot, but best with those of low flat heel. If made of aluminum, the plates are lighter and do not rust with the perspiration, as most of these cases have very sweaty feet.

THE CANADIAN MEDICAL REVIEW.

CASE OF MYXCEDEMA.—Dr. Horner C. Bloom (*Philadelphia Polyclinic*, December 28th) describes a case of this disease where the symptoms were well marked. The patient, a lady aged forty-two, was apparently cured by the use of one hundred five-grain tablets of thyroid extract. After a year there was a recurrence of the symptoms. This time she was placed on protonuclein. This was ordered in tablet form. She took one every three or four hours. Two months of this treatment had removed all the symptoms and she appeared perfectly well. A noteworthy feature of this case is the relapse, and the disappearance of the disease a second time.

* * *

Cold Applications in Pneumonia.—Dr. T. J. Mays (The Times and Regis er, Philadelphia, December 7th, 1895) reports 195 cases of pneumonia, with a death rate of seven. He advocates the local application of cold in this disease as a valuable means of controlling some of the most dangerous features of the trouble. It reduces the pyrexia, strengthens the heart, relieves the pain in the chest, lessens the difficulty in breathing, and gives general comfort to the patient. These applications stimulate nervous energy and contract the small vessels, hastening resolution and dispersing exudation. These applications must be supplemented by the best possible hygienic conditions, good nutrition and such heart tonics as strychnine and digitalis.

* * *

A Case of Phthisis Apparently Cured.—Dr. William Pepper, of Philadelphia (University Medical Magazine, December, 1895), reports a very interesting case. The patient was a woman, aged twenty-one In March, 1893, she became ill, and lost flesh with great rapidity. The sputum contained enormous numbers of bacilli. The patient was placed on a diet of egg-albumen. The medicinal treatment was 7hh grain of strychnine, 1000 grain atrophine, every two hours, hypodermi cally, and $\frac{1}{50}$ grain strychnine nitrate, $\frac{1}{12}$ grain double chloride of gold and sodium, and ½ grain vegetable digestive, by the mouth, every two hours. In a few days the gold and sodium was increased to 1/8 grain every two hours. The strychnine had to be reduced in a few days for a short time, but she soon took the original quantity. She made a recovery to her original weight of 132 pounds, and the bacilli disappeared. In August, 1895, she had a recurrence of cough, loss of weight, and bacilli. The same treatment was again resorted to. the end of October, the bacilli had all disappeared and the weight had increased from 114 pounds to 124 pounds. The cough was almost gone and the lungs nearly normal.

OPERATING ON Hæmorrhoids.—Dr. Joseph B. Bacon, of Chicago, in North American Practitioner, December, 1895, cautions great conservatism in operating on hæmorrhoids. He condemns the Whitehead operation, and all modifications of it. He contends that too much mucous membrane is removed and there is great risk of troublesome strictures. The sphincter should always be dilated with the fingers or thumbs. The muscle should never be fully ruptured, as incontinence may ensue. It is rarely necessary to remove more than one herrhoidal mass on each side, as this breaks up the anastomosis, and the remaining ones disappear. Further, the dilatation of the sphincter also relieves the varices and the smaller masses are often cured by this alone. He prefers the ligature, or clamp and cautery. Care must be taken not to remove too much mucous membrane, and also to have the bowel thoroughly prepared for the operation, and asepsis should be made the rule.

* * *

HEADACHES.—In an article on "Headache" in the December number of the Buffalo Medical Journal, Dr. F. S. Crego calls attention to the 'aw that in proportion as the nutritive and vegetative functions are feeble and languishing, nervous phenomena are mobile, exalted and irregular. He points out that theory attributing migraine to biliousness has been discarded. Dubois Raymond's theory that it is due to vaso-motor spasm does not account for the pain; neither does he believe it is due to anæmia of the brain. That it is due to the disruptive and inco-ordinated action of over-loaded nervous centres, is believed by many, he says, while Dr. Gowers holds that it is a disease primarily of the nerve cells in the higher brain centres. For the treatment, he advocates tonics and nerve sedatives, iron, the hypophosphites and cannabis indica, arsenic and the galvanic current. To break up the attack he recommends four grains of antefebrin, and one grain each of citrate of caffein and bromide of camphor.

* * *

THE SINS OF THE SHORT-SIGHTED.—Dr. Ryerson published a short article on this subject in the Canada Lancet some months ago, which was considered of sufficient interest to be republished by the Scientific American, the Optical Journal, Public Opinion, and other American periodicals. It is reproduced below: "Myopia, being essentially a condition due to abuse of the eye, one is constantly obliged to say 'don't' to patients. It occurs to me that it might be useful to put these prohibitive rules in aphoristic form: (1) Don't read in

railway trains or in vehicles in motion. (2) Don't read lying down or in a constrained position. (3) Don't read by firelight, moonlight, or twilight. (4) Don't read by a flickering gaslight or candlelight. (5) Don't read books printed on thin paper. (6) Don't read books which have no space between the lines. (7) Don't read for more than fifty minutes without stopping, whether the eyes are tired or not. (8) Don't hold the reading close to the eyes. (9) Don't study at night, but in the morning when you are fresh. (10) Don't select your own glasses at the outset. It would almost seem as though some of these rules were too obvious to require mention, but practical experience shows that myopes abuse their eyes just in the ways stated. Reading by firelight or by moonlight are favorite sins. Reading lying down tends to increase the strain on the accommodation, and reading while travelling tires the ciliary muscle because of the too frequent adjustment of focus. In short, anything which tends to increase the quantity of blood in the organ favors the increase of the defect, leading in extreme cases to detachment of the retina and blindness."

Military Medical Notes.

THE ARMY MEDICAL SERVICE.—We learn from our contemporaries that the present head of the Army, Lord Wolseley, is inclined to carry out the same policy toward the army medical service which was adopted by his predecessor, namely, that of snubbing and keeping down, whenever opportunity offers, the medical officers. inspection in Dublin, Lord Wolseley objected to the medical corps carrying swords, because, he said, they were only civilians. officers do not seem to keep in touch with the spirit of the times, which tends constantly to bring into greater prominence the work of civilians, and to attract into civil life the best minds of every civilized country. In particular, the standard of education and intelligence in the medical profession is everywhere steadily rising, while we judge from the various exhibitions of the intelligence of army and navy services that these branches are not any longer drawing the best class of men into them. Yet, in the apparently desperate effort to maintain the prestige of the army and navy, officers do all they can by artificial regulation to keep down men who are, by education and natural intelligence, their equals, and perhaps their superiors. We believe that, in the end, the importance and social value of the medical services in our armies and navies will be recognized at their true worth, and, meanwhile, we hope that the contest will be kept up until justice is secured.—*Medical Record*.

* * *

SURGEON-CAPTAIN R. R. SLEMAN has issued a "Volunteer Surgeon's Guide," which seems to fill a real vacancy in medico-military literature. The scope of this work can be best understood by the headings of some of the chapters: General Conditions of Service: The Army Medical Reserve of Officers: The Volunteer Medical Staff Corps; Civilian Medical Practitioners in Charge of Troops: Schools of Instruction; Duties of Medical Officers in Camp, Barracks, and on the Line of March; Hospitals in Camp; Brigade Bearer Companies; Discipline: Compliments and Salutes: Uniform; Medals and Decorations. We would recommend our militia surgeons to obtain this useful and inexpensive book. Price 3s. 6d. Clowes & Sons, Charing Cross, London.

* * *

SURGEON-COLONEL W. TAYLOR, M.D., the principal medical officer of the South-eastern Military District, delivered a lecture at Aldershot on "The Medico-Military Arrangements of the Japanese Army in the Field." The lecturer declared that the regimental medical organization of the Japanese army was far superior to our own. The medical arrangements for saving life on the battlefield were perfect, no expense being considered too great to save a Japanese soldier's life. The bravery of the medical department was astonishing; he himself had seen a stretcher bearer company attending to their work in a perfect storm of bullets, and they had cleared a line of fire of eighty killed and wounded in about twenty minutes, having first rendered aid, and before sending the wounded back to the field hospitals in the rear. A discussion followed the lecture, in which Sir William Butler and many other officers took part, and all agreed that the British army had much to learn from the Japanese army. - The Mail.

An Immortal Item.—About once a year an item, regarding a report to the British Medical Association on the relative longevity of drinkers and abstainers, goes the ground of the medical press. The fallacy of the figures giving a longer life to habitual drinkers than to total abstainers has been repeatedly exposed, but the item lives on, to the consolation and encouragement of all indulgers.—Medical Record.

幽ook 剩otices.

In Atlas of Ophthalmoscopy. By Dr. O. Hann; translated by Dr. E. Clarke, New York; Wm. Wood & Co. 1805.

This little book may fairly be said to be *intra vires*, which is more than can be said for many works of the fundus oculi. The plates are almost without exception new and well lithographed. We most cordially recommend this work to all appealaists and physicians who wish to be up to date.

Physicians' Office Day-book. Designed by C. HENRI LEONARD, A.M., M.D., Detroit. Price \$2.00.

The Multum in Parco Physician's Ledger. A complete ledger for four hundred patients yearly for five years. Price \$2.50. Issued by the Illustrated Medical Journal Co., Detroit, Mich.

We have used Leonard's office day book and ledger for eight years, and are so satisfied that there is no desire to change. After this prolonged trial we can confidently recommend them to our friends.

A Manual of the Practice of Medicine. By Gronde Role Lockwood, M.D., Professor of Practice in the Woman's Medical College of the New York Infirmary, etc. With 75 illustrations in the text and 22 full-page colored plates. Philadelphia: W. B. Saunders, 925 Walnut Street. 1896.

The author's design in this work is to present in a handy, readable volume the main up to-date facts in the department of medicine. Osler's classification has been followed. As a text for the student and a work of ready reference, particularly in regard to pathology and treatment, this work can be recommended.

An American Text-book of Surgery. For Practitioners and Students. By Charles H. Burnett, M.D., Phineas S. Connor, M.D., Frederick S. Dennis, M.D., William W. Kren, M.D., Charles B. Nancrede, M.D., Roswell Park, M.D., Lewis S. Pilcher, M.D., Nicholas Senn, M.D., Francis J. Shepherd, M.D., Lewis A. Stimson, M.D., William Thomson, M.D., J. Collins Warren, M.D., and J. William White, M.D. Edited by William W. Kren, M.D., LLD., and J. William White, M.D., Ph.D. Second edition, catefully revised. Philadelphia: W. B. Saunders. 1895. Pp. xiv., 1248. Price \$7.

Skioscopy and its Practical Application to the Study of Refraction. By ED. JACKSON, M. D. Philadolphia: Edwards & Docker Co. 1895.

An admirably clear and fairly comprehensive work on this subject by a capable author. Type, illustrations and general get up are excellent.

The American Year Book of Medicine and Surgery. Being a yearly digest of scientific progress and authoritative opinion in all branches of medicine and surgery drawn from journals, monographs and text books of the leading American and foreign authors and investigators; collected and arranged with critical editorial comments under the general editorial charge of George M. Gould, M.D. In one royal 8vo volume of about 1000 pages, uniform in size with the "American Text-Book" series. Profusely illustrated with numerous wood cuts in text and thirty-three handsome half tone and colored plates. Prices: Cloth, \$6.50 net; half morocco, \$7.50 net. Philadelphia: W. B. Saunders, 925 Walnut Street.

The contributors to this magnificent work are: General Medicine William Pepper, M.D., Philadelphia, Pa.: Alfred Stengel, M.D., Philadelphia, Pa. Surgery William W. Keen, M.D., Philadelphia, Pa.: L. Chalmers, DaCosta, M.D., Philadelphia, Pa. Obstotries -Barton Cooke Hirst, M.D., Philadelphia, Pa.; W. A. N. Dorland, M.D., Philadelphia, Pa. Gynacology J. M. Baldy, M.D., Philadelphia, Pa.; W. A. N. Dorland, M.D., Philadelphia, Pa. Diseases of Children Louis Starr, M.D., Philadelphia, Pa.; Thompson S. Westcott, M.D., Philadelphia, Pa. Nervous and Mental Diseases Archibald Church, M.D., Chicago, Ill.: Hugh J. Patrick, M.D., Dermatology William A. Hardaway, M.D., St. Louis, Chicago, Ill. Mo.: C. Finley Hersman, M.D., St. Louis, Mo. Orthopedica Virgil P. Gibney, M.D., New York City; Homer W. Gibney, M.D., New York City. Ophthalmology Howard F. Hansell, M.D., Philadelphia, Pa.; Charles F. Clark, M.D., Columbus, Ohio, Otology Charles H. Burnett, M.D., Philadelphia, Pa. Rhinology and Laryng ology E. Fletcher Ingals, M.D., Chicago, Ill.; T. Melville Hardie, B.A., M.B., Chicago, Ill. Pathology and Bacteriology- John Guiteras, M.D., Philadelphia, Pa.; David Riesman, M.D., Philadelphia, Pa. Materia Medica, Experimental Therapeutics, and Pharmacology-Henry A. Griffin, M.D., New York City: Van Horne Norrie, M.D., New York City. Anatomy and Physiology - C. A. Hamann, M.D., Cleveland, Ohio; G. N. Stewart, M.D., Cleveland, Ohio. Hygiene, Physiology and Chemistry Henry Leffmann, M.D., Philadelphia, Pa. The general design of this work is to give physicians in a compact form an annual epitome of the new and progressive medical truths or suggestions published during the months of the preceding year from July to June inclusive. It is believed that no very significant fact has escaped review in the present pages. The material used has been not only the periodicals of the year, but also monographs and text-books. There is a great wealth of solid information and sound counsel in this most excellent work, and we can with full confidence endorse it.

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Principles of Surgery. By N. Senn, M.D., Ph.D., LL.D., Professor of Practice of Surgery and Clinical Surgery in Rush Medical College, Chicago; Professor of Surgery in the Chicago Polyclinic; Attending Surgeon to the Presbyterian Hospital; Surgeon-in-Chief to St. Joseph's Hospital; Ex-President American Surgical Association, etc. Second edition. Thoroughly revised. Illustrated with 178 wood engravings and five colored plates. Royal octavo, pages xvi., 656. Extra cloth, \$4.50 net; sheep or half-Russia, \$5.50 net. Philadelphia: The F. A. Davis Co., publishers, 1914 and 1916 Cherry Street, and for sale by their Canadian agents, A. P. Watts & Co., 10 College Street, Toronto.

Most progressive surgeons were familiar with the former edition of this work. The present edition is much enlarged, and enriched with many additional illustrations. This work is really what it announces itself to be, namely, a treatise on the principles of surgery; or, in other words, a book dealing with the etiology and pathology of surgical diseases. Such a treatise, if reliable and up to date, could not fail to be of the utmost value to the active surgeon. Those who know Dr. Senn would naturally expect that the task would be executed in a thoroughly scientific manner, and a perusal of the pages of this book fully realizes the above expectation. We are safe in predicting that his reputation will not suffer by the second edition of his "Principles of Surgery." The knowledge of surgical literature is shown to be very extensive; the statement of facts is clear and succinct; the pathology is sound and trustworthy; the book is remarkably free from theories, and the illustrations are very appropriate and of excellent finish. Treatment, though brief, is sound and timely.

The author and publishers have clearly spared no pains to give the profession a first-class work, and it now remains with the profession to avail itself of the assistance to be obtained from these pages. Next thing to being in company with a distinguished surgeon is that of being in company with his studied deliverances, as we find them here recorded.

Materia Medica and Therapeutics. A Practical Treatise with Especial Reference to the Clinical Application of Drugs. By John V. Shoemaker, A.M., M.D., LL.D., Professor of Materia Medica, Pharmacology, Therapeutics and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, Philadelphia, etc., etc. Third edition, thoroughly revised. Reset with new type and printed from new electrotype plates. Royal octavo; pages ix., 1108. Extra cloth, \$5.00 net; sheep, \$5.75 net. Philadelphia: The F. A. Davis Co., publishers, 1914 and 1916 Cherry Street, and for sale by their Canadian agents, A. P. Watts & Co., 10 College Street, Toronto.

The reception accorded the first edition of this work, which appeared but a few years ago, was so cordial that a second edition was issued inside of fifteen months. The third edition is now before us, and the author has taken the opportunity of combining into one the two volumes which had been separately published. There is no part of medical science in which greater progress is being made, almost daily it might truthfully be said, than in that which is treated here by Dr. Shoemaker; and it seems necessary, in order that the profession should be kept informed, that frequent editions of such text-books should be issued. The one before us is fully up to date; indeed, so recent a remedy as tannigen and its uses are described in full. In this edition we note also tolysol, tolprin, solocol, solacetol, chlorphenol, bromphenol, ethylendiamine, silver phosphate, tropacocaine, etc., etc. The treatment of disease by means of animal extracts, secretions or juices, and by immunized serum or antitoxines, is also fully discussed. The natural process and physiological agencies discussed in this volume are of great value in therapeutics, and frequently of much avail in the treatment of disease.

The Principles and Practice of Medicine. Designed for the use of practitioners and students of medicine. By WILLIAM OSLER, M.D., Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University, and Physician-in-Chief to the Johns Hopkins Hospital, of Baltimore; formerly Professor of the Institutes of Medicine, McGill University, Montreal, and Professor of Clinical Medicine in, the University of Pennsylvania, of Philadelphia. Second edition. New York: D. Appleton & Co. 1895. Toronto: N. G. Morang, 63 Yonge Street.

A second edition of this popular text-book for students was called for, and Dr. Osler has made some alterations and additions, but the work remains practically unchanged. The article on "Typhoid" has, the gifted author states, been thoroughly revised to date. He

seems to pin his faith to hydrotherapy, or the Brand method of treatment in the disease, and dismisses the question of eliminative treatment advocated by Thistle and others, by courteously stating that it is based on an entirely erroneous view that the bacterial growth is chiefly in the intestine itself. He still advocates milk as the most suitable food in this disease. We hope that when he re-writes the article for the next edition he may see his way clear to recommend a more generous menu than that now approved of by him. The subject of diphtheria has been recast, and changes have been made rearranging or resenting certain portions dealing with cholera, syphilis, tuberculosis, scurvy, appendicitis, angina pectoris, Addison's disease, muscular atrophy, myxcedema, malarial fever, gout and diabetes. The work throughout is dogmatically authoritative, and bears the impress of marked individualism.

The Pathology and Surgical Treatment of Tumors. By N. Senn, M.D., Ph.D., LL.D., Chicago. Philadelphia: W. B. Saunders.

This new work of seven hundred pages, profusely illustrated and beautifully printed, is written with the object "to prove useful as a text-book for the student, a work of reference for the busy practitioner, and a reliable, safe guide for the surgeon." To these workers in the field of medical science we can 'neartily commend this book, because it is concisely, methodically and interestingly written. Its big points, the summing up of its arguments and chapters, are presented in pithy sentences which catch the attention and impress themselves on the memory.

In the opening chapter the author discusses the various theories which have been held in regard to the origin and nature of tumors, their differential diagnosis from inflammatory swellings, and their his togenesis. He goes a little further than Conheim, saying, that every tumor is the product of a congenital or post-natal matrix of embryonic cells, aroused into activity by a general or local physiological stimulation or by congenital or acquired abnormal conditions in its immediate environment. An account of the karyokinetic changes which occur in neoplastic cells follows. A chapter is then presented on the anatomical structures of tumors. To the student of comparative anatomy the section on tumors in plants and animals other than man will have a peculiar interest. The effect of heredity, race, climate, age, sex, social status, traumatism, irritation, inflammation and contagion as etiological factors in tumor formation, is presented next. He holds that there is not a single well-authenticated case on

record in which the disease was transmitted from man to man or from animal to animal by contagion. One of the most valuable chapters is that on the clinical aspects of tumors. Here the important subject of malignancy is explained. He considers its local effect, its regional effects, and its general effect.

The author places special importance on the science and art of the diagnosis of tumors (for he considers it both). He states that this subject is usually imperfectly taught in medical colleges. referring to the local characters of the neoplasm obtained by sight and touch, he draws attention to the necessity of studying the whole body of the patient. The surgeon will thus be able to find if there are any contra-indications to operation. He instances a number of cases where failure to do this before operating has been the cause of disastrous results, which have thrown much discredit on surgery. The surgeon, he maintains, should make repeated examinations, and exhaust all diagnostic resources before he commits himself concerning the nature of the tumor in any given case. He considers the microscope an invaluable aid to diagnosis, but cites a number of cases to show that complete dependence cannot be put on what it reveals. The clinical aspects of the case must be considered in conjunction with the histological appearance. Treatment, palliative, medical and radical, are then discussed. His category of the various radical steps are, ligation of blood vessels, galvano-puncture, parenchymatous injections, injection of erysipelas toxines, cauterization, ligation, galvanocaustic, ecrasement, avulsion and extirpation. After giving a classification of his own the author considers separately and fully each class of tumors, beginning with epithelial benign tumors and terminating with the sarcomata and a chapter on retention cysts. So in the complete book each tumor is spoken of three times, and in this way the writer has remembered the old truism, too often forgotten, that it is only by frequent repetition that we learn anything. On the whole Dr. Senn may be congratulated on producing an exceedingly creditable work on a subject which in our ordinary text-books on surgery is usually condensed to a degree incommensurate with its scientific and clinical importance.

THE latest statistics place the number of medical men in Paris at 2,922, of whom 52 are foreigners. From this it is calculated that there is 1 French doctor to every 1,000 French people in Paris, whereas there are nearly 3 foreign doctors to every 1,000 foreigners.

Personals.

Dr. R. McGinnis, late of Mount Vernon, has opened an office in Seaforth.

Dr. S. S. Murray, formerly of Thorndale, has taken charge of a hospital at Wahnapitae.

DR. HUGH WATT, of Cariboo District, B.C., has been spending a short holiday in this city.

Dr. W. Macdonald, '94, University Medical Faculty, has commenced practice in Owen Sound.

Dr. Shaw, of Courtright, has settled in East Toronto. Dr. Johnson, formerly of Point Edward, succeeded him.

DR. C. SHEARD, owing to press of duties in connection with the health office, has retired from the *Canada Lancet*. Dr. Sylvester takes his place.

DR. J. W. SIFTON (Trinity, '92) has taken a partnership with Dr. J. McWilliam, of Thamesford. Dr. Sifton has been practising in Dakota since graduation.

DR. HENWOOD and wife, of Brantford, were made the recipients of a magnificent cabinet, containing various valuable articles of table service, on Christmas Eve by the leading citizens. The presentation was made at Dr. Digby's.

DR. JOHN CAMPBELL, of Seaforth, has sold his practice to Dr. Dewar, of Chippewa. The doctor, who has been many years in Seaforth, has always taken a live interest in medical matters. He has always been in his place at meetings of not only the Huron Medical Society, of which he was one of the founders, but also of the Provincial and Dominion Medical Associations. Dr. Campbell goes, we are told, to Brooklyn, N.Y., to practice. He carries with him the best wishes of his hundreds of friends in the medical profession throughout the Province.

Married.

THOMPSON-GREENE—On Wednesday, December 18th, Dr. C. W. Thompson, of Granton, was married to Miss Mary Greene, of Fullarton

Obituary.

Dr. D. E. Brooke.

WE regret to announce the death of Dr. D. E. Brooke, of Windsor, a native of Chatham. Dr. Brooke was a student at Trinitu Medical College, from which he was graduated in 1879. He was forty years of age. The doctor had been in practice in Windsor for five years, and had secured a large and respectable *clientele*. He was highly esteemed by a large circle of friends, who regret his early demise.

Selections.

Puberty and Disturbed Heart's Action.—Kisch (Frauenarzt, October, 1895), distinguishes three forms of cardiac disturbance at the epoch of development of the sexual functions: (1) Nervous palpitations and paroxysmal tachycardia in otherwise healthy subjects. They are frequent before the first period and usually cease soon afterwards. (2) The well-known cardiac symptoms in chlorosis. (3) Hypertrophy of the heart occasioned by the alterations of the circulation associated with the establishment of menstruation and aggravated by insanitary clothing, especially tight lacing.—British Medical Journal.

* * *

DISLOCATION OF THE TESTICLE.—Dr. Ramon Guitéras presented a man whose testicle had become dislocated as a result of his slipping in getting off a wagon and the wheel of the wagon passing up between his limbs. Although the man had remained in a hospital the dislocation had not been discovered. When Dr. Guitéras had first seen the case the testicle had been found turned away from the epididymis and lying under the dartos. After making two incisions, one on the penis and the other on the scrotum over the globus major, reduction of the dislocation had been effected.—Report of New York Academy of Medicine in New York Medical Journal.

* * *

THE BACILLUS OF TETANUS.—Grixoni (Rif. Med., August 21st, 22nd, 23rd, 1895), experimenting with Nicolaier's bacillus, comes to the conclusion that it is aerobic in the soil, and, further, that as long

as it remains aerobic it is atoxic. Its toxicity and virulence are brought about by the presence of other micro-organisms which act by depriving the media of oxygen, and so rendering the tetanus bacillus anaerobic. This anaerobiosis, according to the author, is indispensable to the tetanus bacillus for the production of its specific toxins, but mere deprivation of oxygen alone is not sufficient—the presence of other micro-organisms is necessary. The comparative frequency of the tetanus bacillus in the earth contrasted with the rarity of tetanus; the beneficial effect of antiseptics (which have little effect on the tetanus bacillus spores, but considerable effect on other microorganisms) in checking tetanus are explained by the author's view of the necessity of a particular microbic association for the full development of virulence in Nicolaier's bacillus. This peculiar microbic association fortunately occurs very exceptionally, hence the rarity of The nature of the associated microbes seems somewhat indeterminate. - British Medical Journal.

Miscellaneous.

A LARGE sample of Iatrol will be mailed to any physician sending coupon to the Clinton Pharmaceutical Company, Syracuse, N.Y. (See advertising page xii.)

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The College and Clinical Record will hereafter be known under the name of Dunglison's College and Clinical Record: A Monthly Journal of Practical Medicine.

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A DESIRABLE LOCATION FOR A DOCTOR.—Office and rooms suitable for a physician; vacant February 1st; has been a doctor's residence for thirteen years; is on a main street, and car lines pass the door. 185 Carlton Street.

THE members of the profession will be pleased to learn that Dr. A. Y. Scott, late of Trinity Medical School and hospital staff, has entered into partnership with Mr. MacMillan, under the firm name of Scott & MacMillan, and will manufacture pharmaceutical preparations, which will be reliable, and the physiological action of which can be depended upon.

E. B. Shuttleworth's pharmaceutical preparations and standard fluid extracts may be procured from Messrs. T. Milburn & Company, 55 Colborne Street, Toronto. The new preparation, Palmatta, is meeting with favor. Send for sample and literature.

* * *

SANMETTO.—I have been using Sanmetto for several years, and find it invaluable in nearly all kidney and bladder troubles, especially those accompanied by irritation or inflammation of the mucous membranes, as well as in sexual decay and pre-senility.

Addison, Pa.

WM. F. MITCHELL, M.D.

* * *

A NEW NASAL TABLET.—Dr. Murray McFarlane, of Toronto, having become dissatisfied with the Seiler's and Dobell's solutions as being too irritating in the minority of cases, has used with success a tablet containing the soluble salts of the blood plasma, which when added to two ounces of lukewarm water forms a solution like blood plasma. Each tablet contains 1_0^1 of a grain of menthol.

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REGARDING the decision of the Royal College of Physicians to refuse their license to women practitioners, the Yorkshire Daily Post says that the profession is overstocked, and any discussion on the subject must be largely influenced by this consideration. In the Peebleshire Advertiser last week there was actually an advertisement for a parish medical officer at a salary of $\pounds 6$ a year, and it is stated that already the parish council has a choice of several applicants.—British Medical Journal.

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Writing of Kellogg's elastic funis ring applicator, under date of January 5th, 1896, Professor R. Beverley Cole, President of the American Medical Association, says: "I have been greatly out of liealth for five months, and have had but little opportunity to try the applicator; but I am greatly impressed with the ingenuity, simplicity and seeming utility of the contrivance. I have exhibited it to my class in the University of California, and have caused it to be used by my assistants at the hospital, where it has met all requirements and has given entire satisfaction."

* * *

MEDICINE A TRADE.—A physician employed by the New York workers union makes the statement that his visits net him about one cent each. An enterprising merchant in Belgium issues coupons to

his customers, who make purchases of twenty cents or upward, which entitle them to the services of a physician. A tea merchant in the English metropolis supplies medical service to the purchaser of every pound of tea. Is medicine a profession or a trade? or is it merely a "premium" designed to enliven trade?—Physician and Surgeon.

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Arrangements have been completed with the Canadian Medical Practice Exchange Office to have a full page detail of its offerings and opportunities appear each month among our advertisements. (See p. xiii. this issue.) It is a matter of congratulation that this necessary and important department of medical affairs is conducted by one possessing such recognized business ability, Dr. W. E. Hamill. We recommend our readers to avail themselves of his assistance when occasion requires.

Baily & Fairchild Co. of New York take pleasure in announcing to the medical profession the establishment of "The Doctor's Story Series," to be issued quarterly at \$2.00 a year, 50 cents a number. Each number will consist of a complete work of fiction by medical authors. Only such works as are of established value will be reproduced in this popular form. King's "Stories of a Country Doctor" will be issued January, 1806, to be followed in March by Dr. Phillips' novel "Miskel," and later by a new novel now in preparation by the same author.

FASHION IN MEDICINE.—There has been a fashion in antiseptics. First, carbolic acid held sway; it was dethroned by iodoform, and it was displaced by corrosive sublimate, which is now the rage. results in cases—death by poisoning—was the cause of the disuse of carbolic acid and iodoform, and it will not be long before corrosive sublimate is abandoned. Listerine is a powerful antiseptic and nonpoisonous, and can be used ad libitum either externally or internally without fear of dangerous results. It is indicated in all cases where an antiseptic is required. As a dressing for wounds and washing out the ear in purulent inflammation of that organ specialists declare it to be valuable. In irrigating sinuses and washing out cavities and abscesses, and in vaginal and urethral injections it has been found. useful. In consumption, cancer, diphtheria, scarlet fever and infectious diseases it has been found remedial. It has been tried and commended by the principal surgeons and physicians of the United States.

TREATMENT IN PUERPERAL SEPSIS.—Dr. A. B. Miller, in an article in the Medical Review (St. Louis, October 19th) on "Intermediate Treatment in Puerperal Sepsis," advocates his method in dealing with such cases. In consideration, he says, of the degeneration of the human race and the teaching of the obstetrical art, women are placed in the recumbent position during confinement and during convalescence. This secures imperfect drainage, and the lochia forms a pool in the vault of the vagina—a suitable culture media for germs, which, with the body warmth, forms an incubator the envy of our most modern bacteriologist. To arrest the development of the micro-organisms where infection is present or suspected, his procedure is, after securing a culture for development, using all aseptic precautions, to cleanse the vulva and vagina by means of a gauze pad and a bland irrigating fluid; an examination of uterine cavity with finger and curette for retained products of conception; the cavity then thoroughly dried with pledgets of cotton saturated in sterilized water or antiseptic solutions. After thorough cleansing, the parts should be wiped dry with sterilized cotton, carried into the uterus with dressing forceps; the vagina dried and smeared with sterilized vaseline. With the patient on her back, legs flexed, the perineum should be depressed by speculum; the anterior wall of the vagina is elevated. the cervix caught in the grip of a flat-toothed forcep sufficiently wide as not to tear the parts, and securely held until the cavity of the uterus is filled with some absorbent material-gauze, lamp-wicks, or discs of The uterus is then released and permitted to rise in the abdomen. The vagina is firmly packed with discs of sterilized cotton arranged concentrically about the cervix, exercising all the thoroughness possible, until the cul-de-sac is filled and continued until the osteum is reached.

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TORONTO, ONT.

OVER-SUPPLY AND DIMINISHED DEMAND. —A double suicide which. says the New York World, shocked Paris the other day, brought to the attention of the public the financial straits in which, it is said, a majority of the physicians of the city live. Dr. Arnaud de Langlard. an old physician who had been decorated by the government for brave conduct during the cholera epidemic many years ago, committed suicide with his wife because his practice had dwindled to the vanishing point, and starvation was staring them in the face. In commenting upon the tragedy several newspapers asserted that in Paris not more than one doctor out of five is able to make more than the barest Among the causes of this poverty among physicians is the destitution of most of their patients. Medical science has made such great strides, too, that maladies of all sorts are more quickly cured, and such precautions are taken to prevent the spread of contagious diseases that epidemics are becoming practically unknown. number of doctors, on the other hand, has rapidly increased.—Brit. Med. Jour.

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