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Original Communications.

HOFRATH FUCHS' CLINIC.

BY JOHN P. MORTON, M.B., L.R.C.P. (EDIN.), HAMILTON.

Having lately had a year's experience in the far-famed ophthalmological Clinic of Professor Fuchs at Vienna, I feel that its highly successful methods should be more widely known. This clinic represents half of the eye department belonging to the largest hospital in the world, and Professor Fuchs, who is its head, towers mentally, as he does physically, above those around him. He is always supported by at least five thoroughly qualified assistants, among whom the extensive work of the out-door, refractive, operative and ward departments is divided.

Out-door Section.—This consists of two rooms. In one of these the forty or fifty new patients of the day congregate. None are admitted after 9.30 a.m., at which hour the Hofrath and his assistants see all the cases presenting themselves and assign them to the external disease, refractive, ophthalmoscopic or operative departments according to the nature of the trouble. The work of the day then commences in earnest, and in the other room of this section, on an average fifty old and new cases are treated every day.

In simple conjunctival inflammations, lotions of boracic acid (gr. xvi. to f ℥j) or zinc sulphate (gr. i. to f ℥j) are at first used. When the secretion becomes more copious, however, and no ulcers of the cornea are present, a solution of nitrate of silver (gr. viii. to f ℥j) is applied, this being immediately neutralized by a common salt-solution.

Conjunctivitis ezeematosa or as here designated, phlyctenular conjunctivitis, is treated almost exclusively by dusting the affected area with calomel by means of a camel's hair brush. Many cases of chronic granular ophthalmia present themselves. When the blennorrhœa accompanying these chronic trachoma cases is slight, the solid sulphate of copper is used, especially upon the fornix; but if the papillary hypertrophy is marked, a nitrate of silver solution (gr. xv. to f ʒj) is preferred. Operative treatment will be referred to later. In epithelial abrasions and ulcers of the cornea, the sac is cleansed by a corrosive sublimate lotion, and sometimes this is injected subconjunctivally. Rest is assured to the iris by atropine, but if the ulcer is peripherally situated and has a tendency towards perforation some myotic is used to reduce intraocular pressure. The affected eye is kept tightly bandaged except when the secretion is profuse. Progressive ulcers go to the operating room. In this department, every other day, about ten patients each get 10 min. of a one-half per cent. solution of strychnine for chronic retrobulbar neuritis or optic atrophy. The injection is made at the right and left temple alternately and good results are obtained. Blennorrhœa of lacrymal sac seems to be especially common in Austria. Bowman's dilators are used in the attempt to remove the causative stricture of the nasal duct which is usually present. Contrary to the Edinburgh custom the inferior canaliculus is usually chosen for passing this instrument; the previous use of Weber's knife is seldom practised. If these cases resist five months' treatment the sac is generally extirpated.

Refractive and Ophthalmoscopic Departments.—At Moorfields Eye Hospital in London, atropine is used whenever any refractive difficulty presents itself, while at the Edinburgh Infirmary I seldom saw it prescribed. In Vienna Professor Fuchs adopts the middle course and uses it only in very difficult cases.

The paralyzants are prescribed chiefly in young hypermetropes, and in those cases of apparent myopic astigmatism in which, after the use of the mydriatic, the astigmatism may show itself as hyperopic.

Homatropine is a great favorite, and examination is proceeded with two hours after its insertion. For the determination of refraction in the dark-room, we were taught to rely on the direct ophthalmoscopic method rather than on skiascopy (shadow test). When retinoscopy was used, however, the concave mirror was always employed. At Moorfields, on the contrary, stress is not laid upon the direct method in refraction determination, and moreover, no examination is complete without exact skiascopic results.

In Vienna a case is unfinished until the Javal-Schiotz stig-

mometer has been used, while at Moorfields and Edinburgh I never saw it once appealed to, as they say it only registers the corneal astigmatism. The lental astigmatism, however, is generally so small as to hardly affect the result.

Operation Department.—The operating room is the brightest I have ever seen, the end being simply a large window. Stationary and portable electric lights are also used. The floor is marble and the operating table is a glass-topped one. Work in this department commences at 10.30 a.m. and lasts until 1 or 2 p.m., and on an average there are seven or eight operations every day. All instruments, including Von Graefe's knife and the keratome, are boiled for four minutes before use.

Enucleations.—The well-known Vienna method is in vogue. A speculum is seldom used. Desmarre's elevators are preferred, and these, of course, necessitate an assistant. In enucleation of the right eye, the internal rectus and conjunctiva overlying are firmly taken hold of by a pair of strong, hooked forceps. This grasp is retained throughout the whole operation. The conjunctiva and internal rectus are divided just behind the forceps. Retaining hold of the stump of the internal rectus, the conjunctiva is severed around the whole extent of the limbus, and well undermined. A pair of blunt-pointed, straight scissors is then used, without the aid of a strabismus hook, to divide the superior and inferior recti and oblique muscles. The optic nerve is then cut, the eye is now drawn well forward and to the left, after which the external rectus is divided and the operation is complete. The conjunctiva with Tenon's capsule is sometimes drawn together by a running suture.

Mule's operation is sometimes done and a gilded ball is used for the artificial vitreous.

Evisceration is done for staphyloma but is never substituted for enucleation in sympathetic ophthalmitis.

Extractions.—These are never done in the wards. Pressure is avoided by the lids being separated by the fingers of an assistant; and when on rare occasions the speculum is used, it is removed as soon as the corneal incision is completed. When our Hofrath was operating, iridectomy accompanied extraction only in those cases where the pupillary reaction was very sluggish. With the object of preventing infection and of hastening healing he always made an extensive conjunctival flap, and after the extraction the conjunctival wound was often sutured by means of the finest silk. Capsule forceps are used instead of the cystotome, and I have seen the cataract lifted out bodily by means of these. The iris forceps replace Tyrrell's hook. The patient is very slowly and gently assisted from the table and allowed to walk to his bed, where he lies for three or four days and has the eye dressed every morning.

Iridectomy.—The keratome is used for all ordinary cases. In glaucoma iridectomies, with narrow anterior chambers, Von Graefe's knife is preferred. De Wecker's forceps scissors are used for snipping off the iris segment.

Excision of Lacrymal Sac.—This is almost of daily occurrence at Vienna, whereas at Moorfields two or three during the year would be a good average. If blennorrhœa of sac persists after five months' treatment, this operation is resorted to. After the sac has been thoroughly loosened and extirpated the upper part of the lacrymal canal is cleaned out by a fine curette. The epiphora which follows this operation never seems to be very troublesome.

Cauterization.—The advancing edge of progressive corneal ulcers is always touched with the fine red-hot electric cautery point. For corneal ulcers threatening perforation, Sæmisch's operation is very rarely performed.

Transplantation of Cornea.—I saw this tried about a dozen times, but the results were not very encouraging, as only in rare instances did the transplanted portion remain more transparent than its predecessor. A rapidly revolving circular trephine is used to remove the macular portion and to cut the required piece of the same size from some enucleated eye. The trephine should not go through Descemet's membrane.

Posterior Sclerotomy was done in a few cases of detachment of the retina, and in one case of cysticercus of retina. Good results were obtained.

Discision through sclera is quite a favorite where any difficulty is anticipated in lacerating the lental opacity.

Extraction of Foreign Bodies.—The delicate Asmus sideroscope is used in doubtful cases to decide whether a splinter of iron has entered or not. The X-rays are employed to determine its position by taking frontal and lateral photographs. A whole room is set apart for the large electro-magnet, which rarely fails to extract any magnetable matter.

Tattooing of disfiguring corneal opacities is a common operation.

Correction of Ptosis.—Our Hofrath favored Pannus' operation, both in complete congenital and old acquired cases. Von Graefe's excision of the fibres of the orbicularis and Pagenstecher's subcutaneous sutures were used only in mild cases. I did not see Eversbusch's advancement of the levator palpepræ sup. undertaken.

Correction of Trichiasis.—A combination of Jæsche-Arlt's and Hotz's operations is preferred in this, for besides fulfilling the requirements of the former operation, some of the fibres of the orbicularis are excised.

Correction of Ectropion and Entropion.—Many are the

operations done for each of these conditions. In the former, however, Kuhnt's excision of a triangular piece of the tarsal plate, and Snellen's sutures are oftenest used; while in the latter Gaillard's sutures and the simple excision of a piece of integument are practised.

Trachoma.—When operation is deemed advisable, Knapp's roller forceps are generally employed.

The Wards.—These contain about seventy beds. Exhaustive histories and minute descriptions are taken of every case. The work is much the same as in other hospitals. Cases of blennorrhoeal ophthalmia or blennorrhoea neonatorum are isolated. During the first stage the conjunctival sac is syringed out with a corrosive sublimate, or boric acid lotion, but when the blennorrhoeic stage commences a solution of silver nitrate (gr. xx. to ℥j) is thoroughly painted over the conjunctiva and then neutralized with a common salt solution. When chemosis is great, free incisions are made with scissors; and in great lid swelling the external canthus is divided from without.

Cataract cases awaiting extraction have their bowels opened the day previous, and the nurses practise them in the maintenance of the downward position of the eye, so helpful to the surgeon. Wire-meshed masks are worn after the operation.

In closing I have to thank Hofrath Fuchs for the assistantship which I held under him, and for the many opportunities of operating which were permitted me.

THE LOCAL TREATMENT OF INTRA-UTERINE SEPSIS.

BY A. GROVES, M.D., FEROUS.

Hitherto the local treatment of sepsis of intra-uterine origin has been unsatisfactory, and in spite of modern aseptic and antiseptic methods the death record is yet by no means insignificant. The usual treatment by first curetting the uterus and afterwards washing it out every few hours with bichloride or some other antiseptic solution is far from being followed by uniformly good results. Continuous irrigation is a great advance upon intermittent washing, and in the cases in which I adopted it some years ago, I had good results, but the treatment is very wearisome and annoying to the patient on account of the length of time it requires to be kept up. In looking at a case of intra-uterine sepsis, there is seen a soft, flabby uterus, with feeble contractile power; in the inside decaying shreds and remnants and open absorbents bathed in a highly septic and infective fluid. The problems are to get rid of, or to render innocuous the decaying matter, to destroy or remove the septic germs, to seal up the absorbents and to promote the contraction of the uterus. The treatment I now adopt and from which I have had unvarying success is as follows:

I first explore the uterus with my finger, and if there is a fragment of placenta of any size retained it is removed with the finger nail. I never now use a curette in a septic uterus, for to me it seems most unscientific and dangerous to blindly scrape the inside of a uterus bathed with septic discharge. Every piece of epithelium removed opens up a fresh absorbing surface, so that it might be laid down as a rule that the more thorough the curetting the greater the danger to the patient.

My next step is to pass a cylindrical glass or hard rubber speculum of large calibre, and through this wash the uterus thoroughly with warm water, passing the tube up to the fundus. The syringe I use is simply a hard rubber tube about the size and length of a No. 10 catheter, in fact a No. 10 gum elastic catheter would do very well, having attached a syringe bulb capable of holding an ounce or so of the fluid.

When the water flows back clear, I fill the syringe bulb with tincture ferri perchlor. pass it to the fundus and inject it. The uterus contracts and expels the fluid which is removed from the speculum without having come in contact with the vagina. If the iron does not come away at once a second syringe full is injected and it escapes immediately. The uterine cavity is again washed with water to remove any of the tincture which may otherwise trickle down and excoriate the vagina. This

treatment should be repeated within thirty hours, and if necessary kept up until all danger is past. The objects obtained by injecting the iron, are: first, the instantaneous destruction of every germ exposed to its action, for no germ or spore can withstand pure tincture of iron; in the next place all absorbents are sealed up so that even if it were possible that septic matter remained in the uterus it would not be absorbed; and lastly, the uterus is stimulated to contract. This treatment is safe, simple, satisfactory and painless. No special skill is required in carrying it out and there is no risk of injuring the patient. I believe a very considerable mass of placenta might remain safely in the uterus until it was disintegrated and expelled under the treatment above outlined. In proof of the satisfactory results I shall quote a few cases in the order in which they occurred and without selection:

CASE 1.—Mrs. H., had been confined a week before I saw her. On my first visit, March 28th, 1897, at 10 p.m. her temperature was 105, pulse 136, expression in every way bad, skin livid, chills frequent and severe, in fact her condition was apparently hopeless. The uterus was explored with the finger but contained only shreds, and acting on the principle that an attempt at scraping them away would open large absorbing surfaces, curetting was avoided. The uterus was thoroughly washed out with water, tincture ferri perchloride injected, and nothing further done locally. By the evening of the 29th the temperature had fallen to 103, and her condition greatly improved. Until 9 p.m. on the 30th, steady improvement went on and her temperature fell almost to normal, but at this time a severe chill came on and at 10 p.m. her temperature was 105. The uterus was again washed out and the iron injected, and by next morning her temperature had gone down to 100. This last chill was allowed to take place by overlooking the fact that the duration of the protection afforded by the iron was limited, and that not more than twenty-four or at most thirty hours should elapse until a re-injection was done. The injection was repeated on March 31st and April 1st, and the patient went on to an uninterrupted recovery.

CASE 2.—Mrs. G., on the fourth day after her confinement took a severe chill, temperature at 8 a.m. on morning after chill being 103. At this time the uterus was washed out and injected, and next morning temperature was 100, when a second treatment was given, after which steady progress to recovery took place.

CASE 3.—Mrs. E., on third morning after confinement the usual symptoms of septic infection were present, temperature 104. Then I tried the old routine treatment of washing out the uterus with carbolic acid and bichloride of mercury for two

days, but as the patient gave every sign of progressing steadily to death, I injected the tincture of iron and repeated it a second time, prompt recovery following.

CASE 4.—Mrs. D., first seen on the sixth day after confinement, when her condition was practically hopeless under ordinary treatment. Three treatments at intervals of twenty-four hours were all that were required to terminate the trouble.

The above cases appear to demonstrate that the treatment laid down is positive and unfailing in its results, for in no case where the treatment was carried out was there other than a successful issue.

LOCAL TREATMENT IN PUERPERAL INFECTION.*

BY ADAM H. WRIGHT, B.A., M.D.,

• Professor of Obstetrics, University of Toronto; Obstetrician, Burnside Lying-in-Hospital, Toronto.

At the last monthly meeting of the Toronto Medical Society I gave some brief notes on the diagnosis and treatment of puerperal infection. On the following day I read Dr. Groves' excellent paper on "The Local Treatment of Intra-uterine Sepsis," which appears in this issue of the CANADIAN PRACTITIONER AND REVIEW, and decided to publish in the same issue my own views on the subject, as expressed at the meeting above referred to.

When signs of puerperal infection appear—such as headache, relative or absolute insomnia, rapid pulse (80 or more), vague impressions of cold, elevation of temperature—commence treatment at once without waiting for the grosser signs, such as very rapid pulse, very high temperature, rigor, delirium, etc. The early or premonitory symptoms, as pointed out by Ferré, have not as a rule received the attention they deserve. Puerperal infection does not show its signs suddenly on or about the fourth day, as described by some authors. The premonitory symptoms as mentioned above always appear not later than the second day. We should carefully watch for such symptoms, and when we recognize them carry out the proper treatment. It is not my intention to refer in detail to diagnosis and general treatment; but I may say that for general systemic treatment I rely chiefly on active catharsis, using especially calomel and epsom salts, with a view to having from four to twelve evacuations in twenty-four hours. A combination of headache, insomnia, chilly feeling, slight increase of pulse and temperature does not of course always mean puerperal infection; but free

* Abstract of paper read before the Toronto Medical Society, February 16th, 1899.

catharsis is likely to do good in any case. I have never seen it do any harm.

It is difficult to lay down definite rules as to when local treatment should be instituted, but it is better to commence too early than an hour too late. When undertaken it should be carried out in a thorough and systematic manner. If the lochia are perfectly normal, while the doubtful or premonitory symptoms are present, I generally wait a few hours to ascertain the effects of catharsis, and if there is no improvement, or if the symptoms become more severe, I commence the local treatment. I do the same in all cases when the lochia are at all offensive.

My rules for local treatment are as follows: Clean and inspect the vulva and vagina carefully, using a speculum, and being sure that every portion is seen. If the surface of the cervix is clean and the cervical lochia are sweet, do not invade the uterine cavity. If decomposition of clots or lochia is found in the vagina, use an antiseptic vaginal douche twice a day (a 1 per cent. solution of lysol, creolin, or carbolic acid). If so-called diphtheritic patches are found in the vagina or on the cervix, apply once a day a 20 to 90 per cent. solution of carbolic acid and then dust with iodoform. If sutures have been introduced for torn perineum, it is generally or always advisable to remove them. I dress the wounds thus reopened antiseptically.

WHEN UTERINE LOCHIA ARE OFFENSIVE.

Let an assistant administer an anesthetic. When the patient is anesthetized introduce the hand into the vagina and one or two fingers into the uterus. If portions of placenta, or membranes, or debris of any sort are found, scrape thoroughly and remove. There is no instrument so good for this purpose as the finger tip. After removing the debris, wash out with hot water (110° to 118° F.) that has been boiled, or with a weak antiseptic solution. Pack the uterine cavity tightly and the vagina loosely with iodoform gauze. Leave this gauze in position twenty to thirty hours, or two days. If temperature and pulse become normal and remain so, no further local treatment will be required. If temperature and pulse become again abnormal, repeat the treatment.

Some use the ordinary blunt curette, or the rinsing blunt curette; but neither is so effective as the finger-tip. Others use the sharp curette. This is not safe, because it is likely to open vessels which may absorb more poison. Many, perhaps the majority, employ the intra-uterine douche. This, if the work be properly done (as I fear it seldom is), answers very well; but it is really more troublesome than the method I have described, requiring, as it generally does, many repetitions.

If nothing has been found in the uterus and the discharges are not offensive, but still the patient becomes worse, the system is profoundly affected—very likely from absorption in rents of the fourchette, perineum, vagina, or cervix. In such cases local treatment of the uterine cavity will do more harm than good. On the other hand, all cases of sapremia may be cured by thorough local treatment. The methods I have described have been adopted after years of study and observation, and I am unable to give due credit to all sources of information, but I think I may mention especially Dührssen, Reynolds, Price, Garrigues and Smyly as men from whom I have learned much about methods in antiseptic midwifery.

Dr. Groves has evidently had good success with the methods he has described. I may say, however, that I think the intra-uterine application of tincture of iron is not entirely free from danger. Robert Barnes, many years ago, advised the use of intra-uterine injections of iron solutions for post-partum hemorrhage; but other obstetricians had many unpleasant experiences in connection with such treatment, and the procedure has now become almost obsolete. There may be less objection to the use of iron in septic endometritis, where we are not so likely to have large clots formed in the uterine cavity or sinuses; but still, I think there is always some danger of thrombi being formed which may pass into the general circulation, or may by their disintegration favor septic processes. If I adopted that line of treatment I think I would prefer to use the tincture of iodine, as recommended by Trask.

CARDIAC NEUROSES.*

BY JOHN FERGUSON, M.A., M.D.

It is often a feature of heart affections that when organic and serious they may cause the patient but little discomfort or occasion little alarm. In some of the disorders commonly spoken of as functional, the sufferer experiences great discomfort and often is much alarmed. In several of the nervous affections of the heart this is a very prominent feature—the alarm is out of proportion to the danger.

In attempting a study of the nervous affections of the heart, or those where the nervous symptoms predominate, it is necessary to obtain a clear view of the manner in which the heart is related to and governed by the nervous system. In the first place there is a very abundant supply of nerve fibres around the heart, especially about the base. This plexus of nerves is connected with the heart by means of various ganglia in its substance. It is also connected with the central nervous system by three nerve cords.

One of these cords passes between the cardiac plexus and last cervical and first dorsal sympathetic ganglia. It carries to the heart impulses that augment the force and increase the frequency of the heart's action. These nerve fibres come from the second and third dorsal spinal and enter the sympathetic ganglia.

The second cord passes from the cardiac plexus to the brain by way of the pneumogastric. This nerve conveys to the central nervous system the impression as to the effort the heart is making to overcome arteriole resistance. If this be too great this nerve inhibits the constructor centre and lessens the work the heart has to perform. In this way it is called the depressor nerve of the heart, as it relaxes the arterial tension.

The third nerve passes from the central nervous system to the cardiac plexus by way of the pneumogastric. This nerve really arises from the roots of the spinal accessory. From this origin it passes to the vagus, thence to the cardiac plexus and finally to the cardiac ganglia. The function of this nerve is to slow the action of the heart. It restrains the action of the first nerve cord, or the one that comes from the last cervical and first dorsal sympathetic ganglia. This nerve is inhibitory on the heart, as the one from the sympathetic is augmentative in action. The one from the spinal accessory roots is anabolic. The one from the sympathetic ganglia is katobolic. The former lessens action, while the latter increases it.

It is through this nerve mechanism that many of the nervous

* Address at Clinical Meeting of Western Hospital.

disturbances of the heart are produced. Strong stimulus of the vagus branch controls the sympathetic, and the action of the heart is thus restrained, because the sympathetic is restrained. The heart has a great store of inherent energy of its own. It is this idio-muscular power to act that is the real cause of cardiac movements. But these movements are regulated by the above system of nerve supply, and this regulation is necessary to the maintenance of cardiac action. Anything that irritates the sympathetic produces undue rapidity, while irritation of the vagus, especially the spinal accessory communication, results in undue slowing of the heart's movements.

In somewhat similar manner there is only one set of nerves that act upon the arterioles. These nerves are vascular constrictors. They act upon the muscular fibres in the small arteries and stimulate them to contract. This raises arterial tension. The vaso-dilators act by inhibiting the vaso-constrictor nerves, and permitting dilatation to take place in the arterioles, under the interrupted pressure from the heart and the continuous pressure from the larger arteries.

Sudden stimulation of the vaso-constrictors may, through such an extra amount of work upon the heart, cause speedy death, the heart being in the condition of asystole. Strong emotion, grief, joy and cold are efficient causes in this connection. If the nervous mechanism is normal and the heart of sufficient strength, this resistance is overcome by the afferent nerve from the heart, carrying to the nerve centre the sensation as to the overwork the heart is doing. This sensation in the centre starts the efferent inhibitory impulse to the vaso-constrictors. These latter are held in check, and the arterial resistance sinks. But should this adjustment not take place promptly enough, or of sufficient amount, the results may be most disastrous, to the extent of sudden death, or the production of gradual heart failure going on to a fatal termination in some cases, or difficult of cure in others.

The motor nervous mechanism of the heart and blood vessels falls into two halves: First, that which acts directly upon the heart and arteries, the cardio-augmentor and vaso-contractors; and secondly, the cardio-inhibitory and vaso-dilators. These latter do not act upon muscle but upon the augmentor and constrictor nerves.

A few words now on the sensory nerve supply and distribution. It has just been shown that there are three cardiac nerves. Two of these come by way of the vagus; and one, the lower, by way of the sympathetic. It has been shown that these really arise from spinal roots; and, in the case of the lower vagus cardiac nerve, from the spinal accessory, while the augmentor arises as low as the third dorsal. These cardiac

nerves carry sensory fibres. In this way the heart is brought into a wide sensory relationship. The sensory nerves radiating around the back and front of the chest and down the arms have the same spinal origin. The connection of the heart with distant portions of the body through the sensory nerve system has been greatly cleared up by the researches of Lussana, Sturge, Ross, McKenzie and Gaskell.

The cardiac neuroses may be divided for convenience of study into the motor and sensory. The motor derangements would include bradycardia, tremor cordis, delirium cordis, tachycardia, palpitation, arrhythmia; while the sensory derangements are limited to the forms of angina.

First, then, let us look at the symptom group of bradycardia. This diseased condition has been studied with much care by Huchard. The condition was recognized by Hope, Adams, and Stokes. Riegel, among the recent German writers, deserves special mention for the work he has done on this subject. Perhaps, however, none has placed the whole case before the medical profession in a clearer light than Dr. G. W. Balfour, whose writings have been so valuable on cardiac pathology and therapeutics. This condition may be divided into the true bradycardia, and the false, as did Laennec, in 1829. In true bradycardia the heart and pulse are synchronous, while in the false they are not, there being more heart beats than pulse waves, as some of the cardiac systoles are too weak to produce a radial pulse. This distinction can easily be made, and ought to be made, as it is of much importance, both in prognosis and therapeutics.

Bradycardia may be caused by several conditions. One of these is toxic agents in the blood, such as influenza, uremia, the convalescence of typhoid fever and pneumonia, diphtheria, lead, digitalis, alcohol and some others. The condition of exhaustion, as in the recovery from rheumatism, during an attack of jaundice, after certain diseases, in anemia, from insufficient nourishment, are causes in some instances. It is met with as the normal condition, the person always having had a slow pulse and heart. The real cause of *true* bradycardia in the great majority of cases is some diseased condition of the nervous system. In those cases that have lasted a long time, with a constantly slow heart, the disease is almost always in the cervical region, and effects the origin of the spinal accessory; and, consequently, produces a continuous inhibitory action on the heart. These patients are mostly epileptic, and usually die in an epileptic fit or a faint. Sooner or later there is dilatation in these cases.

The treatment must be directed to the cause. In toxic cases and those due to debility, as in anemia, the course is clear, and

much may be done. In those of disease in the cervical cord, with epilepsy, the outlook is gloomy enough. No drug will undo the results of injury to the cervical region of the spine. In some of the cases where syphilitic meningitis is suspected, the use of the iodides and mercurials may have a favorable action. Not much can be hoped from surgical interference, even though the cervical spine may have been injured.

Tremor cordis is a very interesting condition. It comes on without a moment's warning. After a number of almost imperceptible beats, the heart starts off again as if nothing had occurred. The explanation is an imperfect systole, due to reflex inhibition. This is repeated a number of times, the heart meanwhile becoming more and more distended. A vigorous systolic action then takes place, the heart is emptied, and everything goes on as usual. This is what is generally spoken of as fluttering at the heart. The pulse suddenly drops to an almost imperceptible thread. This form of heart trouble is always reflex, the source of irritation being some digestive derangement. It is not caused by emotion, grief, anger, nor excitement. While it may occur in the young, it is usually met with among those of advanced years. The treatment is that of the digestive disorders causing it. This consists in proper exercise, as the sufferers are usually sedentary in habits; suitable regimen; and the needed corrective medicines for constipation, flatulence, or any other digestive disorder.

Delirium cordis is an extreme degree of irregularity. It is met with in cases of true bradycardia when the ventricles are becoming markedly dilated, and compensation for their work failing. It has been also noted in cases of mitral stenosis. In one case under my care, a woman, aged 36, with mitral stenosis of rheumatic origin, there is now at times an extreme amount of delirium cordis. It would appear that the principal feature in the irregularity of the heart's action is the want of synchronism between the auricles and ventricles, these portions of the heart having taken on an independent rate of systole. Prof. McWilliams contends that a fibrillary contraction of the ventricular muscle is an important factor in the causation. This is a very serious condition. When mainly due to the evil effects of work and worry on a dilated heart, much may be done to prolong life and improve the condition of the patient. When this condition of heart is found in conjunction with considerable dilatation, the prognosis is very unfavorable. During an attack of delirium cordis, the only drug that appears to have any influence is digitalis in large doses, say, a drachm every two, three or four hours for some time.

Palpitation is another of the motor neuroses. Bradycardia, tremor cordis, and delirium cordis are usually diseases of

advanced life, while palpitation is more frequent among the young. I have a personal knowledge of a case of severe attacks of palpitation, the patient being in his eighty-fourth year. When this condition occurs alone, it is not of serious import, as a rule; but when it complicates some of the organic forms of heart trouble, the danger may be very great. Palpitation is usually met with in delicate, anæmic persons, the attacks being induced by reflexes, or emotion, not by exertion. During an attack the heart and large vessels beat violently and often rapidly. There is, however, no change in the radial pulse, except that of being more frequent if the heart's action is more frequent than normal. In this respect there is a total difference between reflex palpitation and the forcible heart's action due to exercise. In the latter, the radial pulse is full and bounding. Further, the latter disturbance ceases on taking rest; while the former does not, and often comes on when the person is at rest. The cause of these attacks is some nervous stimulus carried to the pneumogastric centre, restraining its influence. The vagus is no longer able to inhibit the sympathetic, and so the augmentors, for the time being, run off with heart. This is the view held by the best authorities on cardiac affections; and one's own experience confirms it. The treatment is, therefore, that of the derangements causing the reflexes, as emotion, dyspepsia, ovarian irritation, or toxic conditions, as tobacco and alcohol. These, however, may be very difficult to remove or control.

Tachycardia is that condition where the heart beats abnormally fast, without forcible impulse or any disturbance in the action of the larger vessels, and with a regular but very small pulse. This is the condition of the new-born infant. The frequency of the heart's action and pulse may be as much as three hundred per minute. In this remarkable condition of the heart the person may not be conscious of the disturbance. There is a very short and imperfect diastole, followed by a short, sharp systole. By this mechanism, though the heart may contract two hundred times per minute, no more blood is thrown out than when it is acting normally at the rate of seventy. In those conditions of low arterial tension, such as in Graves' disease, the heart is rapid. Marie has clearly pointed out the relation between low tension and heart hurry. There is a complete difference in the quiet, quick action of the heart in tachycardia to the violent, throbbing action of exophthalmic goitre. They differ both in clinical and pathological characteristics. It may be laid down as a rule that all forms of tachycardia, after infancy, are morbid. Another statement that may be dogmatically made, is that this is a symptomatic condition.

The causes of tachycardia may be grouped under the headings:

Those belonging to the heart itself and vessels; those of general character; the toxic cases, and those of nervous system origin. Under the first group would come cases of fatty, weak and dilated hearts, often due to faulty circulation through the heart muscle. Mitral stenosis is sometimes accompanied by great rapidity of heart action. The second group would include such cases as general debility and anæmia, where the heart muscle becomes weakened and augmentor action is increased, or inhibitory lessened. The third group would include those cases due to the excessive use of digitalis, tobacco, coffee, and many other agents that act upon the vagus, and the sympathetic is set free from control. This group would include most cases of tachycardia due to fevers, though some of these cases are due to the reduced arterial tone. The fourth group is the most important, as it is likely to contain the more typical and protracted cases. The action of the vagus may be destroyed by some pressure upon it, as a tumor; or the disease may be central and of some degenerative type. Many reflex conditions and emotions give rise to this derangement. These reflexes and emotions are sometimes most difficult to bring under control. It has been suggested by some authors that there may be a sort of discharge action in the sympathetic centres. Dr. Balfour states that "careful inquiry will in every case discover some previous heart strain sufficient to originate an endocarditis or a myocarditis, some history of an overwhelming emotion, or the abuse of some cardiac poison." The chain of morbid processes once set agoing, it may require years to cure them. Dr. G. A. Gibson states that of six *post-mortems*, there was fatty degeneration in one, chronic myocarditis in two and dilatation in three.

The prognosis and treatment depends to a great extent upon the discoverable causes. In the elderly it is a dangerous condition, as the heart may suddenly become asystolic and death take place when not expected. All irritating conditions and constitutional diseases require attention. Those cases due to disease in the heart may be greatly improved by proper rest and heart tonics, especially if there be any dilatation. In such a case digitalis often affords great relief. Those cases of poisons can only be treated by the correction of the occupation or habit that causes the intoxication. Cases due to tumor pressing the vagus, disease of the vagus or central nervous system, are very serious. In recent cases caused by heart strain, belladonna is very useful. Where paralysis of the vagus is suspected, digitalis should be used. In cases of over-action of the sympathetic, bromide, chloral and opiates, separately or combined, ought to be tried. The long-continued use of digitalis and arsenic cures some cases where the nutrition of the myocardium is at fault.

In cases with dilatation, the employment of baths and exercises do good.

Having said this much on the motor disturbances of the heart, it remains to say a few words on that classic condition, the great sensory disease of the heart, angina. This disease is classified by many as one of the cardiac neuroses, because the pain in most instances is the prominent symptom. But pain may not always be present, as its place is sometimes taken by a sensation of anxiety, breathlessness, or impending dissolution.

With regard to etiology, heredity plays an important rôle, the disease following some families through several generations, as the Arnolds. In this regard it resembles tachycardia, which Dettinger traced through as many as four generations. It is much more frequent among men than women. This is accounted for by the fact that the former are called upon to fulfil more arduous duties, and are more frequently subjected to those conditions that cause heart strain, hypertrophy and dilatation. Long continuance in severe exertion gives rise to cardio-vascular sclerosis.

Prolonged mental work and a life of worry and anxiety have a tendency to produce arterial sclerosis. This would, of course, act injuriously on both heart and kidneys, as has been well shown by Clifford Allbutt.

Certain poisons, either of disease or of a chemical nature, have a marked tendency to impair the health of the myocardium and lead up to attacks of angina. Among these should be mentioned as occupying a first place, gout and rheumatism. Syphilis may stand in a causative relationship by producing disease of the arteries, more especially the coronary arteries. Fevers also may start into existence the faulty nutrition of the myocardium. Toxic agents, as alcohol, tobacco, tea, lead and others have a similar power.

The principal exciting causes are: Exertion of some kind, especially after a meal. Some constrained position during sleep is quite sufficient to induce an attack. Emotion, as grief or joy, has often brought on an attack, and the anxious condition of expectancy, as in the case of those who are to be called upon to make a public speech. Exposure to cold may cause such a strain on the heart as to bring on promptly a severe or fatal seizure.

Some writers, from W. H. Walshe down, have been in the habit of speaking of a pseudo-angina. Dr. G. W. Balfour does not agree with this. He is strongly of the opinion that angina has always a morbid substratum. There is some fault with the nutrition of the cardiac muscle.

The main changes that have been found in this are a chronic inflammation of the myocardium... With this there may be

fatty or fibroid changes. The endocardium is sometimes found diseased, as the result of former inflammation. There may be valvular disease, though this does not specially cause anginous attacks. Throughout the arterial system there is usually a wide-spread arterial sclerosis, and arteritis deformans. There may be much obliteration in the arterial system. This is specially important in the event of its occurring in the coronaries.

The cause of the pain has given rise to much discussion. Heberden, Latham and Rosenbach have contended for the view that it is a cramp-like action of the organ. Others, Brunton, Chambers, Traube and Duncan, regard the pain as due to a stretching of the heart walls. Balfour, and many with him, such as Gibson, inclines to the view that, under exertion, the heart becomes suddenly ischæmic. This is well known to cause severe pain. Then there is the opinion that there is a neuralgia or a neuritis of the cardiac nerves. Peter, Huchard and several other eminent writers take this view. The opinion seems well founded that, when the heart is called upon for some sudden exertion or powerfully stimulated by emotion, or taxed by general arteriole contraction, as in cases of poison, or cold, it cannot at once obtain the blood needed. Either the coronaries are diseased, or the nutrition of the myocardium is bad; and there is at once caused an ischæmic condition. This ischæmic condition is the cause of the pain; and the lack of tone in the heart the cause of the asystole and sudden death.

The varieties, as the reflex of Landois, the vasomotor of Nothnagel, the neurasthenic, and pseudo-angina of Walshe, need not detain us further.

The symptoms can be summed up in a few words. The pain is usually intense, and, almost always, radiating in character. There is a marked shallowness of breath, as the sufferer seems afraid to perform even so necessary a movement. The patient leans against the nearest object, and stoops forward. The heart action is weak, often irregular, and pulse small. The countenance usually is pale, but may be livid, and is extremely anxious-looking. There is a terrible sensation of impending death. The extremities are cold, and the surface bedewed with perspiration. Some cases pass through the attacks without pain, the well-known angina *sine dolore*. This is generally so when the heart becomes dilated; and, in many cases of angina, when dilatation becomes prominent, the anginous attacks cease.

Improved views of the pathology have done much for improved plans of the treatment. In addition to the relief we are often able to afford the patient during the attacks, we can do much for them in the intervals. Thus it is that the treatment falls into two divisions, that of the paroxysm, and that of the

interval. The attacks are treated by the administration of drugs that relax the arterial system and relieve pain—nitroglycerine, amyl nitrate, chloroform, morphia, and stimulants in cases of organic disease of the heart; but not in the vasomotor forms. Erythrol tetranitrate is likely to be a valuable addition to our list of remedies. In the intervals every attention should be given to the health of the person. Gout, syphilis, arterio-sclerosis should all receive due attention. The proper use of the iodides, as vascular alteratives and stimulants, cannot be too highly valued. When the vascular system has been unlocked by their use for some time, digitalis will often prove of the utmost value, by way of improving the nutrition of the myocardium, through a better coronary circulation. Strychnine and arsenic are very useful. The latter is an excellent heart tonic. All improper habits of diet and drink must be corrected, and undue exertion and conditions of too severe mental strain absolutely forbidden. By these means, the patient may be spared many attacks, and many years of useful life be measured out to him.

OBSTETRICAL METHODS IN DUBLIN AND LONDON.

BY K. C. McILWRAITH, M.D.

The subject-matter of my paper is culled from notes which I made in the Rotunda Hospital in Dublin, and the Queen Charlotte's Lying-in Hospital in London last summer. On some points which did not come under my personal observation I have supplemented my notes by references to the teaching of these two institutions. I shall speak first of some points in the conduction of normal labor in the Rotunda.

1. The patient is delivered in the left lateral position, whether the case be normal or instrumental.

2. For the diagnosis of the position of the fetus reliance is placed on abdominal palpation first; then on auscultation, and then on vaginal examination. Two positions are recognized, viz., occiput to the left and occiput to the right anterior; the occipito-posterior positions being looked upon as variations of these.

3. One vaginal examination is advised, preferably just after the rupture of the membranes, to find if there be any presentation or prolapse of the cord. No more are made unless delivery be unaccountably delayed.

4. Before any examination is made the external genitals of the patient are washed with soap and water. The operator's hands are cleansed by scrubbing with soap and water, washing off in fresh water and immersion in a perchloride of mercury solution of a strength of 1-500. When a lubricant is necessary, creolin emulsion (half an ounce of creolin to a gallon of hot water) is used.

5. To preserve the perineum. When the head is distending the perineum, push it forward by means of the heel of the right hand placed behind the anus, taking care not to touch the perineum itself at all. Pass the left hand between the mother's thighs from in front, and with it support the presenting part, not allowing it to be delivered at the height of a pain. If done properly and at the right moment the effect of this forward pressure is to aid the action of the levator ani muscle, to take advantage of all the space below the symphysis pubis, take pressure off the perineum, and assist in maintaining flexion. If done too soon it only serves to jam the head against the symphysis and stop delivery. If the perineum require much stretching a douche of hot creolin solution is allowed to play upon it.

6. The time and manner of delivering the placenta. During the process of delivery one hand is placed on the fundus uteri, and is not removed from it till the last pin in the binder is inserted. In tying the cord all loops of it are pulled gently out of the vagina, and a ligature placed on it just outside of the vulva. The placenta is expelled as soon as it has left the uterus, and there are three signs that show when that has occurred:

(a) The ligature at the vulvar entrance moves away from it four or five inches as the placenta descends.

(b) Immediately after the delivery the uterus, containing the placenta, is telescoped as it were, into the vagina, and the fundus is not much above the symphysis. When the placenta is expelled into the vagina, the uterus is pushed upwards and the fundus rises nearly to the umbilicus.

(c) While the uterus contains the placenta it is quite immovable. After the expulsion of the placenta it becomes freely movable. As soon as it has been ascertained by these signs that the placenta has left the uterus, the fundus is rubbed a little to secure a firm contraction, and the uterus, pressed firmly downwards in the direction of the vaginal outlet, easily thrusts the placenta out. The relative positions of placenta and uterus are excellently figured in Dr. Jellett's little book.

7. Perineal lacerations are repaired immediately with silk-worm gut sutures.

8. Ergot is never given until the uterus is empty.

9. The binder is applied very tightly.

The pads used while the mother is in bed are wrung out of perchloride of mercury solution 1-500.

The Queen Charlotte's Hospital practice differs very widely from this, notably in the following particulars:

1. In every case an ante-partum douche of perchloride of mercury, 1-3000, followed by boracic solution, is given. On examining a patient after the administration of this douche the vaginal walls feel quite stiff and, for a short time, devoid of lubricating secretion. The same douche is given to every patient post-partum.

2. Numerous vaginal examinations are made, the diagnosis of the position of the fetus being determined mainly by this means.

3. For the delivery of the placenta the practice is to wait half an hour with the hand on the fundus uteri, and then attempt expression from the uterus or vagina, as the case may be.

I shall go on to speak now of

ANTE-PARTUM HEMORRHAGE.

At the Rotunda.

I. ACCIDENTAL.—1. *Open*—(a) Before the onset of labor pains, plug the vagina and await the pains and dilatation of the os. (b) After the onset of labor pains, rupture the membranes. 2. *Concealed*—Parro's operation if the patient's life be in danger.

II. UNAVOIDABLE.—1. Before the os admits two fingers, plug the vagina and await dilatation. 2. After this, do bipolar version and bring down a leg.

At Queen Charlotte's, in open accidental hemorrhage the

practice is to rupture the membranes in all cases, and *not* to plug the vagina. In cases of placenta previa, Champetiere de Ribes' bag is being tried, the hope being that it will lessen fetal mortality. Where the placenta is directly over the os it may be perforated with a sound and the bag thrust through it. In this way the placenta is not so widely detached as in some other methods, and there is a better chance of saving the child. Hemorrhage can be easily controlled by pulling on the tube of the bag which remains outside the vulva. For this suggestion I am indebted to Dr. Porter Mathew. I do not know whether it is original with him or not.

FORCEPS.

In the Rotunda, axis-traction forceps is the only kind used. The pattern recommended is Barnes' long forceps, with Neville's axis-traction apparatus adjusted to it. The advantage of this instrument is that the traction apparatus is entirely outside the vagina when the forceps are in position. It is laid down as a rule, to which of course there are exceptions, that the greatest diameter of the head must have passed the brim before the forceps are applied. The reason given for this rule is that the forceps elongate the diameters which require diminishing. In the case of flat pelvis, however, Milne Murray* has shown that this is incorrect. He applied a cephalotribe to the head of a still-born babe, and found that when the one blade was applied to the occiput and the other to the sinciput (as in the case in flat pelvis, where the head presents with the sagittal suture in the transverse diameter), the transverse diameters were not increased by a moderate amount of pressure, and only increased by one-eighth of an inch when a mutilating degree of pressure was applied. These experiments were repeated and confirmed by Dr. Porter Mathew, who used, in addition, the phantom pelvis.† Before the forceps are applied they are sterilized by boiling and placed in creolin solution. The operator's hands are sterilized as described above. The external genitals of the patient are washed thoroughly with soap and water and then doused with creolin solution. Two fingers are passed into the vagina and its walls scrubbed with a small piece of soap, and then doused out with creolin solution.

In the Rotunda, the forceps are removed before the head is delivered, while at Queen Charlotte's they are left on.

PELVIC PRESENTATIONS.

In Dublin, pelvic presentations are left to nature. If assistance becomes necessary, the first plan resorted to is firm pressure

* "Effects of Compression of the Fetal Skull, with special reference to Delivery in Minor Degrees of Flat Pelvis." *Edinburgh Medical Journal*, November, 1888.

† "Clinical Observations on Two Thousand Obstetric Cases." London, 1888.

on the fundus. Should this fail, the attempt is made to bring down a leg. If this cannot be done, recourse is had to traction by means of two fingers placed in the anterior groin. If this fail the fillet is used. For the delivery of the after-coming head the Prague method is used when the head is in the pelvis; when it is above the brim, Martin's method or Smellie's method. A noticeable feature in the conduction of these cases is the entire absence of instrumental interference. Forceps to the breech are regarded as difficult to apply and apt to slip or do injury to the child; for the aftercoming head they are regarded as too slow. The blunt hook for traction is considered dangerous. In Queen Charlotte's Hospital the usual practice is to do cephalic version, if the case come in soon enough.

CONTRACTED PELVIS.

In the minor degrees of contracted pelvis the opinion published by Dr. Jellett is that the head should be allowed to mould through. In a lecture last summer he stated that he had now changed this opinion, and advocated prophylactic version in these cases. Forceps is not used in breech cases. The pelvic diameters, conjugate and transverse, are measured by means of Skutsch's pelvimeter. Where the conjugate is so contracted as to necessitate the induction of premature labor, the time at which this should be brought on is determined by Muller's method. The patient is examined at intervals of a few days. Two fingers are placed in the vagina to palpate the head. An assistant then attempts to press the head through the brim from above. On the first day on which this fails to be accomplished, labor should be induced. In London, forceps and version each has its advocates.

OCCIPITO-POSTERIOR CASES.

In Dublin the practice is to leave these cases to nature, it being found that most of them will rotate themselves. If labor is unduly prolonged the forceps is applied.

In London the hand is introduced into the vagina as soon as the position is recognized, and the occiput rotated to the front. The shoulders are rotated at the same time by the other hand on the abdomen.

I have given only a brief outline of the treatment in some points. Those who wish to follow further details of the Rotunda methods will find them in "A Short Practice of Midwifery," by Dr. Jellett, late Senior Assistant at the Rotunda. I am not aware of any publication which officially represents Queen Charlotte's Hospital, though the majority of Dr. Mathew's "two thousand obstetric cases" were confined there.

PROGRESS OF GYNECOLOGY.

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

Fellow of the American and British Gynecological Societies; Professor of Clinical Gynecology in Bishop's University; Gynecologist to the Montreal Dispensary; Surgeon-in-chief of the Samaritan Hospital for Women; Surgeon to the Western General Hospital.

On the way to the meeting I had the pleasure of hearing an address by Martin, of Berlin, on the "Progress of Ovariectomy" in the last twenty years. It was a remarkable paper by a remarkable man. He has adopted the vaginal route to a great extent, and he closed his paper by giving the results of 131 vaginal laparotomies for diseased ovaries and tubes and for retroversions, ovarian cysts and small fibroids, etc. Out of these 131 cases he lost two. Since my return from Berlin I have performed a number of these operations at the Samaritan, Western, and at my private hospital with most gratifying results. These will be reported in full later on, but in the meantime it is of interest to note that all the patients operated on by the vaginal route made a much quicker recovery than those by the abdominal. Although they included pus tubes, tubal pregnancies, retroversion with fixation, cystic ovaries and closed tubes which were opened, yet not one of the patients died. Another striking advantage was the absence of the abdominal scar, and the pain from the incision, which these patients generally suffer from very acutely, was entirely absent. In fact, most of these patients did not require any anodyne whatever. During the discussion at the recent meeting of the British Gynecological Society a gentleman reported a number of cases by the vagina with bad results, and other speakers all pointed out with great stress that the vaginal route is not suitable for large tumors of any kind, whether fibroids or collections of pus, because it is almost impossible to deal with the adhesions which are so often present in these cases. In properly selected cases I feel sure that the vaginal route has immense advantages over the abdominal one.

One of the most interesting figures at the meeting was Doyen, of Paris, who showed two new instruments; one for automatically holding open the abdominal incision, and the other his instrument for arresting hemorrhage without ligatures by means of an enormously powerful crushing machine. The broad ligaments with the ovarian artery is seized and compressed for a minute with such force that it is completely crushed, and when it is taken off no blood flows. I was told in

Paris that it was not to be depended upon, as several times secondary hemorrhages had followed. I would prefer to trust Dr. Skene's electric clamp which desiccates the artery. One of the most interesting features of the meeting was a cinematographic representation of an abdominal hysterectomy given by Doyen in one of the large halls of the University, at which there were over six hundred doctors present. He is a very rapid operator, and has devised a new method which only requires four minutes from the first incision until the whole uterus including the cervix is in the dish. The salient features of his method are to put a clamp on the two ovarians, and then to catch the cervix through an opening in the vagina in Douglas' cul-de-sac, and draw it up, forcibly tearing it away from its connections laterally and to the bladder in front. The uterine arteries are thus distinctly brought into view and clamped. He only takes two or three minutes for removing the uterus, and some eight or ten minutes more are used in tying the arteries and closing the opening in the pelvic peritoneum. I had the pleasure of being one of eight or ten who saw Doyen do two total abdominal hysterectomies for fibroid at the Royal Infirmary, and he did one of them quite as quickly as the six hundred saw him do it by the cinematograph.

Another interesting figure was Morisani, of Naples, a gentleman very short in stature, about three feet six, but a giant in intellect, who gave an address on symphysiotomy in French. He was followed by Dr. John Moir, of Edinburgh, ninety-five years of age, who told of the improvements in obstetrics and gynecology in his lifetime.

The hottest discussion of the meeting was on Dr. Milne Murray's paper on "The Use and Abuse of the Forceps," and incidentally, Dr. Japp Sinclair's excellent paper read at Montreal last year, condemning the too frequent and too early use of the forceps, came in for a great deal of abuse.

Dr. Sinclair stated that the forceps was responsible for a great deal of injury to women who were confined in the neighborhood of Manchester. It was evident that the majority of those present at the meeting were general practitioners who used the forceps to save time, and did not want to be reproached for causing puerperal lesions. [This is certainly a remarkable statement; but I venture to hope that it is incorrect.—A. H. W.]

There were several interesting papers on the proper time for removing pus tubes, and the general feeling was that it was safer to operate during the interval than during the acute attack, as is also the case in appendicitis. There was also a very warm discussion as to the relative advantages of the abdominal and vaginal route for removing pus tubes, and the general feeling

was that it was easier and safer to remove them by the abdomen. As disease of the vermiform appendix frequently complicates pus tubes, it was pointed out that the possibility of having to remove it in any case was a sufficient reason of itself to induce us to operate by the abdomen. Dr. Macan, of Dublin, laid great stress on the importance of making a careful bimanual examination under narcosis before deciding upon the vaginal route. Landan, of Berlin, was strongly in favor of the vaginal route even for bad pus cases, and he has the courage of his convictions, for I saw him removing the uterus and both tubes and ovaries by the vagina in a very bad case while I was in Berlin. One thing was very evident on this occasion, that while it is difficult to remove large pus tubes even after the splitting of the uterus in two and consequently sacrificing it, it is well-nigh impossible to remove them through an opening in either the anterior or posterior vaginal vault without removing the uterus. Some years ago I attempted to do this and was compelled to abandon it by the vagina and to complete the operation by the abdomen. This combined operation by the vaginal and abdominal route was the subject of a long discussion at the December meeting of the British Gynecological Society. Dr. Arthur Giles summed up the general opinion very concisely by saying that the *raison d'être* of the vaginal operation was to obviate the necessity of opening the abdomen, and that there was nothing that was done by the combined method that could not be done by the abdominal alone; consequently, it seemed to him that to open the abdomen after beginning an operation through the vagina was practically a confession of failure. It meant that the operator had found himself unable to carry out his original intention.

It was not his experience that abdominal operations for pyosalpinx had a specially high mortality, for it happened that a rather large proportion of his cases of abdominal section had been for pyosalpinx, and so far there has been no death among them. I might add that my own experience agrees with that of Dr. Giles, as I have often been agreeably surprised to see patients recover from the most serious operations for pus tubes when both the assistant and myself had thought it hardly possible.

Conservatism in gynecology has been receiving a good deal of attention during the last few months. Up to within a year or two ago it was the custom to remove both tubes and ovaries when one tube was diseased—even though the other tube and both ovaries were apparently healthy. When this was done in young women the artificial menopause brought on so suddenly was accompanied with great inconveniences, so much so that many of these young women declared that they regretted having had the operation performed. This led us to

remove only the tube and ovary on the affected side, and although we were occasionally reproached for not making a complete cure by removing both, mostly in cases of sclerotic ovaries, yet these cases were much fewer than those who complained of the miseries of the premature menopause. More attention was then directed to the matter, and now we frequently leave both ovaries, even where we have to remove both tubes for suppuration. Nearly a year ago such a case came under my care, a young lady who was infected by her fiancée with gonorrhœa, leading to two very large pus tubes. He so regretted his crime that he was anxious to make amends by marrying her, and she begged that I might leave her ovaries. The pus tubes were therefore removed without tying the ovarian artery or otherwise hurting the ovaries, except that the adhesions were stripped off them and they were carefully cleaned. This patient made a splendid recovery and is now very happily married. She menstruates regularly and normally and has all her womanly feelings and attributes. As I used cat-gut to tie off the tubes at the corner I would not be surprised to learn that she had become pregnant. In many other cases I have removed three-quarters of one or both ovaries and part of one tube with very satisfactory results. As many of these were done during the last few months it is too soon to expect them to become pregnant, but there is no reason why this should not occur. Since beginning this article I have operated on a lady for retroversion with fixation, who was most anxious to have children. I found both tubes closed and imbedded in adhesions, the result of a severe attack of pelvic peritonitis, from which she nearly died eight years ago. Both ovaries and tubes were torn almost to shreds by the enucleations, and nearly an hour was spent in patching them up with fine silk; but finally a good tube was left through which a probe could be passed into the uterus. She is making a remarkably pleasant recovery from the operation, and I have yet hopes of her becoming pregnant.

250 BISHOP STREET, MONTREAL.

THE CRUSADE AGAINST TUBERCULOSIS.—The editor of *The Practitioner* (London, England) says in the February issue: "I have to thank the CANADIAN PRACTITIONER for a very kindly reference to my humble efforts to start a national movement for the repression of tuberculosis. I may perhaps be pardoned also for feeling gratified at the manner in which the movement is spreading all over our own 'tight little island.' It is particularly satisfactory to note with what interest the crusade is regarded by the public, for, as I cannot repeat too often, it is on the earnest and general co-operation of the public that the success of the movement must mainly depend."

Society Reports.

TORONTO CLINICAL SOCIETY.

The fifty-first regular meeting of the Society was held in St. George's Hall, Elm Street, on Wednesday evening, the 8th of February, at 8.30 p.m. The President, Dr. F. LeM. Grasett, occupied the chair.

Aneurism of Arch of Aorta.

Dr. R. J. Dwyer reported as follows: Patient, male, aged 56. Had been under observation for sixteen months. Had an attack of jaundice when a boy; and eighteen years ago had become inoculated with the virus of syphilis, for which he had only been treated at that time a period of three or four months. Had been a heavy drinker also, but for the last two years temperate. Two years ago the patient was a very muscular man, weight being about 230 pounds. It is now 190 pounds. Patient a peripatetic vendor of goods, probably often carrying his pack on his back. First noticed pains under left scapula. Some slight cyanosis. Respirations, 34, slightly labored. Pulsation in right parasternal line, most distinct in second space. Dulness more marked to the right of the sternum than to left. Systolic murmur heard over the apex and another of same variety, most distinct in the second right space, near to the sternum. The aortic second sound is also much accentuated. The patient complains very much of pain radiating from angle of left scapula, around the left side. Voice somewhat husky. The aneurism diagnosed to be situated in ascending and transverse portions of arch. Impulse of aorta easily felt in supra-sternal notch. Dr. Dwyer considered the condition to be a dilatation of first and second portions of the arch.

The Fellows present examined the patient presented by Dr. Dwyer, after which an interesting discussion of the case was participated in by Drs. Fenton, Anderson, Chas. Temple, Grasett, Rudolf, Primrose and Bingham.

Acute Exophthalmos.

Dr. Fenton read comprehensive notes of this case, which occurred recently in his private practice. Married woman, aged 23; primipara. Never strong, but never had any serious illness. The thyroid gland had always been very prominent. The mother of patient had also had enlarged thyroid, as also an aunt. Grandfather, an uncle and a sister died of phthisis. Patient was confined in September last, being delivered with forceps. After delivery, pulse 110, ascribed to anemia. Bleeding continued free for a couple of days, in spite of ergot and strychnia. There was no pain or marked tenderness anywhere.

Patient dozed considerably during the day, but extremely wakeful during the night. Ten days after delivery the doctor was hurriedly summoned to her bedside. Found patient very hysterical, with some headache, epistaxis and a tympanitic condition of abdomen. Thirst very troublesome. The gland measured $4 \times 1\frac{1}{2}$ inches. Pulse, high tension and marked accentuation of second sound. Eyes prominent; Von Graefe's sign absent. Marked muscular tremors. No pulsation of thyroid gland to be felt, nor any murmur heard on auscultation over it. Urine, natural. The swelling was almost confined to right lobe. Patient on the tenth day, highly erotic. Treated with digitalis, twelve-minim doses. The gland can now be scarcely noticed. She was apparently well two or three weeks before parturition, although the nurse had noticed the prominence of the eyes before delivery. Dr. Fenton considered the case an interesting one from the probability of its acute onset.

Drs. W. J. McCollum and Chas. Temple reported similar cases seen in practice. The case was further discussed by Drs. Dwyer, Ross, Trow and the President, the latter complimenting Dr. Fenton upon the acuteness of his observations.

Clinical Notes of Cases of Cholelithiasis.

Before presenting these notes to the Society, Dr. Ross reiterated a statement he had made at the Toronto Medical Society that anyone who had sudden severe pain coming on, accompanied by vomiting and tenderness on pressure, with rigidity of the right rectus muscle, was a subject for celiotomy.

CASE 1.—A doctor aged 62, who had been in good health for some time past. A few years ago patient had typhoid fever and nearly lost his life. In the present attack there was slight elevation of temperature and some acceleration of pulse. Two days before operation had complained of sudden severe pain in the abdomen. There was no vomiting, but tendency to vomit. No rigidity of the muscle in this case. Exploratory incision was decided on after consultation, as appendiceal trouble was suspected. The abdomen was opened in the right rectus muscle, but no disease of appendix found. Examination upwards ascertained that the omentum was adherent to the intestines and gall-bladder. The gall-bladder was black and gangrenous, and quite ready to burst. Four large gall-stones were removed, one of which was acting as a ball valve. The patient made an uninterrupted recovery.

CASE 2.—Gall-stones in gall-bladder simulating stone in the kidney. Pains on right side with painful micturition. The temperature and pulse elevated. A tumor was found in the right lumbar region, and slight dulness in the loin. The abdomen was opened to right of right rectus muscle. The tumor proved to be a large suppurating gall-bladder matted

down and quite adherent. Patient made a good recovery. This case shows that it is almost impossible to diagnose suppurating gall-bladder and floating kidney, even after the abdomen has been opened.

CASE 3.—Obstruction of common bile duct in a man aged 60. He had been a sufferer for twenty-five years. Jaundice two years ago—thought it was cancer. Murphy button used and it has not yet appeared. Patient now enjoys perfect health. No growth can give symptoms extending over twenty-five years. Anastomosis with the colon will give a perfect result. It is not necessary to convey the bile into the small intestine.

CASE 4.—One of extended gall-bladder in a woman aged 52. This was an obscure case. Patient had suffered intense pain. The case was one of gall-stones obstructing cystic duct. Retching was at times almost incessant. Paroxysms of pain, albumen found in the urine. Removed thirty-six stones from the gall-bladder, one in the duct could not be taken out. Patient made an excellent recovery. Dr. Ross spoke of an instrument he had devised and was having prepared in England to facilitate the removal of stones in the duct. He promised to show it to the Society on a future date.

CASE 5.—Man, aged 76. Had suffered two or three years with attacks of pain of indefinite character. The pain was referred to the region of gall-bladder and lower angle of scapula. Jaundice nine months previously. The gall-bladder was found embedded in a mass of adhesions. Thirteen small stones were removed, but one felt in the common duct was left *in situ*. Jaundice has all disappeared, but still has a sinus.

Dr. Ross exhibited the different stones to the Fellows, and spoke about the importance of draining Morrison's pouch in these operations.

Drs. A. A. Macdonald, Grasett and Pepler contributed brief discussions on the cases. Dr. George A. Bingham spoke of the advantage to the Fellows of having heard such interesting and instructing notes, and emphasized the importance of draining Morrison's pouch, as pointed out by Dr. Ross.

Scirrhus Cancer of Breast—Specimen.

Dr. A. A. Macdonald reported case as follows: Patient unmarried, aged 36, menstruated regularly. Never noticed any pain in the breast until three weeks before the specimen was removed. Then after a little pain a small nodule was felt in the breast, about the size of a hen's egg. There were no enlarged glands in the axilla. On removing the growth, the under surface was found to be particularly hard and somewhat puffy, though the nipple was not retracted and no adhesion of the skin. Examined microscopically the growth was pronounced to be cancerous.

GEORGE ELLIOTT, *Rec. Sec'y.*

Editorials.

THE HOSPITALS, THE PUBLIC AND THE MEDICAL PROFESSION.

Hospitals were originally intended for aged helpless people, orphans and the sick poor. Without any reference to homes, poor-houses, etc., we have to note that hospitals for the sick and injured have been greatly improved in character and increased in numbers during the last quarter of a century. The stigma formerly attached to residence in a general hospital during illness has to a large extent vanished. Private and semi-private wards have become very popular, as shown by the fact that, although many private hospitals have been established, and many additions have been made in recent years to the accommodation for private patients in all the general hospitals, latest reports show that more rooms for such purposes are urgently needed.

People who are fairly well-to-do without being wealthy, have discovered that they can get much better care for a limited amount of money in any well-regulated hospital than they can possibly get at home; and, as a consequence, are more inclined than ever before to go or send their friends to such a place for treatment during illness. The comfortable private ward is especially a boon to one who becomes ill in a hotel or boarding house, and this fact is now pretty well recognized in all parts of the civilized world.

In certain cities and towns complaints are made by physicians unattached to hospitals because they are not allowed to attend their own patients after sending them into such institutions. Both physicians and patients often felt that such a rule was not fair. The hospital authorities in some places considered that they could not preserve proper discipline unless all patients were placed under the care of members of the visiting staff, who were to be held responsible for their proper treatment. The governors of all the public hospitals in Toronto have for some years allowed all physicians and surgeons of

good standing to treat their own patients in the private and semi-private wards. This appears to be the fairest thing for all concerned, especially as it prevents anything like a monopoly on the part of those who happen to be on the visiting staffs. So far as we know, this custom, which is by no means an ancient one in some of our hospitals, has proved quite satisfactory in all respects. The patients get the best of care for a reasonable sum, and the attending physicians get the fees which should properly belong to them.

THE QUEEN VS. TAGGART.

This case was tried at the January assizes. At the time it attracted very much attention, and is a case of more than usual interest from the medico-legal standpoint. It is not our intention to go into the personal and family history of the unfortunate man, but rather to offer a few remarks on the course pursued by the Crown in the case.

It was anticipated that the plea of insanity would be raised as a defence for the murder of Mrs. Taggart by Frederick Taggart, her husband, last November. As it is the duty of the Crown to secure justice, as far as possible, and not to strive after a conviction, the authorities very properly appointed medical experts to examine the prisoner. The medical gentlemen commissioned for this purpose were Drs. J. H. Richardson, N. H. Beemer (Medical Superintendent of the Mimico Asylum), A. J. Johnson and Alexander Primrose.

After a most careful examination these four medical gentlemen unanimously decided that the prisoner was a typical instance of delusional insanity, and that his actions had been governed by voices that he had heard telling him to perform the dreadful deed. After this examination the four experts made out a report, which all signed. This report was duly forwarded to the proper Crown officers.

Subsequently to the receipt by the Crown officers of this report, they sent a fifth medical gentleman to examine the prisoner.

The case came to trial at the January assizes. The Crown completed its case, without the slightest reference to the report

of the medical experts who had examined the prisoner. During the defence the counsel of the prisoner made the demand in court to see the report. This was refused by the Crown. Why Mr. J. K. Kerr, the Crown counsel in the case, should have refused to give the prisoner the benefit of the testimony of these experts, it is difficult to understand.

Had the defence not decided to put in the plea of insanity, as a defence for the prisoner's action, we can only guess what course the Crown would have taken. It is only reasonable to assume, however, that no reference would have been made to the medical experts' report, nor would any of them have been called as witnesses. We have no hesitation in stating that, in our opinion, such a course as the above, cannot be too strongly condemned. For the Crown to be fully informed of the prisoner's insanity, and not only make no reference to such information, but refuse to produce it when requested so to do by the defence, seems most remarkable. Perhaps the Crown counsel could explain it.

On the Crown's refusing to produce the report of its own experts, and having made no reference to it, nor having called any of the experts in the submission of the Crown's case to the court, the defence called Drs. Beemer and Richardson, Crown witnesses—in addition to those who appeared for the defence, namely, Drs. Samuel Richardson, J. Ferguson and W. J. Wilson. The defence then stated that if the Crown would put Dr. A. Primrose in the witness stand, the defence had done its whole duty in placing the case before the court.

It is perhaps due to our lack of learning, but it puzzles us to see why the case was dragged through a whole week when it could have been disposed of in a few minutes, and the unfortunate man sent to the asylum, where the jury very properly assigned him "until the pleasure of the Lieut.-Governor be known."

It creates within one a feeling of horror to think that, if the defence had not set up the plea of insanity, the Crown, knowing what it did, would have permitted the unfortunate prisoner to have been judicially murdered.

There was an entire agreement on the part of all the medical gentlemen in the case as to the prisoner's insanity and irresponsibility for the crime. Dr. J. M. Cotton, the Crown's fifth

exper^t, concurred in this opinion. The medical evidence throughout was peculiarly clear and able, and reflected great credit on the profession of this country. It is to be hoped that it will be a long time before the Crown again adopts such a course, where a man's life hangs in the balance.

THE DEPOPULATION OF FRANCE.

We are so fully possessed of the fact that the French in Canada are exceptionally prolific that we can scarce realize that the French of France are quite the reverse. We learn from an article in the *British Medical Journal* that for every 1,000 married women the annual number of births in France is 115, as compared with 184 in Belgium and Italy, 176 in Switzerland, 186 in Norway, 190 in England and Wales, 202 in Germany, 205 in Scotland, 206 in Prussia, and 216 in Wurtemberg. It seems that the birth-rate has been steadily declining from year to year for some time, and political economists are beginning to take a serious view of the matter.

It is said that if the French population be separated from the foreign population living in France, there has been for several years an excess of deaths over births; and it is feared that in consequence of the decrease of the purely French population in France, that country may before long be reduced to the rank of a second or third rate power. It is said that many of the races of antiquity were entirely killed off by this "disease"—called by Aristotle, oliganthropy.

This condition of things is thought to be due to the voluntary curtailment of the family through artificial measures directed against conception. It is well known that such practices are not confined to France. In many other countries, including England and the United States, the birth-rate is declining from similar causes. The whole story is an old one, and has been widely discussed in all its aspects. Ministers and doctors protest loudly against practices tending to the prevention of conception, but generally in vain.

The *British Medical Journal* concludes its article as follows: "The future of the world's history depends largely on the question as to which races will continue to multiply and to

colonize until the limits of colonization have been reached, when other races have, through the exercise of selfish prudence, ceased to take part in this colonization, and upon the relative excess of births over deaths in the different European countries preceding the stage at which other nations like France may have ceased to any material extent to add to the emigrant population."

THE TIME ELEMENT IN SURGICAL OPERATIONS.

It is recorded of Professor Syme, of Edinburgh, that he did the first amputation at the hip which was done in Great Britain, in the time of one minute, and that although forced by unforeseen circumstances to change his plan after entering the knife. His patient survived in spite of some hemorrhage and the absence of any anesthetic to lessen shock. It is doubtful if many—indeed any—of our present experts in surgery could duplicate Syme's feat, and fortunately, it is not necessary to do so.

One of the great benefits of anesthesia is the freedom of action, within certain limits, conferred upon the operator. Unfortunately there is a strong tendency amongst some surgeons to forget that whilst the anesthetics in use at the present day relieve the patient from pain and free the surgeon's hands to a great extent, they are nevertheless powerful intoxicants, and may exert a highly detrimental influence upon the progress of the case. This is a mild statement, since we all know that a considerable number of patients must, and do, die of the anesthesia alone. But it is not in respect of the anesthesia only that the surgeon's case may suffer. It is beyond dispute amongst reasonable men that prolonged exposure and handling of the organs and tissues of the body subjects the patient to much greater risk of disaster than a shorter exposure and handling does. It seems marvellous, then, that we find men who are good operators in one sense, and who occupy positions of authority as teachers, acting, if not in so many words, formulating, the doctrine that the length of time during which a patient is under an anesthetic and during which his organs and tissues are exposed and handled—mauled in many cases—is of no consequence in determining the result. There can be very few operations in surgery which require two hours for

completion ; those calling for a longer period still, must be quite exceptional ; yet it is not a rare thing to hear of an even greater period elapsing during which a patient is under chloroform or ether. We have heard of a case, not long since, in which a breast amputation, with cleaning of the axilla, occupied five hours, the patient being under anesthetic all the time, no special difficulty complicating the case. If recovery were not all that could be desired in this case, could the surgeon say that he was not to blame ? Surely not. Shock, septicemia, mania from ether or chloroform poisoning, nephritis, pneumonia, may any of them depend in part upon the time of exposure of the patient. Leaving out of sight the interests of the individual operated upon, what reasons can the operator give for slowness of procedure ? That there is nothing inherently better in the slow work as compared with the rapid is proven by the results of many of our best men—men such as Kelly, of Baltimore, who not only practises, but preaches speed, and who attributes some measure of his success to his speed. Many others could easily be quoted in support of this position. If any man be weak enough to plead for time, that he may give due consideration to all steps as he proceeds, then he should not be operating. Rapid and sure observation and deduction is a *sine quâ non* for the surgeon.

As to the plea that the length of time that an organism is under the influence of poison, makes no difference in the result, or that the length of time that delicate structures, such as the tissues of the human body, are mishandled, are of no consequence in the subsequent efforts at recovery, probably all sane men will have the same opinion.

DEPARTMENT OF PUBLIC HEALTH.—The Government has done the right thing in establishing a department of Public Health, and has fortunately found the proper man to take charge of it. Dr. F. Montizambert, for many years superintendent of the Grosse Isle quarantine station, and for the past five years General Superintendent of Quarantine, has been appointed Director-General of Public Health, with headquarters at Ottawa. His duties will be to act as sanitary adviser of the Dominion Government, as a General Superintendent of Quarantine, and as inspector of the Tracadie Lazaretto.

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. AKINS, J. E. GRAHAM, J. FERGUSON, T. McMAHON,
AND H. J. HAMILTON.

Membranous Enteritis.

Dr. Max Einhorn's remarks on this subject (*Medical Record*, January 28th) are worthy of careful attention. He treats his subject under the following headings :

1. *History*.—This is an old disease. It was clearly recognized by Paulus Ægineta, who spoke of the passage of the inner membrane of the intestine.

Morgagne thought that these membranes was mucus, which had become inspissated and thickened in the bowels.

Mason Good describes it under the name of tubular diarrhœa. Woodward employed the same term, but also said that membranous diarrhœa would be a suitable one.

Siredey, in 1869, studied the disease carefully, and came to the conclusion that, as it occurred in persons whose digestive canal revealed no organic disease, the condition was an intestinal neurosis.

Whitehead, in 1871, spoke of the condition as mucous disease. He insisted on a fair amount of exercise, the limitation of food in amount and to easily digested solids, and the avoidance of liquid diet except milk.

Cruveilhier wrote of the affection under the appellation pseudo-membranous enteritis.

Da Costa again, in 1871, gave it the name membranous enteritis. His description is very full, and recognizes its nervous nature.

Leyden, in 1882, called the affection colica mucosa ; and Nothnagel adopted the same name. They regarded it as a disease of the colon, caused by increased secretion of the glandular cells, induced by constipation, with some secondary inflammation of the mucosa, and that secreted masses consisted of mucus.

Ewald and Boas have laid stress on the ptosis and atony of the colon.

2. *Etiology*.—This disease is regarded by most authors as rare. It is met with much more frequently in women than in men. W. Mendelson asserts that neurasthenia was not absent in any of his cases. With this statement nearly all agree.

Hysteria and neurasthenia play a great rôle in the origin of the trouble.

Dr. Einhorn states, that of 772 men and 543 women under his own care, 20 suffered with membranous enteritis. He states that motor function of the stomach was increased in 8, and normal in 4, and that 5 presented typical achylia gastrica. When one considers the infrequency of achylia gastrica, this large percentage in cases of membranous enteritis is worthy of note. Even when typical achylia is absent, some feature of it, such as defective secretion of gastric fluid, is present. It is likely that the nervous conditions present cause both the gastric and the enteritic symptoms.

3. *Symptomatology.*—The disease is characterized by rather sharp attacks of colic in the abdomen, followed by the passage of mucous masses in the stools. The mucus may be alone or mixed with fæces. Usually the attack is preceded by a period of constipation. This is followed by diarrhœa and tenesmus. The gastric symptoms of the attack generally are loss of appetite, belching and burning pain at pit of stomach. There may be vomiting. These attacks last from three to seven days, when the pains subside, the diarrhœa ceases, though the nervous symptoms continue.

The mucous masses have a grayish-white, rarely yellowish, color, and are ribbon-shaped, or membrane-like in appearance. A complete mould of the intestinal canal has been sometimes met with. Cornil and Nothnagel have proven the mucous nature of these masses.

4. *Diagnosis.*—It is necessary to guard against making the mistake of calling shreds of orange pulp, pieces of tendonous tissue, portions of tape-worm, etc., masses of mucus.

It should not be confounded with intestinal catarrh. There are, however, cases of chronic intestinal catarrh, which are complicated with membranous colic, where the typical attacks of mucous colic occur.

5. *Treatment.*—The old authors recognized that fluid diet is unsuitable. Experience confirms this view.

Von Noorden recommends a coarse diet. This gives the intestines more work to do. There is considerable residuum left. He advises half a pound of bread containing a good deal of chaff, leguminous and garden vegetables rich in cellulose, fruits with small pits and coarse skins, as currants, grapes, gooseberries.

This diet should not be introduced too suddenly. Dr. Einhorn advises a nutritious diet, but not too coarse. It should contain a liberal portion of vegetable substances. The great object is to train the patient to master the foods of an ordinary healthy diet. The therapeutics of the disease consist of the

treatment of the attacks and the intervals. The former is managed by rest in bed, enemata, the administration of opium or belladonna, and hot applications. The most important point in the treatment of the interval is the methodical employment of oil enemata. These injections are made into the bowel at night; the quantity is from 250 to 500 cubic centimetres, at blood temperature. The amount may be reduced to 150 or 100 cubic centimetres where it causes a desire to evacuate the bowels. The injection is retained during the night. The oil should be injected every night for three weeks; every other night for three weeks; twice a week for four weeks; and then once a week for four or five months. Good tonics and proper hygiene should not be overlooked. Hydro-therapeutic measures are useful in some cases.

Polymyositis.

Sir W. R. Gowers (*Brit. Med. Jour.*, 14th January) discusses this disease in his usual able manner. This is a rare disease, but it is important because it is so formidable. It has a close relationship to another disease that is common enough—namely, polyneuritis.

In this severe disease, the nerves suffer with the muscles, though it would seem less widely. In the case of polyneuritis it is the peripheral nerves and those in the extremities that are mainly affected. It is also specially a bilateral disease. The motor or the sensory nerves may be mostly involved, but very generally both are implicated. Although a bilateral disease, it is often more severe on one side than on the other.

This bilateral feature is a genuine characteristic of polyneuritis. It brands the disease as a constitutional one. Not only are there structures on each side of the body of nearly equal liability to the disease, but these must be reached through the blood. The poison may be varied, but the channel of conduction common, that is, the vascular system. The power in certain tissues in the body to endure or resist diseases differs. This failure to perform function on both sides of the body and in similar structures may be safely taken to be of toxic origin.

The number of toxic agents is great and their nature most varied. Some are taken from without, as the metallic poisons and alcohol. Many of these poisons are the product of low organisms. The body may produce within itself poisons that are extremely damaging, as the products of various bacteria that are introduced into the system, but we have also the toxic products that arise from deranged metabolism, as in gout. Then again, exposure to cold is capable of causing grave disease and deranging the functions of certain of the glands so as to throw into the system large quantities of virulent toxic

agents. Some change takes place in the chemical action of the organs of the body, and disease of a constitutional and toxic nature results.

In polymyositis there seems to be developed some form of rheumatic poison that affects the muscles in groups on each side of the body. It is met with almost exclusively as the result of exposure to cold. It may be very acute and severe in some cases, and of extreme chronicity in others. The multiple inflammations affect the nerves and muscles, but the latter more widely than the former. At the first the muscles are very tender, and afterwards undergo hardening and contraction, and, in time, may resist all efforts to overcome these conditions.

It is usual to obtain a history of rheumatism or gout in the ancestry. Gout often changes in a subsequent generation into the rheumatic form.

The treatment in the early stage of the disease consists in rest, diaphoretics, salicylates and sometimes small doses of mercury. This controls the inflammation and lessens the tendency later on to contractions and deformities. The advantage of early and effective treatment is multiplied manifold in the advantages yielded in the later stage of the disease. If the early stage of the disease is not properly managed a lifetime of the most distressing invalidism may be imposed upon the person, coupled with severe and incurable deformities.

Antitoxin Treatment of Diphtheria.

Dr. E. W. Goodall, the medical superintendent of the Eastern Fever Hospital of the Metropolitan Asylums Board, has an article in the *Brit. Med. Jour.* for January 28th and February 4th. In these articles he lays before the medical profession much valuable information as to the results obtained by the non-antitoxin and the antitoxin treatment of this disease.

It is now about four years since Roux read his paper on the serum treatment of diphtheria at the Eighth International Congress of Hygiene at Buda-Pesth. Before the date of this paper, some strong evidence had been advanced that the treatment was of undoubted value. But there was an air of suspicion about the practice. But when a person of such high standing as Roux gave the weight of his experience in favor of it, the profession was compelled to give the method an un-biassed trial.

Under the antitoxin treatment, the mortality has been greatly reduced for all ages. This is specially true, when the treatment is commenced at an early period. In the hospital, 180 treated before the introduction of the antitoxin, yielded a death-rate of 46 per cent. Under the antitoxin treatment, 264 yielded a death-rate of 23 per cent. Now it should be borne in

mind that many of these were not admitted until a late period of the disease, when the treatment is by no means so useful. In nearly all the cases admitted, the patients had not been treated by the antitoxin; and in 1896 as many as 74 per cent. were admitted on or after the fourth day of the disease.

With regard to laryngeal diphtheria, the evidence was very strong as to the great value of the antitoxin. Of 3,275 cases treated without the serum, whether operated on or not, the recovery percentage was only thirty-three. On the other hand, of 3,486 treated with the antitoxin, and including those operated upon, the recovery percentage was as high as seventy-four.

It is well known that the membrane may extend into the trachea and bronchi. The value of the antitoxin in preventing this extension is beyond doubt. In a record of 131 fatal cases, not treated with the antitoxin, forty-three died of the extension of the membrane, or of broncho-pneumonia. But of 274 fatal cases under the antitoxin treatment only twenty-one died of the extension of the membrane into the trachea or bronchi, or of broncho-pneumonia.

With regard to the post-diphtheritic paralysis, some very important points are revealed by a study of cases under the two methods of treatment. In the first place, those treated without the antitoxin give a paralysis percentage of fourteen. Among those treated with the antitoxin, there was a percentage of eighteen. It must be noted, however, that many mild cases are not treated by the serum method. All the best observers admit that the severe cases are those most liable to be followed by paralysis; and these are the cases in which the serum is most frequently employed. It would appear that cases treated with the antitoxin would average a severer type than those not treated in this way. There is one very important feature that must not be lost sight of. It is that when the antitoxin is used early in the disease the rate of paralysis is greatly reduced; those treated with the serum on the first day give 5 per cent., while those treated on the second day give 10 per cent. This is a good showing as compared with 14 per cent., the result in all non-antitoxin cases. It would therefore appear that the serum treatment, when properly employed, lessens materially the risk of paralysis.

Apart from these valuable statistics, the clinical facts are of much moment. The extension of existing, and the formation of fresh membrane is stopped, and that already formed clears off more rapidly than is the case when the serum has not been used. The foul discharges from the nares, when they are implicated, soon cease. The lessening of the faucial inflammation enables the patient to take food more readily. The swelling of the glands and the cervical tissue subsides. The

pulse-rate and temperature fall, the appetite improves, and the convalescence is more rapid.

The Management of Epilepsy.

Dr. C. H. Hughes (*Alienist and Neurologist* for January, 1899) has a carefully thought-out article upon the above subject. He takes strong ground that he who would successfully treat epilepsy must be a broad clinician and know well the whole range of practical medicine. Epilepsy is a condition of brain, special and peculiar; yet, the paroxysms are set in motion by digestive derangements, by toxins in the blood, either introduced from without or originated within. Epilepsy is often an expression of gout, rheumatism, syphilis and sympathetic irritation. To restore the idiopathic epileptic, the person must be made anew. The epileptic habit and the neuropathic substratum must be corrected. All the hereditary conditions must be searched out and weighed.

The treatment means much more than the postponement of the attacks. It means the curing of the causative conditions, and the rebuilding of the nervous system. Only long-continued suppression of even the vertiginous and *petit mal* attacks give hope of cure. This result cannot be obtained in more than 10 per cent. of all the cases. After a year and a half or two years of careful treatment there may be a lengthy spell of freedom; but even then it is not wise to leave the patient without some daily treatment. The author states that he continues the bromide impression by the daily use of thirty grains of bromide of strontium, alternating with the other bromides from time to time.

The suppression of the epilepsy sometimes brings out a far worse condition. Epileptic automatism, epileptic mania, or insanity may appear, and show only too plainly that the explosive attacks are by no means the whole disease. This epileptic change in the brain must be overcome and altered back to the normal before they may be considered as recovered from their malady. No one remedy will probably do this.

In view of these facts, it is not in accordance with sound pathology or therapeutics to speak of special plans of treatment, as the Codeia, or Bechterew methods. They are only fads, and can do nothing but harm. In all these plans of treatment, where a number of drugs are combined, bromide usually forms the main ingredient.

The combinations of the bromides with cannabis, chloral, codeia, etc., add nothing to our resources, and tend rather to encumber than help. The whole question of neuropathology has passed the period of merely controlling the attacks. What we need is something that will cure the brain change that

displays itself in vaso-motor, or psycho-motor paroxysms. This is coming along the lines of a general knowledge and study of neuropathology, and neurotics in particular.

A good deal of weight should be attached to the toxic theory of the excitation of the attacks. Although gastric, intestinal and toxic conditions do not cause the epileptic predisposition of brain, yet they are causative factors in the epileptic paroxysm.

It is clear that the alternation of the bromides, the blending of them, care and treatment of the digestive canal, and the regulation of the whole organism constitute parts of the treatment of epilepsy. There is certainly very much wrong when the brain goes into coma and starts convulsions. Our success, therefore, must be measured by our ability to arrest the convulsions, the psychic, vertiginous, somnambulistic, automatic and impulsive features of the disease. It will not do to have regard only to the convulsive seizures.

SURGERY.

IN CHARGE OF EDMUND E. KING, HERBERT A. BRUCE AND L. M. SWEETNAM.

Independent Third Kidney.

W. Watson Cheyne (*Lancet*, January 28th, 1899) records a case of an independent third kidney found while performing an abdominal section. A well-developed kidney was found on the right side of the lower part of the spinal column just at the brim of the pelvis, having its own ureter and blood supply, and distant from three to four inches from the right kidney, which was felt in the right loin and apparently of normal size. The left kidney was somewhat smaller than the right. In this case the symptoms the patient complained of were no doubt due to the mobility of the kidney and probably to slight pressure on, or kinking of, the ureter. The symptoms were as follows: Indefinite abdominal pain, indigestion, and a general hysterical condition. The only special feature was diminution in the quantity of the urine passed. On examining the patient under an anesthetic an irregular, flattened, tender swelling was readily felt behind the right rectus muscle at the brim of the pelvis. The swelling was slightly movable and had a nodular character. It could not be felt from the pelvis and evidently had no connection with the pelvic organs. As to the exact nature of the swelling no definite opinion was reached. The idea of a movable kidney, which presented itself among other suggestions, was discarded on account of the situation of the tumor and the fact that it could not be pushed into the loin. An exploratory operation was consequently done with the above

result. Mr. Cheyne made no attempt to fix the kidney by stitches as that would have been very difficult, and he hoped that the tearing and disturbance necessary to expose it would lead to such adhesions as would sufficiently fix it in its place.

A Note on Amputation for Charcot's Joint Disease.

Mr. Southam (*Lancet*, November 12th, 1898) gives notes of a case of Charcot's disease affecting the ankle-joint, in which the joint was so completely disorganized that the foot was displaced upwards and outwards, the internal malleolus projecting through an opening in the skin, giving rise to a condition very like an unreduced compound Pott's fracture. Removal of the foot was obviously the proper treatment, but bearing in mind the unsatisfactory results which often follow amputation for perforating ulcer in tabetic subjects, he hesitated in adopting this course, when a short article by Mr. Jonathan Hutchinson attracted his notice. Mr. Hutchinson wrote that he had recently had an opportunity of observing the process of repair after amputation in a state of advanced locomotor ataxy. He did a Teale's amputation in a middle-aged subject, who for ten years had suffered from locomotor ataxy accompanied by perforating ulcer and disease of the bones of the foot and ankle-joint. The result was extremely satisfactory, the patient recovering with a sound stump, which was afterwards fitted with an artificial limb and bore pressure well. Mr. Southam advised the patient, a male, aged 49, to submit to amputation below the knee-joint. Since then he has performed the same operation on three other patients, all males between forty and fifty years of age, for a similar condition, the ankle-joint being affected in one case and the tarsal joints in the other two. In all four patients the result has been most satisfactory, the stumps healing quickly without suppuration, and without any tendency to sloughing of the soft tissues or necrosis of the end of the bone, as might have been expected from the nervous origin of the disease.

Removal of Calculus from Common Bile Duct, 2 inches long and 3½ inches in circumference without suturing Duct.

Mr. Thornton (*Lancet*, October 22nd, 1898) reports a case of the above where the operation was performed by Mr. Bland Sutton. The patient, a male, aged 58, had suffered for the past four years with attacks of pain, vomiting, and slight jaundice. These occurred often at intervals of only a few days, sometimes weeks. Sometimes, after attacks, he passed small gall-stones by the bowel. On examination there was distinct tenderness and a sense of obscure fulness over the region of the gall-bladder

but deeper than that organ. Although the patient was very thin, no enlargement of the liver or gall-bladder could be detected on palpation or percussion. Mr. Sutton made an incision from the margin of the ribs along the outer margin of the rectus muscle, about three inches in length. There was no enlargement of gall-bladder, but a small stone could be felt in it. The gall-bladder was opened and this was removed. Behind the gall-bladder, underneath the liver, could be felt indistinctly a large resisting body in the situation of the common bile duct. The abdominal wound was enlarged, the liver was pulled up as high as possible, and the pylorus was pulled aside. Strong efforts were made to push the stone, felt in the distended common bile duct, back into the gall-bladder or onwards into the bowel, but, owing to its size, without avail. An incision about an inch and a half long was made in the long diameter of the duct and the stone was easily expressed. It was of the dimensions given above and weighed seven drachms. There was very little bleeding and the incision in the duct was not sutured. A large india rubber drainage tube was put in down to the bottom of the abdominal wound, the gall-bladder was closed and stitched to the parietes, and the abdominal walls were closed by three layers of sutures. There was for the first three days a profuse discharge of bile, at least two or three pints daily. The tube was gradually shortened and it was removed altogether in about seven days. There was no discharge of bile after the third day. He made an uninterrupted recovery.

OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, JAMES F. W. ROSS, ALBERT A. MACDONALD,
H. C. SCADDING AND K. C. McILWRAITH.

+ On the Relief of Suffering in Labor.

W. E. Fothergill, M.A., B.Sc., M.D., in the January number of the *Medical Brief* has a good paper on this subject. Many useful hints are given, but his remarks on the use of the hot bath are especially valuable. We quote the author, first in regard to the false labor pains:

We all know that in most cases these false pains are caused by overloading of the rectum, and it is surely worth while to take the trouble necessary to afford the patient relief. The first thing to do is to have the rectum well washed out with one, or two, or if necessary, three copious enemata. When the bowel is quite empty, let the patient be put in a hot bath and kept in it for ten to twenty minutes. This has a wonderful effect upon the false pains, but it cannot be done unless

there is a full-sized bath in the house and plenty of hot water to cover the patient when lying down. A good dose of opium in some form is generally necessary, and other sedatives, such as the bromides, may, with advantage, be combined with it at the discretion of the physician. In bad cases there is nothing like an abdominal application of mustard.

I have alluded to the use of the hot bath in the treatment of false labor pains. It is equally useful during the early stage of true labor. Hyperemia of all the abdominal and pelvic organs exists at this time; the circulation is disturbed, the ligaments of all the pelvic articulations are being stretched and relaxed. All this produces discomfort of more kinds than one, which has to be added to the actual pain of uterine contraction in estimating the suffering of early labor. This discomfort is immensely relieved by immersion of the patient in hot water.

In helping the uterus to dilate the cervix, hot baths, friction over the abdomen, changes in posture, and, sometimes, the application of the binder, are useful.

The Topical Use of Quinine in Leucorrhœa.

Dr. Hardwicke (*Lancet*, January 7th, 1899) speaks as follows about the topical application of quinine to the mucous membrane of the cervix uteri and vagina in cases of leucorrhœa: A patient, the mother of six children, who had been a sufferer from the above complaint for some years, having used the various remedies usually prescribed in such cases but with only temporary benefit, her trouble sooner or later recurring, adopted the use, from prudential motives, of what proved to be quinine pessaries. Since using them not only had her leucorrhœa disappeared but her general health had improved. I have since used quinine topically in several cases of simple leucorrhœa always with great success—in fact, I do not know of a single instance in which it has failed or in which quinism has been produced. It may be used in the form of douche or pessary. I adopt the latter form as being obviously the better one; the drug has a better chance of closer and more continuous contact with the congested membrane. I prescribe three grains of the hydrobromate in a half-drachm pessary in combination with oleum theobromatis, but the pessus quininae of the "Extra Pharmacopeia" containing the hydrochloride answers just as well. One insertion a day is generally sufficient.

Post-Partum Hemorrhage Treated by Rectal Injection.

F. de Jersey, M.B., Ch.B. (*Lancet*, December 17th, p. 1628), was called to a woman 1½ hours after the birth of her thirteenth child. She was utterly collapsed and blanched, and the pulse

was imperceptible. The placenta had not come away. Two pints of hot saline solution were injected into the rectum. In a few minutes the pulse returned. The placenta was removed under chloroform anesthesia.

We have published another article on the value of saline injections in severe hemorrhages and in puerperal convulsions. Intravenous or subcutaneous injection is usually recommended. But it has always seemed to us that for the emergencies of general practice rectal injection was far the best method. No special instruments are required. The theoretical advantage that intravenous injection acts more rapidly than rectal is more than neutralized by the greater time required in preparing for and performing the former operation.—*Med. and Surg. Review of Reviews.*

[I have for the last four years been much pleased with the results of the administration of hot saline enemata in cases of severe hemorrhage and puerperal eclampsia, and have often wondered why so many surgeons apparently ignore this simple, safe, and generally satisfactory procedure, and prefer the very serious operation of intra-venous injection. My rule is to commence with the saline enemata; if they fail, I try subcutaneous injections; last of all, in desperate cases where the other methods have failed I recommend the intra-venous injections.—A. H. W.]

A New Device for the Arrest of Post-Partum Hemorrhage.

Arndt (*Münchener Med. Wochenschrift*, No. 43, 1898, p. 1390) proposes a new treatment for atonic uterine hemorrhage. Though deaths from post-partum flooding are not so common as formerly, now that the manual expression of the placenta has been limited to suitable cases, Dührssen's statement that in Prussia alone there is probably one death a day from this cause, shows the need of a reliable method of treatment. Dührssen's tamponade is valuable, but is not without danger.

Arndt's treatment consists in seizing the flaccid lips of the os with one or two bullet-forceps, and forcibly but slowly drawing the uterus downwards as far as possible. This is repeated three or four times, until all hemorrhage has ceased and the uterus is firmly contracted.

This mechanical device acts, firstly, by rendering the uterus anemic. This has long been known to operating gynecologists. Winter, Hegar, and others have proved that pan-hysterectomy, of even the gravid uterus, for cancer can be performed without danger from hemorrhage if this precaution is taken. Secondly, it not only arrests bleeding at once, but stimulates the uterus to contract, and prevents its further relaxation; partly by the irritation of the automatic ganglia in the middle layer of the

uterus, and by stretching the uterine nerves in the broad ligaments, partly because anemia of the uterus is one of the strongest stimuli to contraction.

The great advantages of the method are its certainty, simplicity, and—with the most elementary precautions—avoidance of sepsis.—*Med. and Surg. Review of Reviews.*

Orthoform and New Orthoform.

Klaussner (*Münchener med. Wochenschrift*, October 18th, 1898) draws attention to a new modification of orthoform ("Orthoform neu") introduced by Einhorn and Heinz. The new orthoform has the same action as the original, but presents the following advantages over it: (1) The powder is more homogenous, whiter in color, and does not cohere into lumps to such an extent. (2) It is considerably cheaper, and since its action is manifested in a 10 to 20 per cent. mixture with starch or other powder, its price is no longer prohibitive.

Orthoform, though introduced so recently as August, 1897, has proved serviceable in a great variety of painful affections, both external and internal, through the local anesthesia which it produces whenever the nerve endings are exposed. Neumayer and others have found that, insufflated in tuberculous laryngitis, accompanied by severe pain, it causes anesthesia for 18 to 36 hours, allowing solid food to be taken with comfort, and thus improving the general health. Other clinicians have employed it in painful gastric affections in doses of 15 grains, and have found that, while it relieves the pain of gastric ulcer, simple or malignant, with certainty for some hours, it has no action if there is no solution of continuity. On this account it is a very valuable aid to diagnosis in these cases. Good results have been obtained in skin affections such as prurigo or herpes zoster. A 5 per cent. ointment relieves the pain of corneal ulcer. It has also been reported on very favorably by dentists, as relieving the pain accompanying exposed pulp or excavation of carious teeth, and by gynecologists as a local anesthetic for curetting or plugging the uterus. Surgeons have praised it as an application to anal fissure, malignant ulcers and bed-sores. Hirschbrüch uses it in a 3 per cent. emulsion instead of cocaine for infiltration anesthesia, and Lob adds it to injections of mercury in syphilis. Orthoform has the great advantage over cocaine of being absolutely non-poisonous.—*Med. and Surg. Review of Reviews.*

Treatment of Fissure of the Nipple.

Maygrier and Blondel (*Bull. et Mém. de la Soc. Obs. et Gyn. de Paris*, November 10th, 1898) report favorably on the use of orthoform for cracked nipples. It belongs to the same chemical

family as cocaine, which was tried for the same thing by Her-gott. Cocaine has the drawbacks, first, of being apt to produce toxic effects: secondly, of exerting a tendency to suppression of the milk secretion. Indeed, one of the authors has used it for this purpose. Orthoform is a powerful local anesthetic, whose action is more enduring than that of cocaine, lasting on an average twelve hours. It has no effect, however, when applied to the unbroken skin: and it must be kept continuously applied to the wounded surface. A slight burning sensation is felt for a few seconds when first applied. Orthoform has the further advantage of being antiseptic, so that it does not require sterilizing before use. It produces a marked effect in hastening the cicatrization of the fissures. The authors tried it in forty cases; all, without exception, experienced a more or less marked relief. They employed it in three forms: the powder with a moist dressing, the powder with a dry dressing, and a saturated alcoholic solution. For the first the powder is applied to the fissure and sterilized gauze is placed over it and covered with a piece of protective. For nursing the dressing is removed and the breast wiped with a sterilized compress; when the nursing is finished the whole dressing is put back. The second plan consisted simply in the substitution of dry compresses for the wet. The third plan is to apply a few drops of a saturated solution of orthoform in 80 per cent. alcohol; a dry compress is then placed over it. They found the last plan the best; the analgesia is effected much more quickly, the burning sensation is less and of shorter duration, and to the beneficial action of the orthoform is added that of the alcohol. Cicatrization was generally complete in four to five days, without any interference with suckling: by other methods cicatrization takes ten to twelve days even when nursing is suspended.—*Epitome Brit. Med. Jour.*

PATHOLOGY AND BACTERIOLOGY.

IN CHARGE OF J. CAVEN, H. R. ANDERSON AND J. AMYOT.

Neusser's Perinuclear, Basophilic Granules in the Blood.

Simon (*Amer. Jour. Med. Sciences*, February, 1899) discusses the presence of Neusser's granules in the blood and their relation to the elimination of uric acid and xanthin bodies in the urine. These granules, originally described by Neusser, in 1894, have a marked affinity for basic dyes, and in blood preparations stained with a modification of Ehrlich's tri-acid formula are seen as small, irregularly-sized, greenish-black or black granules located in immediate contact with the nuclei of the leukocytes. Neusser affirmed that the presence of these

granules was indicative of the uric-acid diathesis in its widest sense, including gout, lithiasis, muscular rheumatism, leukemia, Hodgkin's disease, neuralgia, neurasthenia, diabetes, gastro-intestinal derangements and nervous asthma. He also held that the presence of the granules in the blood of tuberculous subjects was of favorable prognostic import.

Simon suggests the following questions: "1. Are Neusser's granules found in the blood under normal conditions? 2. In diseased conditions, are these granules confined to the blood of patients suffering from the uric acid diathesis? 3. Does a constant relation exist between the presence of these granules in the blood and the elimination of uric acid, xanthin bodies, or both? 4. Is the presence of the granules of any prognostic import in tuberculous subjects?"

From a carefully conducted series of examinations, in which the urine of each subject was examined quantitatively for uric acid and xanthin bodies, on the same day that the blood was taken, Simon comes to the following conclusions in answer to these questions: 1. That the granules are present (in varying numbers) in the blood of all healthy subjects, and their absence in a supposedly healthy individual may be regarded as presumptive evidence of some morbid process. 2. That in diseased conditions the granules are not more marked in the blood of those suffering from the uric acid diathesis than in that of those suffering from other diseases. 3. That a constant relation between the presence of the granules and the elimination of uric acid and xanthin bodies in the urine does not exist. 4. That the presence of the granules in tuberculous subjects is not of favorable or unfavorable prognostic import.

Gonorrhœal Septicæmia and Ulcerative Endocarditis.

In a highly interesting paper, in the *Journal of Experimental Medicine*, January, 1899, Thayer and Lozear record a case of the above, occurring in the Johns Hopkins Hospital, and in which, fortunately, they were able to demonstrate the character of the disease—so far as its cause was concerned—by means of cultures from the blood during life, and from exudates and blood after death. This case of Thayer and Lozear is perhaps the only one in which the proof of the gonococcal origin of a septicæmia and, finally, of an ulcerative endocarditis as the terminal accident of the septicæmia, is quite beyond cavil. Thayer and Blumer had already put a case upon record in which the proof is, to most readers, conclusive enough, but Fränkel takes exception. None can be taken in this second case. "Clinically the case presented the features of a grave, acute nephritis with anemia, anasarca, ascites, and finally uremic coma." The anatomical diagnosis (p.m., made by Pro-

fessor Flexner) was "gonococcal septicemia; subacute gonorrhoea; subacute vegetative and ulcerative tricuspid endocarditis, caused by the gonococcus; subacute splenic tumor; chronic passive congestion of liver; subacute hemorrhagic and glomerular nephritis; acute sero-purulent pleurisy and pericarditis, caused by gonococcus; pulmonary infarct."

Summary of conclusions, based upon the study of thirty-two cases:

1. An acute gonorrhoeal urethritis may be the starting point for a grave general septicemia, with all its possible complications.

2. These infections may be mixed or secondary, due to the entrance into the circulation of organisms other than the gonococcus, or they may be purely gonococcal in nature.

3. Endocarditis is an occasional complication of gonorrhoea.

4. This endocarditis may be transient, disappearing with but few apparent results, or it may leave the patient with a chronic valvular lesion, or it may pursue a rapidly fatal course with the symptoms of acute ulcerative endocarditis.

5. The endocarditis associated with gonorrhoea is commonly due to the direct action of the gonococcus, but may be the result of a secondary or mixed infection.

6. Pericarditis may also occur as a complication of gonorrhoea, but is less frequent than endocarditis. It may, as in the case of the latter, be the result of a pure gonococcal or of a mixed infection.

7. Grave myocardial changes, necroses, purulent infiltration, embolic abscesses are common in severe gonococcal septicemia.

8. In instances of gonococcal septicemia the diagnosis may, in some cases, be made during life by cultures taken from the circulating blood according to proper methods.

The Bacteriology of Noma of the Vulva.

Freymuth and Petruschky (*Deut. med. Woch.*) report a case in a child aged three years, in which the diphtheria bacillus was found, and which was treated with the serum. The child was admitted on February 2nd with recent measles. There was much hoarseness and considerable dyspnea. On February 5th an extensive noma was observed in the external genitals. Cultivation experiments revealed, besides other microbes, one exactly resembling the diphtheria bacillus. The dysphagia, along with the laryngitis, rhinitis, and noma, suggested a mixed infection of measles and diphtheria, and therefore anti-diphtheritic serum was injected. The child gradually improved, the slough separating from the vulva. It received in all 6,000 immunity units, and made a good recovery. Freymuth states that previous researches have shown noma to be due to various

microbes. In the above case it was due to the diphtheria bacillus. Later in the disease exudation was observed on the uvula and palate. Noma was thus successfully treated with antitoxin. Freymuth thinks that if a bacteriological examination is made, the number of cases due to the diphtheria bacillus will be found considerable.—*Med. Age*, January 25th, 1899.

Sarcoma of Vagina.

Morris (*Practitioner*, December, 1898) reports a very interesting case of sarcoma of the vagina. The patient, a woman of twenty years of age, had been married eight months, and was six months pregnant. The growth which obstructed the outlet, was removed, and proved on microscopic examination to be a mixed cell sarcoma. There has been no recurrence after two and a half years. The rarity of the growth is shown by the small number (fifty) of which Morris could find record. The facts of its complicating pregnancy and not having recurred add to the interest.

Heart Disease in Fetus and Children.

E. A. Sansom (London *Lancet*, December 10th, 1898) speaks of endocarditis in the fetus as being right-sided. He recalls the case recorded by Constantin Paul in 1880, of a girl of seventeen years of age, who was admitted to the hospital of La Pitié in Paris for accouchement, being in the last month of pregnancy, and examination of whose womb by auscultation revealed highly abnormal fetal heart sound. The first sound of the "tic-tac" was replaced by a harsh murmur. The infant was born in a moribund condition, and *post-mortem* examination showed the right chambers of the heart to be hypertrophied and dilated, whilst the left side was normal. The tricuspid valves showed endocarditis, both sclerous and vegetative. In thirty *post-mortem* examinations of children having organic heart trouble, Sansom found vegetations on the tricuspid in six cases. The heart lesions in rheumatism bear no relation in time or degree to the articular symptoms.

Phosphorus Necrosis and Tuberculosis.

In the *Brit. Med. Jour.* of January 7th, 1899, Stockman gives the result of his investigations in phosphorus necrosis cases amongst match-makers, and concludes that tubercular infection is really at the bottom of the mischief in the jaw. The disease begins, he says, in a carious tooth or the cavity left by tooth extraction. In rapid cases the gum swells, becomes red and tense, and finally an abscess containing fetid pus forms. Necrosis of the soft tissues is followed by bone necrosis, result of chronic periostitis and osteitis. Examination of the pus in

six cases showed the bacillus tuberculosis in all. When death occurs it is generally from pulmonary tuberculosis. The action of the phosphorus is a preparatory one, causing a lesion of the tissues in which Koch's bacillus can lodge and grow.

PEDIATRICS.

IN CHARGE OF ALLEN BAINES, W. J. GREIG, AND W. B. THISTLE.

Cyclic Vomiting.

H. B. Whitney, M.D. (*Archives of Pediatrics*, November, 1898).

Edward G., aged 8½ years, was noticed by his parents on June 21st to be developing certain symptoms which had been known by past experience to be precursors of gastric disturbance. The symptoms were pallor, darkness under the eyes, restless sleep, coated tongue and heavy breath. They had kept him in bed on a limited fluid diet for twenty-four hours.

The writer saw the boy on the 22nd. He gives the following description of the boy at that time: Fairly nourished but delicate-looking. Pulse, 120; temperature, 101°; respiration, normal; tongue moderately coated and breath offensive; abdomen moderately retracted, but no tenderness. At the base of the heart over the pulmonic area was a slight systolic soufflé. On the 24th and 26th this soufflé had disappeared, and the writer had no reason to suspect any organic lesion.

On the 23rd, although nothing had been taken by the mouth for over thirty-six hours excepting a little calomel and teaspoonful doses of cold water, the boy began to vomit, and continued it for twelve hours. The vomit was some watery mucus, and once contained shreds of clotted blood.

On the 25th, without any medication, the condition much improved, so much so that on the 26th milk was being given at the rate of three pints in twenty-four hours.

This attack would be of little importance in itself were it not that at strikingly uniform intervals similar attacks had occurred. The first attack was on September 14th, 1896, and came without known cause and was very severe. The vomiting lasted five days and was followed by extreme exhaustion. The pulse at one time reached 190, and was irregular. Following this attack were others on December 23rd, 1896; March 20th, 1897; May 20th, 1897; August 18th, 1897, and November 18th, 1897.

The writer thinks that the disease is a gastric neurosis, rather than a gastritis, and under the head of etiology suggestively refers to the numerous poisonous bodies found by Rachford in the urine of persons suffering from such crises as migraine and periodic vomiting.

Book Reviews.

Self-Examination for Medical Students. Three thousand questions on Medical Subjects arranged for Self-Examination. Second edition enlarged. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

This little book is published for students. The questions refer to both primary and final subjects. For instance, in surgery, we find: What is the cause of inflammation? 9-20. Describe the varieties of inflammation. 9-19. How does inflammation terminate? 9-19, 31, etc. The figure 9 refers to a book of reference — Horwitz's "Quiz-Compend on Surgery, Minor Surgery and Bandaging," while 20, 19, etc., refers to page. That is to say, on page 20 of a certain quiz-compend you get the answer to the first question. The price of this book is only ten cents, but it is not of much use without the set of fourteen quiz-compends published by the Blakiston Company.

The American Year-Book of Medicine and Surgery. Being a yearly digest of scientific progress and authoritative opinion in all the branches of medicine and surgery, drawn from journals, newspapers and text-books by the leading American and foreign authors and investigators, under the general editorial charge of GEORGE M. GOULD, M.D. Illustrated. W. B. Saunders, 923 Walnut Street, Philadelphia. J. A. Carveth & Co., Toronto.

This is an admirable work in all respects. The different contributors, all of whom are well-known authorities in their various departments, have done their work well, and have furnished a fair epitome of the medical and surgical literature of the year. We believe that no better work of the kind has ever been published. We desire to congratulate the able Editor-in-Chief, Dr. George M. Gould, on the great success that he has achieved. The work will be highly appreciated by the general practitioner.

Clinical Report of the Rotunda Hospitals for one Year. By R. DANCER PUREFOY, M.D., Master; T. HENRY WILSON, HENRY JELETT, R. P. R. LYLE, Assistant Masters. Printed by John Falconer, 53 Upper Sackville Street, Dublin.

The Dublin School of Obstetricians has for more than half a century been recognized by the medical world as one of the

best that has ever existed. It has been eminently safe and conservative, yet ever practical and progressive. In this report we get interesting details of the methods adopted in Rotunda in various emergencies as well as in ordinary routine work. The Rotunda Hospital is the largest lying-in hospital in Great Britain, and consists of two distinct hospitals, in one of which about 1,800 labor cases are admitted in each year, while in the other about 500 patients suffering from diseases peculiar to women are treated in each year. The medical report of the hospital for the past two years can be obtained post free on application to the Master, Dr. R. D. Purefoy, Rotunda Hospital, Dublin, Ireland.

A Text-Book of Mechano-Therapy. By AXEL V. GRAFSTROM, B.Sc., M.D., late Lieutenant in the Royal Swedish Army; late House Physician, City Hospital, Blackwell's Island, New York. Philadelphia: W. B. Saunders, 925 Walnut Street. 1898. Price \$1.00.

This is a small manual in which the author treats of massage and medical gymnastics in a clear and concise manner. The first six chapters are devoted to a description of the movements used and to general massage. They are appropriately illustrated in such a way as to materially help the student or nurse wishing to acquire the art. The system used by the Royal Gymnastic Central Institute of Stockholm, Sweden, has been followed largely, with some modifications suggested by eminent authorities on the subject. The remaining chapters deal with the application of the system to special diseases giving the proper movements for several classes of cases such as diseases of the respiratory organs, urinary organs, cardiac diseases, rheumatism and gout, constipation, diseases of the nervous system, diseases of children, and also gives a short review of mechano-therapy in connection with obstetrics. It is a book well worthy of a careful perusal.

The International Medical Annual for 1899. New York: E. B. Treat & Co., 241 West 23rd Street.

The seventeenth issue will soon be ready, and from the advance announcements we predict a book superior to its predecessors. Among the special articles will be found the following: "Practical X-Ray Work," by R. Norris Wolfenden, M.D., B.A.; "Advances in Skull Surgery," by Seneca D. Powell, M.D.; "Surgical Treatment of Paralysis," by Drs. Robert Jones, F.R.C.S., and A. H. Tubby, M.S., M.B. These articles will be freely illustrated, chiefly by reproductions from photographs. "Climatic Treatment of Consumption," by F. de Havilland Hall,

M.D., F.R.C.P. An article on "Legal Decisions Affecting Medical Men," by William A. Furrington, A.B., LL.M., will be found interesting and pertinent. In response to the request of many of the subscribers there will be found an article on "The Chief Pathogenic Bacteria in the Human Subject," with descriptions of their morphology and methods of microscopical examination, by S. G. Shattock, F.R.C.S., the Pathological Curator of the Museum of the Royal College of Surgeons, London, illustrated by a series of finely colored plates.

ANNOUNCEMENT. - J. B. Lippincott Co., Philadelphia, in the ninth annual announcement of *International Clinics* give notice that the price of this well-known quarterly, on, and after the April, 1899, issue, will be, for cloth binding, \$2.25, and half leather, \$2.50 per volume, the annual subscription being thereby reduced from \$12.00 and \$13.00 for the respective bindings, to \$9.00 and \$10.00. New or renewal subscribers in Canada may address their orders to Charles Roberts, 593A Cadieux Street, Montreal.

Personals.

Dr. Harley Smith has removed to 190 Spadina Avenue.

Dr. Wm. Goldie has commenced practice at 56 College Street, Toronto.

Dr. J. H. Lowe, of the Montague Private Hospital, has gone to England.

Dr. A. R. Gordon will remove to Bloor and Huron streets on March 1st.

Dr. Edward H. Horsey, of Shanghai, China, is spending a few weeks in Toronto.

Dr. R. Rowan, of Stouffville, has removed to Toronto and located at 301 Dundas Street.

Dr. John Malloch, Toronto General Hospital house staff, 1897, has located on College Str. et.

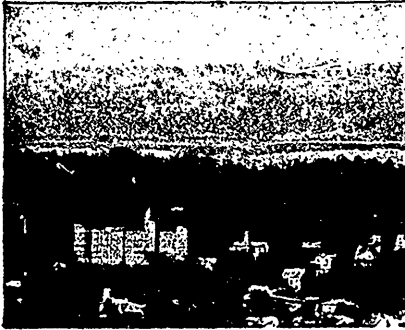
Dr. S. H. Westman has returned after a year in the Woman's Hospital, New York, and located on Spadina Avenue.

Dr. Charles Carter, Trinity, '96, has located in Grand Valley, Ont., having purchased the good-will, fixtures and instruments from the estate of the late Dr. Gavillier.

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Dr. George R. McDonagh, of Toronto, reached Gibraltar, February 5th, and the next day went on to Naples.

Dr. W. P. Caven, of Toronto, went to Old Point Comfort, February 21st, and expected to remain about a fortnight.

It is said that Dr. Thos. Roddick, M.P., of Montreal, is tired of politics and will resign at the end of the present term.

Dr. G. Sterling Ryerson left Toronto, February 9th, for Atlantic City, N. J., where he expected to spend a brief holiday.

Professor Wm. Osler, of Baltimore, will deliver the Caven-
dish lecture for 1899 before the West London Medico-Chirur-
gical Society.

Dr. F. Montizambert, Medical Director of the Public Health Department at Ottawa, came to Toronto, February 21st, and remained a week.

Dr. Ryerson has been appointed an associate-editor of the *Annals of Ophthalmology*, with the charge of the department of the British Colonies, including India.

Dr. Wm. Graham, who practised in Brussels for many years, and recently in Toronto for a short time, is now located in Clinton in place of Dr. James L. Turnbull.

Dr. Jas. E. Graham, of Toronto, had a slight illness from bronchitis, following la grippe, in Baltimore, but was only confined to his room for a few days. He left Baltimore for Florida, February 8th.

Dr. George S. Wattam, who has been practising in Minnesota since he graduated in 1884, paid a visit to his relatives in Picton. On his return journey he remained a few days in Toronto.

Dr. James L. Turnbull, formerly of Clinton, passed through Toronto, February 17th, on his way to Europe, where he expects to remain about a year. He will go first to Berlin, where he will remain a few months.

The following physicians of Toronto attended the funeral of the late Dr. Mullin, of Hamilton, February 24th: Drs. Rosebrugh, Reeve, O'Reilly, Wright, Ross, Grasett, Cameron, McPhedran, J. D. Thorburn, McGillivray, and McIlwraith.

Dr. J. Heurner Mullin, who graduated 1897, University of Toronto, was a resident assistant in the Toronto General Hospital for one year. After leaving the hospital in July, 1898, he assisted his father, the late Dr. Mullin, of Hamilton, in his practice. He will continue to practise in the house formerly occupied by his father.



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Obituary.

JOHN ALEXANDER MULLIN, M.D.

Canada has lost through the death of Dr. John A. Mullin one of her greatest physicians and one of her best citizens. Dr. Mullin was born in New York City in June, 1835. When he was two years old his family came to Canada and settled in Brant County, Ontario. After completing his preliminary education in the public schools he studied medicine under Dr. Rolph. He took the ordinary course in "Rolph's School of Medicine," and received the degree of M.D. from the University of Victoria College in 1859. After graduating he went to New York, where he remained a short time. He then returned to Canada and located in Toronto; but on receiving the offer of a position in the General Hospital, of Hamilton, he went to that city. After a short residence in the hospital he commenced general practice in Hamilton, and was soon recognized as one of the leading physicians of Ontario.

Apart from his services to his patients Dr. Mullin always took a keen interest in matters pertaining to the general welfare of the profession. He was one of the most prominent members of the Canadian Medical Association, of which he was a past-president, and also of the Ontario Medical Association. In private life he was greatly beloved and highly respected by all who knew him. His friends noticed several months ago that his health was failing. Symptoms of a serious condition in the region of the stomach appeared, and he steadily lost ground until death brought relief from his sufferings. He died Feb. 21st, 1899, aged 64. The funeral, which took place Feb. 24th, was a very large one. All classes of citizens felt that a "great man had fallen," and wished to show respect to his memory by following his remains to their last resting place. We deeply mourn our loss by his death. The profession has few such men as John Alexander Mullin, and none better.

W. H. DUNNINGTON.

W. H. Dunnington, a third-year medical student at the University of Toronto, died very suddenly, February 27th, 1899, at the General Hospital, from acute appendicitis, after an illness of two days. Deceased was about thirty years old, and was immensely popular among his college mates and friends generally. He was vice-president of the University Medical Society, and previous to his career as a medical student he lived in Victoria, British Columbia. During the last few months he lived with his mother and two sisters in Toronto. The members of the Medical Faculty, and the students in a body, followed the remains to the Union Station on the morning of March 1st. The funeral took place in Owen Sound on the same day, a number of the students of his year acting as pall-bearers.

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Selections.

Splenectomy in Malaria.

Laccetti (*Giorn. Internaz. delle Scienze Med.*) reports a case where he removed an enlarged malarial spleen. Six days later an intermittent fever appeared, which soon yielded to quinine injections. This was probably due to the sporulation of the malarial parasite, which, according to Pes, may remain latent in the blood for months. The patient experienced also violent pains in the long bones, which it is suggested were due to a vicarious action of the bone-marrow. Laccetti states that the simple congested spleens found in chronic malaria are reduced by quinine or vaso-constrictor drugs—such as arsenic, strychnine, ergotine—or electricity; when, however, there is a hypertrophic interstitial splenitis, splenectomy is indicated, especially if the enlarged spleen is painful.—*Med. and Surg. Review of Reviews.*

Boulimia.

On August 27th an inquest was held at Plumstead upon the body of William Ward, aged 84, an army pensioner, who died from asphyxia. At the post-mortem examination three pieces of meat, measuring in all twelve inches in length, were found in the deceased's "throat." Evidence was given that he was always a gluttonous feeder and in the habit of bolting his food. His daughter-in-law said that she used to mince his food, but that even then he would bolt such large spoonfuls that he had to gasp for breath. A verdict was returned of "Accidental death." Instances of ravenous appetite are not uncommon, constituting the condition known as boulimia or bulimy, moreover this craving for food substances is sometimes associated with another condition known as polyphagism, when the sufferer eats pins, string, broken bottles, and other indigestible articles. The *Lancet* for May 5th, 1894, commented upon the death of a man in the London Hospital whose stomach was found after death to be full of a heterogeneous mass of these things. Certain tribes in South America are known as earth-eaters, from the habit they have of filling their stomachs with clay, and the custom of gorging is not uncommon among those who live a precarious life. In 1799 there was a French prisoner in England, by name Charles Domery, one of nine brothers who with their father were all remarkable for voracious appetite. One day he was allowed as much to eat as he liked, and between 4 a.m. and 6 p.m. consumed four pounds of

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raw cow's udder, ten pounds of raw beef, two pounds of candles, and five bottles of porter. The narrator remarks: "It is also to be observed that the day was hot, and not having his usual exercise in the yard, it may be presumed he would otherwise have had a better appetite." We fancy the custom still exists in some parts of the country of having hasty pudding eating matches, and at a certain college in Oxford the following rite obtains, or used to do twenty years ago. On Mid-Lent Sunday the first lesson in the evening is Genesis xliii., which gives an account of Benjamin's mess, which was five times as great as any of the other's. Furmenty was always served in Hall on that evening, and the junior man at each table was considered as Benjamin and served with an enormous helping. If he ate it all he could "sconce"—*i.e.*, fine the whole table in sherry—if he could not he was himself fined. When this custom originated no one knows, but it is probably like so many other old customs, a remnant of paganism with a veneer of Christianity over it.—*Lancet*.

Serum Diagnosis in Pediatrics.

After a short account of the diagnostic experiments of Gruben-Widal, which produced such favorable results in abdominal typhus, Pfaundler (*Deutsche med. Woch.*, No. 41, 1898) quotes his own experiments in similar cases of intestinal complications by systematic examination of the intestinal bacteria by serum tests, to find the cause of this disease. His researches may be attributed to an endeavor to establish the theory (as yet but little discussed) that in above-mentioned cases an etiological meaning may be more readily ascribed to the agglutination of bacterial species taken from the serum of a patient. A succession of about seven hundred separate reactions furnished the following conclusions: (1) That the saprophytic bacterium coli of the healthy intestine does not react upon the serum; (2) that in certain cases of contagious colitis a specific agglutination of bacterium coli develops; (3) that the same reaction appears in many instances in which the bacterium coli does not result from primary intestinal lesions, although it may proceed from certain conditions caused thereby, as peritonitis or cystitis. Positive results of serum reaction have been obtained from intestinal bacteria other than bacterium coli; for this reason the positive result of examination of serum for streptococci is noteworthy. A second phenomenon is the formation of fibre; a third (though noticed in few cases only) is the entire freeing of bacterial bodies, caused by extreme attenuation of the blood-serum. This refers to those mesenteric forms in the stools. This freeing took the form of dependent drops as in Dr. Pfeiffer's experiments on animals.—*Medical Age*.