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CANADA

MEDICAL & SURGICAL JOURNAL

MARCH, 1886.

Original Communications.

CLINICAL LECTURE.

By PROF. WILLIAM PEPPER, M.D., of Philadelphia.

Delivered in the Hospital of the University of Pennsylvania, February 6th

Bright's Disease.

Here is a case, gentlemen, that possesses several points of interest, and will afford me the opportunity of making some practical remarks. This man offers a past history of exposure and a reckless life, so that when he came into the hospital, suffering with an acute attack of kidney disease, we were justified in supposing that he had a chronic, latent Bright's disease, and that his present illness was an acute exacerbation of his chronic disease. He came to us with great and rapidly-increasing anasarca, his urine was dark and thick. The general symptoms, the constitutional derangement, were not so great as one would expect to find in cases where the kidneys were evidently so much deranged as the localized symptoms (the dropsy and the condition of the urine) would indicate that they were in this case, and this fact lent additional force to the view that the present attack was an acute exacerbation of a chronic condition, for it demonstrated to us that the system had created a tolerance of the pernicious influence of the disease, which could only have been caused by a long existence of the disease in a latent condition. It is a fact that in those who are the subjects of chronic Bright's disease, acute attacks of the same may supervene without causing anything like that amount of systemic perturba-

tion that will occur in those who were previously well. Therefore the very tolerance of the disease which this man displayed was a bad omen for his recovery. The anasarca was enormous, the urine was scanty, and the proportion of albumen was very great. I feared the development of uræmic symptoms, and so decided upon a brisk depurative course. As he had considerable gastric disturbance, I was loth to give medicine by the stomach for this purpose, particularly those of an irritant character, and I therefore decided upon diaphoretics in preference to purgatives. On the 24th of January he was given 30 minims of the fluid extract of jaborandi in the morning. This caused a very free sweating. His diet was confined to milk, of which he was given three pints in twenty-four hours. While he had been passing only about twenty ounces of urine daily, the day he took the jaborandi he passed thirty ounces. On the 25th, his bowels were moved, and he was still sweating, showing how powerful and how lasting are the effects of jaborandi. On the 26th, he was given another similar dose of jaborandi, when he again sweated very freely, and when it was noted that during the sweat he had lost five pounds in weight. As this was the only time he was weighed, there might have possibly been some inaccuracy, but, in future, I will have him carefully weighed before and after each sweating. The headache of which he had complained all along still continued.

I would call your attention to the action which jaborandi here had on the urinary secretion, increasing it from twenty to thirty ounces. I have repeatedly observed this action. Not only does this drug cause sweating, salivation, and sometimes watery vomiting, but it is also a most admirable diuretic; it promotes a great watery drain from the system, and I think that there is no drug comparable to it to remove fluid accumulations.

On the 28th, he was again given jaborandi, and again sweated profusely. After this it is noted that he breathes easier, there are less râles, and the œdema is less. On the 31st, the dose was again repeated, since which time it has been given on alternate days. He is still very considerably water-logged, but the œdema is much less marked than it was. The arms show less

improvement in this respect than do the other portions of the body. Let us here note the difference between the dropsy from heart disease and that from disease of the kidneys. In cardiac dropsy we may have the legs and belly swollen and the lungs congested, but, as a rule, the dropsy will diminish as we go from the periphery towards the centre, and we will have none in the hands and arms; neither would the face be puffy in cardiac dropsy unless kidney disease co-existed with it. The reason for this is that in cardiac dropsy the cause is purely mechanical, a mechanical interference with the venous circulation, in consequence of which the watery constituents of the blood are forced out into the cellular tissue. This dropsy will therefore naturally occur most where there is the most impediment to the circulation; the further we get away from the heart, the greater will be the obstruction, since the diseased heart will not be able to force the blood along with its accustomed power. So, also, the force of gravity will favor dropsy in the lower limbs. Now, in renal dropsy, there is, of course a mechanical influence at work, but this is the least important factor; the blood is loaded with effete matter, on account of which the capillaries seem unwilling to let it pass through their walls, the suction action of the tissues, which is so essential to terminal circulation, is less, there is a torpid state of molecular tissue interchange, so that while the dropsy of cardiac disease is a propulsive dropsy, the water is forced out because the blood does not properly circulate, it is in renal disease more of a functional dropsy, so to speak, the water escapes because the blood stagnates, because, owing to lessened molecular interchange, there is less invitation, less inducement, less suction to aid the blood in its course through the capillaries. This explains why, in renal dropsy, we have the effusion everywhere, in all parts of the body, why it is so universal. There is still another reason; we must remember that Bright's disease is, in reality, not a local disease, but a general or constitutional disorder that has its seat of greatest manifestation in the kidney. Acute nephritis is, of course, a local disease, but when it has existed for some time, when it has become chronic, or when we have it coming on in that slow, insidious manner, so characteristic of Bright's disease, then the whole system is really involved.

The sheaths of the vessels are involved, and there is widespread tissue change, of which the disease of the kidney is but the most prominent part. So we have general constitutional disturbance, a local disease of the vessels everywhere that tends to favor the transudation of fluid. Very often, in renal disease, the dropsy will make irregular manifestations, appearing in one place and not in another on account of those conditions we have mentioned. In cardiac dropsy, the feet will oftentimes be swollen when the patient is walking or standing, when, however, he lies down over-night, when he rises in the morning it will be gone and will maybe show itself in the face; the water is free to move in conformity with the laws of gravity. In renal dropsy there is some of this influence, but the local causes I have mentioned have much more influence. These changes, this view of the constitutional nature of Bright's disease will do much to explain to us the varied symptoms and complications of kidney disease, the brain lesions, the hemorrhages, the retinal affections, the heart complications and the inflammations of serous membranes, so that we must consider that we have more than merely a poisoned blood, we have widespread lesion of the capillaries. This fact will have a great bearing on our treatment and prognosis. In proportion as the system has suffered, so will be our prognosis; where the systemic implication is great, there will the prognosis be unfavorable, and *vice versâ*. If the disease be localized to the kidney, we will have more chance of affording relief by securing vicarious elimination of the urinary constituents. This is a difficult case in which to make a forecast. The urine has been persistently bad, there is so much albumen that heat and nitric acid almost solidify it. We will continue the treatment of milk diet and jaborandi sweats on alternate days.

Chronic Bronchitis and Emphysema. Has the Man Phthisis?

Here is a man who suffers from gastralgia, but his main troubles are chronic bronchitis and emphysema. His family history is bad, as there is found a tendency to pulmonary disease, and he himself has been frequently and continuously exposed to vicissitudes of temperature. For three years he has had a

cough, which, remitting in summer, became worse in winter, and latterly has been continuous. He has also, as I have said, suffered from gastralgia, which is persistent. He has lost his health and suffers from dyspnœa, requiring to be propped up in bed that he may breathe. His fingers are blue and clubbed, and he has a constant cough, with copious sputa, but has never had hæmoptysis. The pain of which he complains is located in the left, sometimes in the right, epigastrium, but never in the back. It is sometimes very severe, it is not increased by the ingestion of food, though it is affected by changes in the weather. He will always derive relief from taking raw whiskey and leaning forward so as to make pressure on the belly. The pain is usually midway between the seventh rib and the median line. The bowels are costive, the liver somewhat small, and the spleen slightly enlarged. No tumor can be detected, and there is no disease of the kidney. So, then, for a long time, he has had spells of pain that seem like neuralgia. It may be, for it does so happen that the diaphragm may be strained and some of the pain may be muscular; it is not an uncommon thing in chronic bronchitis, on account of the violence of the coughing, to have a stretching or straining of the tendinous insertion of this muscle and consequent pain; but in addition to this, I must admit that there are in this case paroxysms of acute pain of a neuralgic character, which comes in spells, and is relieved by the whiskey and pressure. While, then, I would refer the continuous pain to a stretching of the muscle, the paroxysms I would ascribe directly to the nerves and call gastralgia. This is, however, but an accidental complication of the main trouble, the chronic bronchitis and emphysema. Now a very important question arises in this case, one that is of vital interest to the patient, namely, whether his lungs have degenerated into a phthisical condition or not. How shall I go about ascertaining this? Well, in the first place, he has gained in weight since he has been in the hospital. He never was a very heavy man at any time, his best weight being about 145 pounds. When he came into the hospital, on the 10th of January, he only weighed 100 pounds, but since then he has gained 9 pounds. Although the sputa have been repeatedly examined for them, no bacilli have ever been

found. At times a small amount of elastic fibre has been found in the sputa, but only occasionally, and not in the quantity that we would expect to see if the man had phthisis. The skin of his fingers is glossy, the nails are incurved, but the ends of the fingers are not markedly clubbed as we see them in phthisis. We frequently see this type of finger in chronic bronchitis, pleurisy and emphysema, quite as commonly as we do in phthisis, but in the latter disease there is more wasting of the finger, which makes the clubbed end that much more prominent by comparison. The man says that on the whole he feels easier than he did. Now when we inspect the chest, we find that the upper muscles of respiration are strongly marked, the shoulders are high, the spine rounded, but the chest is not quite so rounded or barrel-shaped as we are accustomed to have it described in emphysema. When we turn to the heart, we find that the impulse is scarcely perceptible, and it is best felt towards the epigastrium. The sounds are weak, but there is no murmur. The heart seems to be overlaid by the anterior edge of the left lung, which somewhat interferes with a thorough examination. When he breathes, there is very little expansion of the chest. The clavicles and sternum rise, but from the third or fourth rib downwards there is scarcely any true expansion, it is just merely an up and down movement. On percussion, there is marked resonance all over the back posteriorly, indeed it is not only marked, but I could truly say that the resonance is exaggerated, it is almost tympanitic, which justifies the expression of vesiculo-tympanitic. On auscultation, the vesicular murmur is found to be exceedingly feeble: over the whole of the lower lobe it can be hardly heard at all. On the left I can hear a few crackling râles. The weakness of the vesicular murmur I know is not due to the lung being pressed away from the chest wall, because if this were the case we would have dullness on percussion, whereas the exaggerated resonance proves to us conclusively that the lung is in direct apposition to the chest wall. But the feebleness of the vesicular murmur is due to the inability of expanding the lung which exists. This is a valuable sign, for, taken in connection with the exaggerated resonance, it is characteristic of emphysema. It is a fact that the presence of bronchitis

and emphysema is no proof against the existence of phthisis, for we might have a patch of degeneration anywhere. The reduced condition of the patient raises the suspicion of phthisis. In examining for this disease, we would, of course, first look to the apices of the lungs. I find nowhere any dullness, any blowing or cavernous respiration, and but the few râles I have mentioned; the same exaggerated resonance everywhere; everywhere the same wretchedly weak vesicular murmur on inspiration and a prolongation of the expiratory sound. There is no evidence of infiltration or consolidation. The habitual dyspnœa and the choking, smothering cough are characteristic of emphysema. There is not a free, full rush of air, as in other cough, hence it takes a long time to start the mucus. While the man has gone down hill, his descent has been very slow, for it has taken him eight years to lose forty pounds, and this downward course has been aided by a serious gastric complication. In ordinary phthisis, it seems to me, his failure of flesh would have been much more rapid. Then, again, he has recently gained in weight, and while it is true that we do sometimes see phthisical patients put on flesh (particularly if they have been removed from unfavorable to favorable surroundings), they do not maintain this gain. The absence of hæmoptysis is an important, though not a positive sign, for it is a fact that we may not have hæmoptysis in phthisis, while we may have it in emphysema; still, it is a sign of considerable value when taken in connection with the other symptoms. Again, he has had no fever, nor night sweats, nor diarrhœa. This marked and progressive dyspnœa is not a usual symptom in early phthisis, unless there is also emphysema, so that its presence here, with the other symptoms, favors the negative view. The expectoration also is opposed to the view of phthisis; it is not solid, there are no bacilli, and very little elastic tissue. In emphysema, we may have elastic tissue from the breaking down of the walls of the pulmonary vesicles. Coming down to the physical signs, which are the most important, we have a bilateral and symmetrical disease, there is no difference in the two sides, while in phthisis we usually find some difference. There is no point where we suddenly come upon cavernous or blowing respiration, it is the same

all over. The existence of bronchial râles on both sides may be taken as evidence of bronchitis and emphysema. In chronic phthisis we would find a cavity, which we do not. In miliary tuberculosis, where the tubercles are scattered throughout the lungs, we might find such symptoms as we have here, but it would be an acute case where the constitutional symptoms would be well marked and the patient would likely die before the physical signs of phthisis became evident. But here he has been sick for eight years. If he should suddenly take a turn for the worse, develop fever and night sweats, I would incline to the view that diseminated tuberculosis had occurred. I have seen such cases.

So, therefore, on the whole, I do not think that this man has phthisis. He is slowly improving, and when his stomach will tolerate them, I will give him tonic and nutrient remedies. The prognosis is comparatively favorable, so far as a fatal issue is concerned; he cannot be restored to vigor, his whole chest is blown up, he will always be short-winded, but he can be made so that he will be comparatively comfortable when he is quiet and avoids exertion.

THE "MEDICINE-MAN."

Or Indian and Eskimo Notions of Medicine.

A paper read before the Bathurst and Rideau Medical Association, Ottawa, 20th January, 1886.

By ROBERT BELL, M.D., LL.D.,
Assistant Director of the Geological Survey of Canada.

Last year, having had the honor of reading before you a paper on "Diseases among the Indians," I would now beg to follow it with a short account of the notions of these people on the subject of medicine.

The science of medicine has now arrived at such perfection among civilized nations that we have almost forgotten the crude beginnings out of which our present knowledge has been gradually evolved. But from our pinnacle of learning, it is curious and interesting to observe the darkness amidst which some of our fellow-men are groping even yet. The false and mistaken notions as to the principles and practice of medicine which pre-

vailed among our forefathers are recalled by some of those in vogue among the red-men; and while, in the light of our own superior knowledge, we may be disposed to laugh at their primitive ideas, we are reminded that many—perhaps the majority—of the doctrines once taught among our own people were absurd enough.

It is very difficult for a white man to learn precisely what the aborigines' views on medical subjects really are. Indians are by nature very reticent, and they appear to be afraid of ridicule; or in some cases they are jealous of giving away what they consider valuable secrets. It is seldom, indeed, that a white man gains their confidence sufficiently to induce them to speak unreservedly on this subject. Even with a good knowledge of the Indian character, one requires to gain an insight into this subject by slow degrees—first, perhaps, by observing and studying their actions; and after having ascertained a few facts, by judicious and serious questioning, as opportunities arise, one may build on these and ask further questions until he learns the greater part of what is current among them.

Many people speak of "the Indians" as if all tribes were alike in every respect. But, in truth, there are great differences. Those with whom I am best acquainted personally, from about thirty years' intercourse, are the various branches of the wide-spreading Cree or Outchipwai stock. I have also had some experience of the Eskimo, who differ widely from all the other aborigines of the continent, and who are not ranked as Indians at all.

Among the Outchipwais, the term "medicine" does not mean strictly material remedies or the practice of the healing art, but rather a general power or influence, of which that of drugs is only one variety. Hence a "medicine-man" is not simply a doctor of medicine, but a sort of priest, prophet, medium and soothsayer. He is also a juggler, conjurer, sorcerer or magician and general dealer in the supernatural. A mere knowledge of medicine proper is rather one of the lower or accessory branches of his profession, and it is often practiced by those who have no pretensions to be considered full-fledged medicine-men. Even women sometimes obtain great reputations as doctors. To the

medicine-man a knowledge of drugs is valuable, principally to enable him to carry out different kinds of poisoning as may best serve his ends. His most important function and the secret of his power is his dealing in occult influences.

In former times, the great medicine-men among these Indians devoted their whole lives to the study and practice of their art, and even yet it receives the greater part of their attention. They were accustomed to do no common work, but lived at the expense of the band they were amongst. They had great influence with the people, principally from preying upon the superstitious fears which had become inculcated by their own class from generation to generation for this express purpose. For the medicine-men form a secret society, with exclusive privileges, and they exercise a terrible influence in degrading their people. The seeming respect which is accorded to them is begotten of cowardly fear which has formed part of the education of the rank and file. They pretend to dispense good and bad luck, to control the weather, to be able to influence the movements of game and fish so as to bring plenty or starvation to the tribe, to predict events, to tell the fortunes of individuals, to bring about the sickness or death of men or dogs at a distance, and generally to have the confidence and coöperation of both good and bad spirits, with whom they communicate freely on certain set occasions.

The common people employ them in favor of themselves or their friends, or against their enemies, just as we do lawyers—for a consideration. It is here that the secret society business comes to their aid. Among the Outchipwai Indians there are many hypocrites who have not the manliness to fight their enemies fairly, or to openly resent an injury, or even to tell an adversary their opinion of him to his face. Such individuals will smile and profess great friendship, while harboring the bitterest enmity and even murderous designs. An Indian may be living at a considerable distance from the person he wishes to injure, and in order to gratify his revenge he will hire his medicine-man to carry out his purpose. But the latter will never appear on the scene. He will find means to operate secretly through another medicine-man who may not even be

suspected. As threats are thus often actually followed by the dire results predicted, persons who may chance to fall sick, or to meet with any accident, become accustomed to attribute their misfortune to the machinations of an enemy or to the ill-will of some medicine-man; and in order to counteract it, they must employ another medicine-man to remove the cause. Thus the established belief in the powers of the medicine-man brings much grist to his mill. The "opposing counsel" having received his fee, in the shape of some article of value to an Indian, will proceed with some grotesque ceremony and pretend to draw to himself and nullify the evil influence which has been troubling his client. He will affect to suck out the poison from the man's body or to go through agonies of pain, writhing and twisting himself amidst many groans, as if he were receiving, all at once, the essence of the disease of his patient. Or he may make-believe that he has been suddenly struck internally by some sharp instrument. The shock and accompanying exclamation are followed by spitting blood (usually from having surreptitiously lanced his gums) and the coughing up of an arrow-point, or a small piece of sharp bone or stone, which the evil spirit of the other sorcerer had transferred to him. In a short time the patient is expected to say he feels better; otherwise it is a sort of slight on the "strength" of the conjurer's "medicine." Sometimes the medicine-man will pretend to receive these sudden internal shocks to show the potency of some other member of the profession at a distance and the danger resulting therefrom, and hence the necessity for his own "strong medicine" as an antidote. He will then spit up the mysterious missile along with some blood, and after a groan or two will subside with a sigh of relief.

One of the modes of conveying an evil influence to a distance is to make a drawing on a piece of birch bark, or even in the sand, to represent the figure of the person to be injured, and then to select the site of the organ, as the heart, lungs, or bowels, which is to be operated upon. This is then stabbed through with a sharp instrument, or touched with poison, and an appropriate charm is repeated at the same time.

The apparent uncertainties of human life and fortune, and

death itself, are thus accounted for, all being controlled by the medicine-men. A person dies, not from natural causes, but because it is the pleasure of some one of this all-powerfull class that he should die, and because he has been unable to find another one powerful enough to counteract his "medicine."

In order to communicate with the spirits, the medicine-man must have a special kind of wigwam or retreat erected. This is done by planting a number of nicely trimmed poles in the ground in the form of a circle about five or six feet in diameter. They are fixed in the erect position by being firmly bound together by hoops at intervals, with a crowning one at the top. The poles are lashed to the hoops with spruce roots or other fastenings. This frame is securely enclosed with bark all the way up, so that no one can peep in, even if disposed to do so, which, however, is never attempted. The medicine-man then gets inside and fastens up the opening. He mutters and sings at intervals, and then maintains a perfect silence. Suddenly the medicine wigwam is violently shaken, after which it is announced that the spirits have arrived and he is ready to answer questions. I have been present on some of these occasions. A question must generally be accompanied by a fee, such as a plug of tobacco or a box of matches. The answers are given in a deep sepulchral voice, and are sometimes direct and positive, but oftener ambiguous, and, in the latter case, great ingenuity is sometimes shown in constructing an answer which will be verified, whichever way events may happen. Or instead of giving any answer, the attention of the audience (which is squatted around the wigwam) may be diverted from the main point of the interrogation by some poetic or entertaining "yarn." When fairly cornered the medicine-man will say the spirit refuses to answer, is offended or has just left for the day, his presence being suddenly required elsewhere. Of course, with experience and intelligence in his favor, the chances are more than even that his predictions will be fulfilled, and great stress is laid on every hit, while the failures are easily forgotten. In this way, even superstitious white servants of the Hudson's Bay Company and others come to have a certain faith in these conjurers. The practices of the Indian

medicine-man are evidently closely allied to the old-world witchcraft.

It may be asked whether these men are themselves sincere or believe in their own practices. In some cases and to some extent I think they do, but in others they are clearly guilty of fraud and trickery. I have known instances where, having become Christians, they have confessed that their former course had been all imposture. Some of them have, however, been known to become really possessed with terrible hallucinations.

In regard to the practice of medicine proper, the common Indian notion of disease is that it is caused by some evil influence, which must be removed, either by driving off its spirit with the tom-tom and singing, or by a charm, and by sucking or blowing upon the part affected. The idea of drawing or sucking out the evil is the prevailing one in their theory of the practice of medicine. A medical practitioner is thus associated with the nature of a leech. This is well illustrated in the custom of naming children. Names are given to Indian children by the grandfather or recognized patriarch of the family-circle or band. The subject of the first striking dream which he has after the child's birth determines its name. If he dreams of a creature which lives by drawing out his food as a woodpecker, which draws grubs out of trees, or of a leech, but particularly of the mosquito, that most determined and energetic blood-sucker, it is considered a good omen, and that the child, whether male or female, is to be regarded as called to the medical profession. If a male, as soon as he is grown up, he is put in training to ascertain if the Great Spirit really intends him to be a medicine-man. The first point in the student's education is to try his powers of endurance and to see if the spirits will reveal themselves to him. For this purpose he is submitted to tortures, as by cutting and running wooden skewers through his muscles and by starvation. The latter is carried out by his retiring to some unfrequented place close to good water, so that he may be tantalized. He selects a site on the brink of a river or on the end of a point in a lake, and there builds himself a sort of couch or nest in a tree, or a platform of poles between three or four trees standing close together, and stays upon it day after day without food or drink

until he become delirious, if he can stand it so long. At night he prays earnestly to the Great Spirit to reveal to him some new thing, and to give to him mysterious or supernatural power. Before he has had time to perish from hunger and thirst, his friends go to relieve him and to ascertain the result of his vigils. It is said there are many failures at the start. If, however, the candidate be deemed a suitable subject, he becomes articled to an old practitioner and duly initiated. Only one student is taken at a time. For some reason, perhaps want of superior intelligence and the necessary disposition, probationers, after having passed the first ordeal, are often rejected before they have learned much in regard to the mysteries of the profession.

Their materia medica is divided into two branches, good medicines and bad. Among the Crees, if not among other Indians, twenty classes of drugs are recognized. The first nine are all good or beneficial medicines, and the rest are all more or less bad or injurious. The student is first made familiar with the good medicines and then the bad, the worst of all being taught last. Some of their poisons, they pretend, are very dangerous to handle.

(To be continued.)

URETHRAL STRICTURE AND PERINEAL SECTION.

By J. A. GRANT, M.D., F.R.C.S. (Edin.), Ottawa.
Ex-President College of Surgeons, Ont., &c.

Read at January meeting Bathurst and Rideau Medical Association, Ottawa, 1886.

Case I.—A. D., aged 41 years, temperate habits and robust conformation, the subject of a very intractable stricture, the result of a fall in December, 1880, on the spike of a small tree, injuring the perineum, opposite the membranous portion of the urethra chiefly. No external wound of the parts was produced, but considerable contusion, swelling, and inability to urinate, except in dribbling quantities. Catheterism being impracticable, and there being almost complete inability to void urine, he entered the General Hospital, Ottawa, January 15, 1885, at which date perineal section was performed, and a No. 8 catheter introduced into the bladder and retained in position fully three days. Afterwards used the instrument every second or third day for fully three weeks, and then only occasionally as neces-

sity required. *April 4th*, '85—Was discharged from hospital, and in June, returned to his usual work well and active, and experiencing no inconvenience whatever as to urination.

CASE II.—(*Reported by Dr. Prevost.*)—W. W., aged 18, entered hospital on 23rd March, 1885, with a slight attack of gonorrhœa, which disappeared rapidly and thoroughly. In May, while riding on a bicycle, fell off, injuring the perineum. Blood flowed freely from the urethra, and was unable to pass his water. Consulted a physician, and, under appropriate treatment, was enabled to empty his bladder, but only in the recumbent position. Next day, micturition was easier, but urine tinged with blood. During the week, patient passes his water pretty freely, but every day the stream diminishes, until the end of the week, when it comes out by drops, and finally is totally suppressed. Sees the doctor, who prescribes, I believe, Sp. Ether. Nitr. Again patient passes large quantity of blood with his urine. Slight pain during micturition. Since then, always great straining during micturition, the want of which, moderately frequent at first, became incessant. Constant incontinence of urine. Sometimes patient feels strong desire of making his water; a thin stream comes out, but immediately urine drops out, and continues, in spite of the efforts of the patient, who has to wear napkins. Tenesmus and great distress. Examination: Stricture membranous portion. Useless and repeated attempts to introduce even a No. 2 catheter. *Dec.* 19—Perineal section performed and catheter introduced. 20*th*—Catheter removed. 31*st*—Chloroform; introdudtion of a No. 8 elastic catheter, and left *in situ* for three days. Urine then flows freely through the penis, and hardly any through the wound. *Jan.* 6—Micturition not difficult; patient introduces the catheter himself.

Remarks.—The term perineal section should, according to Harrison of Liverpool, be rather called perineal puncture. The patient being placed in the lithotomy position, and a grooved staff introduced, I punctured the membranous portion of the urethra, about one inch in front of the anus, with a tenotomy knife, and enlarged the incision sufficiently to enable the groove in the staff to be felt with the index finger. I found it quite impossible to enter the bladder in either case with the small Symes' staff; or even by a small probe, *via* the urethral puncture. Under these circumstances, I adopted the aphorism of Sir Henry Thompson, "*If you cut at all, cut all*," and passed the small tenotomy knife forward from the end of the Symes'

staff, which only entered a small distance into the membranous urethra; through the *entire strictured* portion of the membranous urethra, into the bladder, the staff being firmly held in position, and taking care not to introduce the finger into the bladder, which might induce subsequent prostititis. The staff being now withdrawn, in the latter case a No. 6 elastic catheter was introduced into the bladder without difficulty and retained *in situ* for 36 hours, an elastic tube being attached for the convenience and comfort of the patient. In the boys case, for the first week the catheter was introduced daily, and afterwards every other day. The external wound closed without any unfavorable symptoms, and the lad left hospital about the end of the fourth week, being able to urinate freely. In the after treatment, it is exceedingly important to keep the divided parts of the stricture regularly dilated, otherwise division will prove a failure. According to Gross, the catheter may be, at first, introduced every third day, then once a week or once a fortnight, according to circumstances. In a recent case which came under my notice, and which had been of some years standing, Sir Henry Thompson, after dividing by internal urethrotomy (his favorite plan of operation), recommended the catheter to be introduced daily for some weeks after the operation. During a term of over thirty years practical experience, Sir Henry Thompson has only met with three cases in which, after much careful manipulation, he was unable to pass an instrument fairly into the bladder, and in these three instances only performed perineal section for the relief of stricture without a guide previously passed. (*Braithwaite's Retrospect*, Jan. '85, p. 146.) As to external urethrotomy, it doubtless has its dangers and trials. The late Sir Wm. Ferguson said that while he thought highly of even Symes' operation in certain cases, he was of opinion that, like all others in surgery wherein the knife is used, it is not free from hazards. In all such cases, it is important the patient should be instructed as to the use of the catheter in order to insure the successful completion of the after-treatment.

THE ACTION OF CERTAIN DRUGS AND POISONS ON THE HEART OF THE FISH.

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Last summer I was able to make an investigation on the physiology of the heart of the fish, Professor Brooks having kindly allowed me the advantages of the marine laboratory of the Johns-Hopkins University at Beaufort, North Carolina.

Part of this work consisted in an examination of the action of certain drugs and poisons on the heart, and so far as I know, for the first time for *this* animal.

Exceedingly little, if anything, is known of the action of such agents on the hearts of the cold-blooded animals, except in the case of the frog. This investigation demonstrates that in the fish the action of the drugs and poisons used is similar to what it has been shown to be for the frog by other investigators. (Ringer, Brunton, &c.) The results will be presented exactly as stated in my notes taken at the time, and without comment in most cases, leaving the reader to draw his own conclusions as to *mode* of action.

The fish chiefly used for these experiments was *Batrachus Tau*, popularly known as the "toad fish," a term indicating well its general appearance. It is a fish of great vital tenacity, and well suited in every way for physiological experiments generally. The hearts of most fishes are so easily rendered abnormal that the attempt to investigate them proves abortive; but the heart of *Batrachus* seemed so well suited for testing the action of drugs, etc., that a considerable number of experiments were made to ascertain their influence when directly applied to the heart. The drug was either applied in solution with a camel's hair pencil, or simply dropped over the heart; the fish meanwhile being kept under normal conditions (on its back, with sea-water bathing its gills, etc.) That the effect witnessed on the heart was not due to indirect influence through the extrinsic nervous system of the fish was shown by isolating the heart and treating it with the same drug or poison as the heart *in situ*. The results have always been harmonious.

It may be remarked at the outset that almost all the drugs and poisons used by me have had, as a first effect, the production of an increased rhythm, owing, probably, to the exciting effect of a foreign substance before the specific action had time to manifest itself. To this general rule the auricle proper has often proved an exception. I have constantly found that its beat is arrested with the greatest ease while the sinus extension remains comparatively unaffected.

It will be borne in mind that the heart of the fish consists of a sinus and sinus-extension (as in the tortoises, turtles, etc.), one auricle, and one ventricle.

PILOCARPIN AND ATROPIN.

The following extracts from my notes will give a general idea of the action of these drugs:

"At 2.30 P.M.—Fish prepared as usual. Pilocarpin Mur. in solution of 1 per cent. applied freely to heart, which has a rhythm of 30; vigor soon diminished, the beat lacking in decision; is a lazy heart; diastolic relaxation increased; heart more readily arrested; *e.g.*, wiping it over with a moistened sponge arrests heart for two minutes, which is much longer than the usual stop under such circumstances.

3.05.—Pilocarpin removed with a sponge, and Atropin applied; at once the rhythm, which had sunk, rose to 32; manifest increase of force in both auricle and ventricle; original decision of action restored."

The above notes are meant to be merely illustrative; space does not admit of all being given without undue distension of the paper.

Summary of the results of the action of Atropin and Pilocarpin.

1. Pilocarpin and atropin are antagonistic in action. The former is a cardiac depressor, tending to lower the excitability of the heart, render its action sluggish, and to stop it in diastole; the latter to improve a sluggish or weakened heart, and heighten the excitability of this organ under all circumstances. While pilocarpin tends to slow the rhythm, atropin quickens it, and increases the force of the beat. It manifests its action rapidly.

2. Atropin freely applied to the heart annihilates the possibility of arresting the heart reflexly.

Atropin applied to the conus arteriosus, arrested by a ligature between conus and ventricle, excites it to pulsation.

SODIUM AND POTASSIUM CARBONATE.

The following extract from my notes shows the opposing action of these two agents:

"Fish prepared as usual. 10.15 A.M.—Sod. Carb. in solution of 5 per cent. applied. Rhythm at once gets very rapid; diastole of ventricle very short and imperfect; auricle proper arrested.

10.25.—Auricle has recovered, and leads the rhythm of the ventricle.

10.30.—Pot. Carb. in solution of 5 per cent applied; (1) Auricle at once arrested; (2) Ventricular beat enfeebled. (This preceded by an increased rhythm.) Later, auricle begins and then again stops; an independent rhythm of auricle and ventricle.

10.36.—Rhythm of auricle 40, but weak; rhythm of ventricle 25, and also weak."

Sod. Carb. and Pot. Carb. were alternately applied in this case several times, always producing decidedly opposite effects.

Summary of the results of the action of Sodium Carbonate and Potassium Carbonate.

Sod. Carb. and Pot. Carb. are antagonistic in action on the fish's heart; the former quickens rhythm and diminishes diastolic relaxation, and heightens cardiac excitability, but is in this respect inferior to Atropin. Potassium Carbonate diminishes excitability, weakens the heart's action, and tends to arrest it in diastole. This agent seems to be a poison to the fish's heart.

LACTIC ACID.

In 5 per cent. solution, this acid proves a speedy poison. Its effects in 1 per cent. solution will be clear from the following extract from my notes:

EXP.—R. 56. Lactic acid 1 per cent. freely applied.

Its effects:

(1) Slows rhythm.

(2) Auricle affected before ventricle.

(3) In ten minutes, whole heart arrested in well-marked diastole.

(4) The heart cannot be excited to action by mechanical means (prick with seeker). Neither Acetate of Strychnia in 1 per cent. solution, nor Digitalin applied in the usual manner, cause any improvement.

It is thus seen that lactic acid in 5 per cent. solution is a rapid poison, while in solution of 1 per cent. it depresses the heart and gradually kills it in diastole.

DIGITALIN, IN SOMEWHAT LESS THAN 1 PER CENT. SOLUTION.

Of all the drugs and poisons used, none has produced such decided manifest, rapid and constant action as digitalin. It was used in a solution of rather less than 1 per cent., and the results were precisely the same whether applied to the isolated heart or to the heart *in situ*, though, as is to be expected, much more rapid in the former case, on account of the better state of nutrition in the heart under normal conditions, enabling it to resist longer all kinds of foreign influences. This principle applies in all cases, so far as I have observed, of the action of cardiac drugs and poisons.

The action of digitalin may be stated thus :

1. Digitalin, when applied to a rapidly-beating heart, slows it.

2. *Its invariable action, no matter what the condition of the heart, is to produce gradually increasing systolic contraction, the diastolic relaxation getting less and less till the heart is finally arrested in most pronounced systolic tetanus.*

3. The peculiar action of the drug requires a short period before there is any decided manifestation of its effects ; but when the latter do appear, they rapidly advance to a maximum.

4. It is not possible to stimulate a heart brought to stand still by digitalin, to beat by mechanical means.

5. When the action is well pronounced, a large part of the time occupied in the systole of the ventricle is taken up in *maintaining* contraction when that is complete.

6. Digitalin neutralizes the action of various chemical agents which, when applied to the heart, tend to cause undue diastolic relaxation—(*e.g.*, Pot. Carb.)

7. A ventricle brought to stand still by digitalin is unusually small, hard and pale ("tonic" contraction).

NICOTIN IN 1 PER CENT. SOLUTION.

The effects of this agent I have found somewhat variable. A comparison of my different experiments will, I think, justify the following general statement :

1. The first effect of nicotin has generally been arrest of the

heart in diastole for a variable, but brief, interval; when actual arrest has not taken place, the beat has been much weakened and the rhythm slowed.

2. This condition is usually followed by irregularity and an increased rhythm, without much damage to the force of the beat.

3. The different parts of the heart may not act with their usual proportionate force or frequency. There may be two or more beats of the auricle for one of the ventricle, etc. (Incoördination.)

4. The fish's heart shows a remarkable power to recover entirely from the effects of nicotin.

VERATRIA IN RATHER LESS THAN 1 PER CENT. SOLUTION.

It is much more difficult to define the action of Veratria than that of Digitalin, though the *eye* readily appreciates differences. In general, the beat has that sluggish appearance seen after pilocarpin is used, but in other respects veratria is very unlike that drug in action. One of the most marked effects is the tendency to throw the parts of the heart and even parts of the ventricle out of harmony with each other, *e.g.*, the central portion of the ventricle is sometimes seen to be more relaxed than the rest of it; the auricle often, after the action has lasted some time, gives several beats to one of the ventricle. It is also clear that the diastole takes place in a very sluggish way, quite unnatural to the fish's heart.

The effect on the diastole is certainly much greater than on the systole. In some phases of this action, at least, the systole is strengthened. In consequence of this effect on the diastole, the rhythm is slowed. We may put the salient points of its action thus:

The principal action of veratria is on the diastole, which it renders more sluggish; the effect on the systole is slight, and possibly variable with the phase of action of the poison; as a consequence of its effect on the diastole, the rhythm is slowed. Want of harmony between the different parts of the heart and different fibres of the same part is liable to manifest itself.

CHLOROFORM (UNDILUTED.)

Attention is asked to the following extract from my notes, with a view of showing the action of this drug, and of pointing out how different is the behaviour of the auricle proper and the sinus-extension (connecting sinus proper and ventricle) :

EXP.—Four to five drops of chloroform applied to heart. Auricle stopped at once; ventricle continuing to act longer; latter gradually getting weaker, stops; later sinus-extension beating. A second application, especially to the sinus-extension and sinus, leads at once to a dead stop of the whole heart in diastole. Ventricle recovers first, and sets up by its rhythm a beat of the auricle (*i.e.*, after its own beat.)

Generally the whole heart recovers from the effects of the drug.

It is thus seen that undiluted chloroform is a powerful cardiac depressor; that its readiest effect is on the auricle proper; that it can arrest the heart in diastole, but that this organ has considerable ability to recover from the effects of this agent.

ACETATE OF STRYCHNIA IN 1 PER CENT. SOLUTION.

From a limited number of experiments with this poison, it appeared that it had the power to shorten the diastole and lengthen the systole, and slow the rhythm; after arrest of the heart, it was still excitable by mechanical means.

It may be stated that in an area of the ventral wall of the ventricle, extending across it from the point of junction of the auricle, a behaviour, under the use of drugs, is witnessed different from that of the rest of this part of the heart. Sometimes it seems more dilated; at all events, it appears to be more susceptible to the influence of certain drugs and poisons (nicotin, chloroform, etc.) than the rest of the ventricle, but whether there is here difference in structure has not been determined. On hearts so sensitive as those found in the sharks and skates, drugs and poisons act with remarkable celerity.

QUARTERLY RETROSPECT OF SURGERY.

By FRANCIS J. SHEPHERD, M.D., C.M., M.R.C.S, Eng.,
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Surgery of the Kidney.—Since my last report on the above subject a year ago, much new matter that is valuable has appeared in the medical journals, and I feel that a short account of what has been recently done in this comparatively new surgical field will be interesting to readers. In the last Retrospect I devoted considerable space to the surgery of the intestines, in which department, also, much is being done. The surgery of the kidney and of the intestines has advanced side by side, the success in each division being made possible by the great impetus operative surgery in general has received from the improved methods of treating wounds by the introduction of antiseptics.

All surgeons now agree that in certain affections of the kidney, operative measures are necessary. There is still some discussion as to the best operation to perform in certain cases and the proper method of performing it. For example, whether in advanced suppurative diseases of the kidney we should perform simple nephrotomy with drainage or complete excision, or again, whether the ventral or lumbar incision is the better one. There are at the present time four operations which are well established in the treatment of surgical diseases of the kidney, viz.: Nephrotomy, or incision of the kidney; nephro-lithotomy, or incising the kidney for removal of stone; nephrectomy, or excision of kidney, and nephroraphy or fixation of a floating kidney.

Simple exploration of the kidney performed by means of a lumbar incision is a comparatively safe operation, and as a means of diagnosis is a most excellent procedure. Nephrotomy also is not exceedingly dangerous, but nephrectomy is still a very fatal operation, and von Bergmann (*Berlin Klin. Woch.*, November, 1885) remarks that the rate of mortality has not been much reduced during the last four years—for when Czerny published statistics of 72 nephrectomies performed up to 1881, the mortality was 44·4 per cent. In Gross' statistics of 233

nephrectomies performed up to 1885, the mortality still remains at 44·6 p. c. Of course many of these cases were not proper ones for operation. Von Bergmann hopes that with improved methods of diagnosis and a better method of operating, the mortality in future will not be so great as in the past. For tumors of the kidney, nephrectomy is especially fatal. In certain cases of advanced suppurative disease of the kidneys, nephrectomy is not advisable unless the condition of the other kidney can be positively ascertained to be healthy; if this cannot be done, then nephrotomy only should be performed. According to Billroth and Fischer, suppuration of kidney is generally double, and when single this fact cannot certainly be ascertained. Both Billroth and Fischer are opposed to nephrectomy in suppurative disease. Von Bergmann, however, holds that in many cases the suppurative disease is one-sided, and can be ascertained to be so by the appearance of a tumor in one or other lumbar region, by the character and situation of pain, etc. Besides, the condition of the other kidney may occasionally be recognized to be healthy by bimanual palpation. The most valuable recent contribution to the Surgery of the Kidney is one by Prof. S. W. Gross of Philadelphia, published last July in the *American Journal of the Medical Sciences*. In this article he shows very plainly that the lumbar incision is the safest method of operating. He has collected from various sources 233 cases of extirpation of the kidney; of these 129 recovered and 104 (44·63 p. c.) died. One hundred and eleven of these operations were performed by the lumbar incision, with 70 recoveries and 41 deaths (36·93 p.c.); 120 by abdominal incision, with 59 recoveries and 61 deaths (50.83 p. c). The chief causes of death were, in the abdominal operation, peritonitis, pulmonary embolism, primary hemorrhage, and uræmia; after the lumbar operation, shock, exhaustion, septicæmia, pyæmia, anuria, secondary hemorrhage, vomiting. Primary hemorrhage rarely occurs in the lumbar operation, but is the cause of six-tenths of the deaths in the abdominal operation.

Prof. Gross thinks that nephrectomy is often performed unnecessarily, and that a better result with less risk to the patient might be obtained by one of the less formidable operations.

The following are his conclusions from a study of 450 cases of different operations in the kidneys :—

(1) Lumbar nephrectomy is a safer operation than abdominal nephrectomy.

(2) Primary extirpation of the kidney is indicated (*a*) in sarcoma of adult subjects, (*b*) in benign neoplasms at any age, (*c*) in the early stage of tubercular disease, (*d*) in rupture of the ureter, and (*e*) in uretal fistula.

(3) Nephrectomy should not be resorted to till after the failure of other measures : (*a*) in subcutaneous laceration of the kidney, (*b*) in protrusion of the kidney through a wound in the loin, (*c*) in recent wounds of the kidney or of the ureter, (*d*) in suppurative lesions, (*e*) in hydro-nephrosis and cysts, (*f*) in calculus of an otherwise healthy kidney, (*g*) and painful floating kidney.

(4) Nephrectomy is absolutely contra-indicated in (*a*) sarcoma of children, (*b*) in carcinoma at any age unless disease can be diagnosed at a very early age, (*c*) in advanced period of tubercular disease.

In the paper on "*Extirpation of the Kidney*," by von Bergmann, already referred to (*Berlin Klin. Woch.*, Nos. 46, 47, 48, Nov. 1885), the lumbar method of operating is strongly recommended. Von Bergmann has operated three times for tumor of the kidney—two by the abdominal incision and one by the lumbar. The two cases operated on by the ventral incision died; the one by lumbar incision recovered. When the lumbar-incision is practised, the danger of peritonitis is avoided. Von Bergmann has excised the kidney five times for suppurative disease, with one death. In all five cases the suppuration was one-sided, there being in each case a tumor developed in the lumbar region of the affected side. In two of the cases the suppurative condition followed pregnancy. One of these died, but her condition before operation was far from good. She had high fever, rapid pulse, and was much emaciated. She died of shock four hours after the operation. The removed kidney was converted into two large pus sacs, and in the ureter an almond-shaped stone was found. In the two next cases the cause of the suppuration could not be ascertained. In both,

the suppuration was diagnosed as one-sided. On pressure upon the lumbar tumor, there was an increase of pus in the urine. In the second case the kidney was not immediately removed, but an incision was first made into the abscess, and three months later nephrectomy performed, because the patient was gradually sinking from exhaustion due to the discharge of pus. The fifth case was one of huge abscess of right kidney in a man aged 52. The abscess was first punctured with a Dieulafoy's aspirator and eight liters of pus evacuated. This relieved the great difficulty of breathing which had previously existed. In this case also, by pressure on the tumor, the amount of pus in the urine was markedly increased. The patient not improving, and pain and swelling again returning, the kidney was cut down upon by the usual oblique lumbar incision from the outer edge of the sacro-lumbalis and eleventh rib to the anterior superior spine of the ilium. The abscess was opened and the enormously dilated kidney removed, the vessels being ligatured with catgut. The wound was sewed up in part only, a great portion being stuffed with iodoform tampons. Little blood was lost, but the patient at end of operation was almost pulseless. However, the case did well, there was no after-fever, and he was able to leave his bed in four weeks. In these cases von Bergmann states that incision of the kidney substance is usually bloodless, as the parts are so altered and anæmic that no danger results; besides, the evacuation of the pus and reduction of the size of the tumor greatly facilitates the removal of the kidney. A preliminary incision is useful in cases where it is not known if the other kidney is healthy, and does not interfere with a subsequent extirpation. According to Gross (Loc. cit.), of 93 nephrotomies, 23 died (22·1 p. c.), 21 recovered with a fistula, and of 12 cases where nephrectomy was performed subsequently, only one died. To show the difficulties of diagnosis, von Bergmann relates a case of fistula in right lumbar region with swelling, where he, in June 1885, cut down and evacuated a large amount of pus and then enucleated the kidney; he found it shrunken and uneven, but no abscess in connection with it. He had mistaken a perirenal abscess for a renal one. The patient died in a day or

two of anuria, and at the autopsy the other kidney was found to be in a similar condition to the one removed.

In the after treatment of the wound left in nephrectomy, the author strongly advocates stuffing it with iodoform gauze for 24 hours, a procedure which lessens the risk of septic infection and does not prevent primary union. In doubtful cases (for example, where a cystic kidney might be mistaken for an ovarian cyst), to clear up the diagnosis, von Bergmann advocates inflating the bowel. If the tumor is ovarian, of course no tympanitic note will be produced over it, but if a kidney tumor, the inflated bowel will partly cover it and give a tympanitic note. The author also describes a case in which he operated for hydronephrosis with complete recovery in four weeks. In performing nephrectomy or nephrotomy, the writer advocates placing a thick roll under the sound side to facilitate manipulation. In conclusion, he remarks that the oftener and earlier nephrectomy and nephrotomy are performed for suppurative diseases of the kidney, so many more cases will recover.

A writer in *L'Union Medicale de Reims* (Oct. 15, 1885), commenting on Prof. S. W. Gross' paper, adds twelve more cases of nephrectomy lately performed, principally in France, with only one death. These operations were performed by von Horoch, Polaillon, Lucas-Championnière, Ollier, Le Dentu, Trelat, Spiegelberg and others. The fatal case was one of Ollier's, operated on for tuberculous disease of the kidney. The writer also mentions a method of operating without wounding the peritoneum, advised by some French surgeons—viz., making an incision external to the edge of the rectus abdominis and peeling off the peritoneum from the abdominal wall to reach the kidney. This might do in some cases, but where there was extensive suppurative disease of the kidney would be a difficult procedure in all cases, and impossible in many.

At a meeting of the Surgical Society of Paris, held Nov. 18, 1885, M. Polaillon reported a successful case of nephrectomy of the left kidney for calculous pyelitis. An L-shaped incision was made in the lumbar region, and after the skin incision all the tissues were severed by the thermo-cautery. The patient made a good recovery. In the discussion which followed, M. Le Dentu

condemned the use of the thermo-cautery and also advised that the lumbar incision should be made as far forwards as possible.

In an article in the *Birmingham Medical Review* for Sept., 1885, Mr. Lawson Tait describes nine cases in which he had performed operations on the kidney during the year 1884. The first case was a *nephrectomy* of the right kidney for obstructed ureter in a female aged 32; perfect recovery. Case 2, female aged 19—Nephrectomy for persistent fistula following ruptured kidney cyst; recovery. Case 3, female, aged 45—Nephrectomy for supposed solid tumor of kidney; death from shock 26 hours after operation. Mr. Tait regrets not having made an exploratory incision into this tumor before attempting its removal, as it was found to really consist of a series of abscesses. Case 4, female, aged 38—Nephrotomy and drainage for relief of abscesses; temporary improvement. Case 5, female, aged 22—Nephrectomy; moveable right kidney, which was supposed to be a morbid growth of ovary or tube; abdominal section; kidney large and removed; left kidney healthy; recovery. Case 6, female, aged 25—Nephro-lithotomy; large-branched calculus removed from right kidney; rapid recovery. Case 7, female, aged 52—Nephro-lithotomy; large calculus removed from pelvis of right kidney; rapid recovery. Case 8—Supposed cyst of mesentery; abdominal section; found to be a cyst of right kidney; nephrectomy; perfect recovery. Case 9, female, aged 59—Nephrotomy of right kidney, with removal of large kidney from its pelvis; rapid recovery. Mr. Tait remarks that these cases complete a series of 40 operations on the kidney. These operations have been performed for abscesses, hydatids, sarcoma and calculi. Thirty-eight complete cures have resulted, and, strange to say, with two exceptions, all the operations have been on the right kidney. Mr. Tait says that his experience gained in operating on the kidney has taught him that, before removing a kidney, it should always be first incised to ascertain its condition exactly. He does not think it matters much whether the lumbar or abdominal incision is made use of, but he strongly prefers the abdominal incision if the kidney is to be removed, on account of the facility with which the condition of the other kidney can be ascertained before proceeding with the operation.

For simple nephrotomy, he prefers the lumbar incision. He condemns the attempt at removal of malignant tumors in children under 15.

Demonstration of Extirpated Kidneys.—At the late German Surgical Congress, Baron Horoch (Vienna) exhibited a malignant tumor of the kidney removed by Prof. Albert from a woman aged 40, by lumbar operation; although the peritoneum was torn, patient was discharged completely cured in four weeks.

Dr. Claus exhibited a fibroma of the kidney, to which was attached a large cyst, whose wall was the distended kidney capsule. It was of large size, and diagnosed as a monolocular ovarian tumor. Removed by abdominal section. Patient left hospital in four weeks.

In the discussion which followed, Prof. König stated that he had recently removed the kidney in two cases in children. Both operations were by abdominal section; one was for myo-sarcoma. Both operations were easy and successful. Schönborn said that he had successfully removed an adenoma of the kidney in a child; no recurrence at end of four weeks.—(*Central. f. Chir.*, 1885, No. 24; quoted in *Annals of Surgery*, Nov. 1885.)

Nephrectomy for Sarcoma.—In the *Medical Press and Circular* for March, 1885, Mr. R. N. Pugh reports a fatal case of nephrectomy in a child aged 2 years and 4 months, who was admitted into the Children's Infirmary, Liverpool, for a tumor of left side of abdomen. Abdominal section performed, and left kidney removed. Vomiting came on two days after operation, and death occurred on the twenty-third day. Post-mortem showed the cause of death to be strangulation of a portion of small intestine which had protruded through a rent in the peritoneum behind the colon.

Nephrectomy.—Mr. Knowsley Thornton (*Med. Times and Gazette*, March 14th, '85) reports a case of abdominal nephrectomy performed in a woman, aged 32, for calculous pyelitis of right kidney. Wound soundly healed on fourteenth day.

Dr. C. K. Briddon reported to the New York Surgical Society (*Medical News*, Jan. 30, '86) a case of nephrectomy for calculous pyelitis of right kidney in a woman aged 36. The lumbar

incision was first made and kidney exposed; as it felt solid and non-fluctuating, and it was of such size that the hilus could not be reached, removal by abdominal incision was immediately resolved upon. On separating the kidney, an abscess cavity was torn open and about 8 ozs. of pus escaped into peritoneal cavity. The kidney was removed without great difficulty, but the woman died within a week of septicæmia. The removed kidney was much disorganized, and contained a large calculus in the pelvis.

Dr. Briddon, in this case, evidently committed a great error in not first incising the kidney before resorting to abdominal incision; had he done so, he would have evacuated the contained pus, removed the kidney by the lumbar incision, and probably have saved his patient; or, if he was doubtful about the condition of the other kidney, he could have performed a preliminary nephrotomy.

Dr. Lange (*Medical News*, Jan. 16th, '86) reports a case of nephrectomy for a pyonephrotic kidney. The patient was a woman aged 26, who frequently had bloody urine, and always severe pain; case thought to be one of stone. Under chloroform, both kidneys could be distinctly made out to be of apparently normal size. Kidney cut down upon, and by lumbar incision was found cystic and the ureter and pelvis almost obliterated. Patient made a rapid recovery, and was relieved by the operation, but the author thinks there is probable disease of the other kidney, and that the outlook is not hopeful.

Colquhoun (*Lancet*, June 12th, '85, p. 1081) reports a successful case of left nephrectomy in a man aged 44, for calculous pyelitis. Patient had suffered from symptoms of stone for 16 years. The operation was performed in the Dunedin Hospital, New Zealand.

I might add to the foregoing cases of nephrectomy two additional ones, reported at a recent meeting of the Montreal Medico-Chirurgical Society; both successful. One was performed by Dr. W. H. Hingston for distended and painful left kidney, with obliteration of the ureter, in a girl aged 18: the other performed by myself in a woman aged 24, for advanced calculus pyelitis of the left kidney. The latter case is reported in the *New York Medical Record* for December 12, 1885.

Renal Lithotomy.—In the *British Medical Journal* of September 5th, 1885, Mr. R. H. Bourchier Nicholson reports a successful case of nephro-lithotomy in a woman aged 42, who had suffered severe pain and had been passing pus for two years. A tumor about the size of an orange could be felt on left loin. It was cut down, and on incising kidney a considerable quantity of pus escaped. In introducing his finger into the incision a large branched calculus was found, and removed several smaller ones. The woman made good recovery.

Calculi removed from Kidney by combined Abdominal and Lumbar Sections.—Mr. Knowsley Thornton (*Med. Times and Gazette*, July 4th, 1885,) reports the case of a woman, aged 25, who suffered from symptoms of renal calculus. Abdominal section by Langenbuch's incision (outer side of rectus). Introduced hand into abdomen; no stone felt in left kidney; the right examined, and stone made out by pushing finger through peritoneum. Then a director was pushed through the loin till it reached the skin. Here it was cut down upon from without and the incision enlarged with a bistoury. A director was then passed through the wound in loin from without, till it reached the stone, and the stone was then cut down upon through the pelvis of the kidney and extracted. A drainage tube was passed through the loin into the pelvis of the kidney, the peritoneum sponged out and abdominal wound closed. Fifteen months later, patient was again admitted into hospital suffering from symptoms which led to the supposition of the presence of calculus in left kidney. An abdominal incision was made, the hand introduced, and no stone found—so the right kidney was examined and a stone at once detected in the pelvis. It was removed by the combined operation as before, and another stone was found and extracted from one of the calyces. The patient recovered.

(It seems to me that if Mr. Thornton had performed the lumbar operation in the first instance he would have discovered all the calculi, and would have relieved his patient by a simple operation instead of by two very complicated ones.)

Nephrotomy and Nephro-Lithotomy.—Mr. Bennett May (*Brit. Med. Jour.*, Oct. 31, p. 837,) reports three cases of

the above. Case 1, youth aged 20—Symptoms of calculi well marked, and lasted 14 years; lumbar incision and removal of calculi; free hemorrhage stopped by plugging; subsequent perinephric suppuration; death in three weeks from pyæmia. Case 2, male aged 35—Symptoms of stone for 10 years; stone detected by acupuncture; lumbar incision and removal of large stone; rapid recovery. Case 3, female aged 23—Symptoms of renal calculus well marked for 18 months; had passed a calculus per urethram. Incision made, but failed to find stone; rapid recovery, with relief of symptoms.

At a meeting of the London Clinical Society, held February 27th, 1885 (*Lancet*, March 7th, 1885), Mr. Henry Morris reported a successful case of nephro-lithotomy, in which a calculus was removed from the left kidney. Had suffered from pains in the loins ever since boyhood, but during the last two years pains had increased, so as to prevent his working. At the same meeting, Mr. Charles J. Symonds reported a case of nephro-lithotomy in a man aged 50, who had suffered 24 years from renal colic. Stone removed from the left kidney; good recovery.

Nephro-Lithotomy after Nephrectomy.—Mr. Clement Lucas operated on a unique case in Guy's Hospital on October 29th, 1885. A woman upon whom he had performed nephrectomy about four months before, for complete destruction of the right kidney by large calculi and hydronephrosis, and who had made a rapid and perfect recovery, was suddenly seized with great pain in the region of the other kidney, followed by vomiting, headache, and suppression of urine. The symptoms commenced early Sunday morning, October 25th, from which time no urine had been voided. She was removed to hospital on Wednesday, October 27th, and treated with diuretics for 24 hours. This having no effect and the symptoms being very serious, Mr. Lucas cut down on the remaining kidney and removed a conical calculus. Total suppression of urine had lasted 102 hours. Free drainage of urine immediately took place from the wound, and vomiting and headache at once ceased. The patient had perfectly recovered when last heard from—January 1886.

Treatment of Kidneys in an advanced stage of Suppuration by Drainage.—Mr. W. Bruce Clarke (*Lancet*, November 7th, 1885,) says that in many cases of suppurative disease it is absolutely impossible to remove the kidney with safety, owing to the number of adhesions by dense cicatricial tissue to surrounding organs and bloodvessels. He relates a case in a woman aged 42, with a sinus near the apex of the last rib leading down to a suppurating kidney. Stone being suspected as the cause, the sinus was explored and found to pass upwards between the liver and the ribs for some six inches; the patient becoming very faint, the operation was suspended. The woman died of peritonitis five days after the exploration of the sinus. At the post-mortem, it was found that some thin peritoneal adhesions had been broken down, and this had given rise to peritonitis, which caused her death. The kidney itself was surrounded by a large amount of thickened tissue, and firmly attached to the neighboring organs and tissues. A calculus was found in the kidney. Mr. Clarke thinks it would have been impossible to remove the kidney during life. In such cases as these, Mr. Bruce Clarke advises that the procedure advocated by Mr. Clement Lucas some years ago should be adopted—viz., incision and drainage of the suppurating kidney. He draws attention to 13 cases of attempted nephrectomy, within the last few years, for suppurative disease of the kidney. In two, the operation of nephrectomy was abandoned, and nephrotomy employed with success; in the remaining eleven, only two recovered.

The author goes on to say that when a kidney has already been subjected to nephrotomy and drained, the condition of the two organs can be easily ascertained; and if the healthy kidney be sufficient for the wants of the individual, and the diseased one little more than a suppurating sac, obliteration of the abscess cavity is indicated, either by scraping and irrigation or removal of the whole kidney. Which is the better method, he leaves to be decided by future investigation. After the kidney has been incised and drained, its subsequent removal can be effected with less danger to life than if a primary nephrectomy had been attempted.

Mr. Clement Lucas, in a letter commenting on this paper (*Lancet*, Nov. 28th, '85), says a little bolder surgery might have led to a more successful termination in Mr. Bruce Clark's case. He says why probe the sinus at all; why not cut directly down on the kidney at once. He does not believe that there are kidneys which cannot be removed; however adherent, it is always possible to remove the kidney from within its capsule, for the soft tissue breaks away from the fibrous covering, though bands here and there may need to be divided. He thinks it is always possible to remove the kidney, but not always proper, without first trying the effect of drainage.

Correspondence.

NEW YORK, Feb. 16, 1886.

Considerable excitement prevails here among the laity regarding hydrophobia. The daily press loses no opportunity for painting, with harrowing and ghastly details, the symptoms of all the cases that have been supposed to have died from that disease. Each morning the *Herald* has columns of closely printed matter headed, "Hydrophobia: its Torments, Dangers, &c." The opinions of doctors, celebrated and otherwise, are published in its columns from day to day, and, as these vary considerably, the affrighted public do not know what to believe. The topic of conversation in the drawing-room now is hydrophobia, &c. Woe betide the poor medico if he forms one of the party. He is quizzed beyond all power of endurance. Should he be so indiscreet as to express an opinion, he is literally crushed by the weight of facts, freshly coined in the columns of the *Herald*, which are brought up against him. If an epidemic of nervous or hysterical hydrophobia do not occur in the near future, it will be from no lack of exciting causes. Even Pasteur, though he be beyond the Atlantic, comes in for a fair share of the annoyance the press is creating and keeping up. He has received letters from every corner of the Universe asking him all sorts of questions, and making him the most liberal offers if he would come to the States and start a "canine institution" or exhibit himself for a week at a Dime

Museum. One correspondent wished to know how much Pasteur would charge to have his "dorg syringed."

At the last regular stated meeting of the Academy of Medicine, a somewhat novel method of treating ascites was proposed. Dr. Caillé read a paper on "the Permanent Drainage of the Abdomen in Ascites." The paper embodied the report of two cases in which the author had adopted that method. A trocar was made to pass through the abdominal wall into the peritoneal cavity, and a rubber tube introduced through the canula, which afterwards was withdrawn. The tube was kept *in situ* by means of a rubber bandage. The wound was dressed with iodoform and vaseline, but it was found that a troublesome eczema developed. On using simple tallow this was prevented on a subsequent occasion. The reader of the paper, in closing the discussion, remarked that, doubtless, several improvements might be added in the future; for instance, the tube might be connected with a rubber bag, which the patient could carry sustained up in his pants, or the tube of rubber might be replaced by one of silver, provided with a stop-cock, and the fluid drawn off at will. The latter "suggestion" recalls the wondrous feats that struck the imagination in boyhood. These were performed in small, mysterious booths, and the one most vividly remembered is the tapping of an individual, and any desired wine or liquor would flow in abundance. The choice, however, in this case, would require to be limited, as I believe only whiskey, gin and brandy go to the make-up of cirrhosis and the resulting ascites.

In the discussion that followed, the President, Dr. A. Jacobi, made several instructive remarks. He said that Dr. Caillé's proposal of permanent drainage in ascites was simply following what nature does in some cases. He had seen not a few cases of severe ascites in which the fluid had formed a fistulous opening for itself, and was thus drained off. This opening often occurred at an unfavorable site, and it would certainly be better that the surgeon should make the opening himself at a selected point. He had followed this plan in a few cases recently, and was well pleased with it. On the question of the curability of cirrhosis, Dr. Jacobi said that he had changed his views regard-

ing mercury within the past few years. Prior to that he held that mercury was an anti-plastic agent and injurious to the system, but formed the only true antidote to syphilis, and hence had to be given in that disease. Now, however, he considered mercury a very valuable remedy in all cases of interstitial inflammations, in cirrhosis, myelitis, cerebritis, etc. He feels confident that cirrhosis of the liver can be arrested by small and long continued doses of corrosive sublimate. An arrest of the progress of the disease is equal to a cure, for an organ can discharge its functions well though a portion of it is destroyed by interstitial growth of connective tissue.

The Academy of Medicine and the County Medical Society of New York have conjointly drafted a set of resolutions to be presented before the State Legislature for the purpose of protecting the children in public institutions from the various infectious diseases. The resolutions provide that every incorporated institution for the care of children shall have attached to it a regular physician who shall carefully examine all children applying for admission and give a certificate stating whether the applicant is suffering from any infectious or contagious disease, especially of the skin or eyes. Any such child shall not be allowed to enter the institution, but shall be confined in a dormitory until it will have recovered from the affection. They also provide that the attending physician must give notice in writing, to the proper authorities, whenever any dormitory shall be overcrowded, so that there shall be not less than 600 cubic feet to each individual. The New York State Society, at its annual meeting on the 2nd inst., has endorsed the bill with the view of aiding its introduction into the Legislature.

Some startling facts were revealed by a committee appointed during the winter, by the Academy of Medicine, to investigate the condition of children in public institutions. The committee found 39 children in the "New York Institution for the Blind," who have been sent there during the past few years from some of New York's best known and most generously supported asylums. This report shows in unmistakeable terms that these children lost their sight through neglect of the simplest rules of hygiene and health on the part of those who should have cared for them.

This city has lost one of its oldest and most respected surgeons by the recent death of Dr. Alfred C. Post. The deceased was born in New York in the year 1805, and was graduated at the College of Physicians and Surgeons in 1827. After a couple of years abroad, Dr. Post returned to this city, where he had been in constant active practice until a few weeks before his death. As early as 1836 he was made one of the attending surgeons at the New York Hospital. He was one of the founders of the medical department of the University of the City of New York, taking the chair of Surgery and Pathological Anatomy, and at the time of his death was President of the Medical Faculty and Emeritus Professor of Clinical Surgery in that institution. His connection with the New York Hospital extended over a period of 51 years, and was to have been made, by the Board of Managers of that institution, the occasion of a jubilee the coming spring. Dr. Post was characterized for his cultured and refined tastes, his upright principles, and his strong religious convictions. The two things, it is said, which he enjoyed the most was a surgical operation and a prayer meeting. It is refreshing to learn of an eminent practitioner, in this vortex of passion and worldly strife, go through a long life with a steady, honest purpose, and with a firm belief in his maker and His laws.

Prof. A. Flint has tendered his resignation to the Academy of Medicine, and it has been accepted. This is one of the late fruits of that vexatious code question. H. N. V.

Reviews and Notices of Books.

Puerperal Convalescence and the Diseases of the Puerperal Period.—By JOSEPH KÜCHER, M.D. New York: J. H. Vail & Co.

The author, having enjoyed exceptional opportunities for the observation of puerperal cases in the enormous lying-in hospitals of Vienna, and subsequently in private practice, presents this monograph as embodying his views upon these important ailments. We have carefully examined several of the chapters, and find in them clear and decided statements as to etiology and treatment which commend themselves to our judgment, and are

in consonance with the present teachings of the most advanced pathologists. In no department of medicine is it so necessary to keep up a constant stream of reliable writing in order that the old well-entrenched, but now exploded, superstitions may be utterly destroyed. The contribution of our author tends all in this direction—take, *e.g.*, Mastitis. How many still use the old-fashioned frictions, massage, frequent nursings, &c., overlooking the undoubted fact that phlegmonous inflammation of the breast always arises from an *infected* abrasion or fissure. Dr. K. gives minute directions for the prophylaxis of mastitis by preventing infection of an existing fissure. Asepsis (and antisepsis) is, of course, dwelt upon at some length, and we commend these facts to the profession. Eclampsia receives considerable attention. He adopts the view that pressure may play a part in the production of this trouble, but that, if so, it is chiefly from interference with the ureters, damming back the urine upon the renal calyces. Pilocarpine is condemned owing to the dangers from bronchial secretion. "It is very doubtful," he says, "whether venesection ever has any beneficial effect, notwithstanding the many reports in its favor, and it is very often dangerous, as has been observed by Schröder and others. I have never seen an indication for blood-letting, and it has been completely discarded in the Vienna clinics, where the results of treatment are far better than anywhere else." We look, however, in vain for suggestions concerning the treatment of the milder uræmic symptoms with a view to prevent eclampsia. The book is really a practical and original one, and well repays perusal. Every physician in charge of lying-in cases will derive much reliable information and many valuable hints from this unassuming but none the less solid little book.

The Wasting Diseases of Infants and Children.—By EUSTACE SMITH, M.D., Lond. Fourth edition. New York: Wm. Wood & Co.

This standard work of reference is now added to Wood's Library, and in its present complete form, and with the more recent additions, is a most valuable treatise upon affections which form such a large proportion of all the chronic disorders of

children. The earlier editions are so well known to the profession that it is, perhaps, sufficient merely to note the appearance of this later one. But for the benefit of any who may not know the scope of the treatise, we might say that it is of an eminently practical character. and that the nature of the contents can be readily extracted from the enumeration of the headings of the heading of the chapters:—I. Simple Atrophy from insufficient nourishment. II. Chronic Diarrhœa (chronic intestinal catarrh). III. Chronic Vomiting (chronic gastric catarrh). IV. Rickets. V. Inherited Syphilis. VI. Mucous Disease. VII. Worms. VIII and IX. Chronic Pulmonary Phthisis. X. Caseation of Lymphatic and of Mesenteric Glands. XI. Diet of children in health and in disease.

Psychiatry: A Clinical Treatise on Diseases of the Fore-Brain, based upon a Study of its Structure, Functions and Nutrition. By THEODER MEYNERT, M.D., Professor of Nervous Diseases and Chief of the Psychiatric Clinic in Vienna. Translated (under authority of the author) by B. SACHS, M.D., Instructor of Diseases of the Mind and Nervous System in the New York Polyclinic. Part I. The Anatomy, Physiology and Chemistry of the Brain. New York and London: G. P. Putnam's Sons. 1885.

This work, which has been in preparation for many years by Prof. Meynert, is one of the most important additions that neurological and psychiatrical literature has received during the past decade. It is intended to be essentially a clinical treatise on "Diseases of the Fore-Brain." As the translator says, "it is a scientific treatise on diseases of the mind by the one best fitted to write such a treatise." Prof. Meynert has been director of the observation wards in the Vienna General Hospital since 1875. Here he has had unequalled opportunities of becoming acquainted with the different forms of disease of the fore-brain, as he had yearly from 1400 to 1600 patients under his care. Any one who will peruse this work will be fully convinced that the distinguished author has made good use of his opportunities. The first part of this volume deals with the anatomy of the brain—"the structure and architecture of the brain." It is

impossible in the space at our disposal to give even an idea of the way in which this subject is treated by the author. It requires to be closely studied in order to be fully comprehended. There is a considerable difference in the author's views of the origin and distribution of the spinal cord tract from those commonly taught. The physiology of the fore-brain is elaborately discussed, as well as its nutrition. The volume concludes with a very learned chapter on the "Mechanism of Expression." Considering the very great difficulty of the translator's task, he has performed it extremely well. The members of the profession on this continent and in England who are unable to read the original, owe Dr. Sach a debt for giving them an opportunity of becoming thoroughly acquainted with the views of one of the most distinguished physicians of the present day.

The second volume, which will be shortly issued, will be devoted to the purely clinical features of the diseases of the fore-brain.

A Manual of Animal Vaccination.—By DR. E. WARLOMONT, Member of the Royal Academy of Belgium, &c. Translated by ARTHUR J. HARRIES, M.D., Senior Assist. Physician and Joint Lecturer to St. John's Hospital for Diseases of the Skin, &c. London: J. & A. Churchill.

The subject of vaccination, as regards its history, arguments in its favor, and the technique of the operation, is one to which, perhaps, sufficient attention has not been given in the teaching-schools of this country. At the same time, in view of the occasional occurrence of smallpox in various localities, it is one with which every educated physician should be thoroughly conversant. Dr. Warlomont is the founder of the National Vaccine Institute of Belgium, and is a recognized authority upon all questions relating to vaccine and vaccination, both in Europe and in America. It is to be hoped that this manual, emanating from such a reliable source, will be widely circulated in Canada. It is a small and inexpensive book, and yet contains all essential information on the modes of propagation and collection of vaccine, the various methods of vaccination, the vaccine eruption, and its various peculiarities and associated rashes. There is appended

a list of the chief works published on vaccination which will be very useful to any one desiring to study the subject more at length.

The Science and Art of Midwifery.—By WM. THOMPSON LUSK, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Bellevue Hospital Medical College. New edition, revised and enlarged. With numerous illustrations. New York: D. Appleton & Co.

It is but a short time since we had occasion to review this work, of which we were enabled to speak in high terms of praise. The rapid advance of many departments of obstetrics has meantime called for a few additions. These having been made, it can be confidently said that Lusk's Midwifery holds a high place amongst American authors, and deserves to be extensively employed for reference and recommended to students as a reliable and unusually readable text-book.

Rationalism in Medical Treatment, or the Restoration of Chemism: the System of the Future.—By WILLIAM THORNTON. Boston: Published by the Author, 1885.

As a publisher William Thornton is a great success, but as an author he is an utter failure. He has published a work of 46 pages, the mechanical execution of which we never saw excelled. He has written, however, 46 pages of the most arrant nonsense we ever read.

Books and Pamphlets Received.

LOCAL ANÆSTHESIA IN GENERAL MEDICINE AND SURGERY: Being the practical application of the author's recent discoveries. By J. Leonard Corning, M.D. New York, D. Appleton & Co.

HOW WE TREAT WOUNDS TO-DAY. By Robert T. Morris, M.D. New York and London, G. P. Putnam's Sons.

FRACTURES AND DISLOCATIONS.—By T. Pickering Pick, F.R.C.S. Philadelphia, Lea Brothers & Co.

PRACTICAL HUMAN ANATOMY. A working guide for Students of Medicine and Physicians. By Faneuil D. Weisse, M.D. New York, Wm. Wood & Co.

ROME IN WINTER AND THE TUSCAN HILLS IN SUMMER. A contribution to the Climate of Italy. By David Young, M.A., M.D, &c. London, H. K. Lewis.

A DOCTOR'S EXPERIENCES IN THREE CONTINENTS. By Edward Warren, M.D. Baltimore, Md., Cushings & Bailey.

THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE EAR. By Ozea D. Pomeroy, M.D. Second edition. New York, D. Appleton & Co.

ESSENTIALS OF THE PHYSICAL DIAGNOSIS OF THORACIC DISEASES. By E. Darwin Hudson, Jr., A.M., M.D. New York, Styles & Carb.

HANDBOOK OF THE DISEASES OF THE NERVOUS SYSTEM. By Jas. Ross, M.D., LL.D. Philadelphia, Lea Brothers & Co.

A MANUAL OF OPERATIVE SURGERY. By Lewis A. Stimson, B.A., M.D. Second edition. Philadelphia, Lea Brothers & Co.

A MANUAL OF AUSCULTATION AND PERCUSSION. Embracing the Physical Diagnosis of the Lungs and Heart, and of Thoracic Aneurism. By Austin Flint, M.D., LL.D. Fourth edition. Philadelphia, Lea Brothers & Co.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Dec. 18, 1885.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Unusually good convalescence after Ovariotomy—DR. TRENHOLME related the history of the last two cases operated upon for ovarian dropsy. In one case the temperature reached 101⅗° ten hours after the operation, but the next morning it was normal. The following afternoon (26 hours after operation) it was 99°, but in the evening it was normal, and remained so afterward. After the first day the pulse also was normal. There were no signs of shock or after-suffering of a severe character. The tumor weighed 34 lbs., and the patient was convalescent after the 18th day. In fact, manifestly gained in flesh before the end of the first week. The second case was even more remarkable, as the tumor weighed 55 lbs. The temperature reached 100° ten hours after the operation, the next morning it was normal, and, together with the pulse, remained normal afterward. The patient was up for her meals the 11th day, and going about the house after the 14th. There were no symptoms of shock, no suffering, and not even a sign of tympanitis. The remarkable results obtained in these cases were due, Dr. T. believed, to the smallness of the abdominal incision. In neither case was it more than three inches in length, and in neither case were the intestines exposed to the air—in fact, in one case not even seen. The second point was the mode of securing the pedicle; as in all his operations, Dr. T. employed No. 20 shoemaker's white thread, and ligated the pedicle in small segments. The high temperature of the room, the atmosphere being saturated with vapor of water slightly impregnated with carbolic acid, was believed to have contributed to these favorable results.

DR. SMITH read a lengthy paper on "*The A. C. E. Mixture the best Anæsthetic in Obstetrical Practice.*" The conclusions arrived at were as follows: —1st, A. C. E. is an effective general anæsthetic, producing as deep insensibility as chloroform. 2nd, Its action is rather more rapid than chloroform, but to develop its effects more of it is required, the proportion being about as 6 is to 4. 3rd, It produces a less prolonged second degree of narcotism than other anæsthetics. 4th, When its effects are fully developed, the narcotism is very prolonged, and is reproduced with great ease. 5th, Its influence on the nervous centres is more uniform, and it creates little, if any, disturbance or break of action between the respiratory and circulatory functions. 6th, The final escape from the organism is rapid, so that the symptoms of recovery are sudden. 7th, In some cases, but very rarely, it produces vomiting. 8th, When it kills, it destroys by equally paralyzing the respiratory and circulatory mechanism.

DR. KENNEDY had not seen the A. C. E. mixture used often, and in these few cases he was not favorably impressed towards it. He thought it would evaporate irregularly, the ether being more volatile, would go off first, and leave the chloroform and alcohol behind. He liked chloroform for midwifery practice and ether for surgical cases.

DR. HY. HOWARD said he had used chloroform upon himself continuously for 48 hours for a severe attack of renal colic. He had also taken ether. He had no fear of either of them.

DR. STEWART had never used the A. C. E. mixture, and believed the little alcohol in it could have no value as a stimulus. Bichloride of Methyline had caused a good many deaths in the past ten years. The danger with chloroform did not arise from large doses. Statistics prove that often a small quantity has produced fatal results.

DRS. MCCONNELL, MIGNAULT, ARMSTRONG and TRENHOLME were well satisfied with chloroform for obstetrics and ether in most other cases.

DR. BROWNE said he had never seen post-partum hemorrhage follow the use of choloroform. He gave a few drops on a cone made with a towel or handkerchief, and only when the pain was on, giving a little more just as the head was passing the vulva. He found less danger from tearing if the head be pushed forwards and delivered with the thumb or finger in the rectum in the interval between the pains. He would use ether in placenta prævia, where there had been much loss of blood. Dr. Fordyce Barker advocates the use of chloroform in nearly all midwifery cases. Dr. Kingman of Boston could only find seven deaths

recorded from chloroform in midwifery practice, and none from ether; still, we must remember how many more times chloroform is used than ether in these cases.

DR. BULLER thought the A.C.E. mixture might be very useful. He believed with many that chloroform was better suited to young children and very old persons. He had used Bichloride of Methyline a few thousand times in the Royal Ophthalmic Hospital at Moorfields, and had seen deaths follow its use. He did not like it.

The PRESIDENT said he had taken a deep interest in anæsthetics, but had not seen the A.C.E. mixture used. In his surgery practice he now uses ether exclusively. During six years at the hospital that he had seen chloroform administered, they had no deaths, but he had seen some very narrow escapes. They used to give a draught of spirits before giving chloroform. With ether, one may do without an assistant; this is not justifiable with chloroform, except, perhaps, in midwifery practice. He thought ether was safer at all ages. He has seen dangerous symptoms follow chloroform, even in young children. Of course if he had to operate upon an old man with atheromatous arteries he might use chloroform, as the struggling which often follows ether would be dangerous. He considered chloroform administration in the dentist's chair very dangerous, the upright position causing the patient to be more liable to fatal syncope.

DR. SMITH, while expressing his gratitude for the friendly criticism which his paper had elicited, stated that he had not, so far, heard anything to affect the good opinion he entertained for the A.C.E mixture.

DR. STEWART having remarked that Dr. Smith concluded that the A.C.E. mixture was safer than chloroform, because it only contained one-third part of chloroform, but that it was often the case that fatal cases of chloroformization occurred when only a very small quantity of the drug had been used, and, therefore, that the small quantity of chloroform in the A.C.E. mixture was no argument in its favor.

DR. SMITH replied that it was precisely to meet such an objection as that that he had devoted several pages of his paper to show that those cases of death were not due to the exceedingly small quantity of the anæsthetic, but to the condition of the patient's circulatory and nervous system at the time. It was a well known proverb that by being united in marriage we halved our sorrows and doubled our joys, and so by uniting chloroform and ether we doubled the advantages and halved the dangers of each. Certainly chloroform was safer in midwifery cases

than in any other, because the woman was recumbent, and, moreover, she was making expulsive efforts, which guarantee a plentiful supply of blood to the brain. But it could only be entrusted to a medical man; and where there was only one, and he had the forceps to handle, chloroform was admittedly a dangerous drug. Besides, it was not a drug that could be used very well during the first stage of labor, during which, however, some women suffer more than in the second stage. Alcohol killed by the head or by coma; chloroform killed by the heart or by syncope; ether killed by the lungs or by apnœa; but by adding the three together, and then only giving one-third the quantity, we obtained an average effect sufficient to produce anæsthesia, but remaining very far short of death.

Several of the speakers having called in question the usefulness of adding alcohol,

Dr. Smith replied that alcohol was a very good anæsthetic as well as stimulant, and would have been used for that purpose in the form of vapor long ago were it not for the defect that it irritates the bronchial tubes when administered alone, but not so when mixed with chloroform and ether, the A. C. E. mixture being just as pleasant as chloroform to inhale. In conclusion, Dr. Smith said that he had so far only had occasion to use it in a hundred and ten cases, but that he would continue to employ it as long as he lived, and that, perhaps, in ten or twenty years he would have the inference of a thousand instead of a hundred cases. He did not pretend to be the discoverer of this combination, nor even to be the first person in America to use it; in fact, in reading the current literature of the day he frequently came across reference to this anæsthetic. Indeed, for all he knew to the contrary, there might be a hundred very able men who constantly used it, and yet who had not had the time, nor felt it their duty, to lay it before their professional brethren.

Stated Meeting, January 5th, 1886.

T. G. Roddick, M.D., President, in the Chair.

Rapidly-Growing Ovarian Tumor.—Dr. Trenholme showed a large semi-solid ovarian tumor which he had removed from a woman some days before. The patient, when she consulted him, was unaware that she had a tumor, but consulted him for severe abdominal pain, which had lasted some three weeks. She had only noticed a swelling for the last six weeks. Latterly, the tumor had grown very rapidly. It was removed without great difficulty, though the adhesions were numerous and the operation

was complicated and prolonged by the bursting of a cyst. The pedicle was broad, and, as is his custom, he ligated it in sections with shoemakers' thread. The patient's temperature rose to 101° the day after operation, but soon fell to normal, and remained there.

DR. SHEPHERD mentioned that a short time ago he had operated in a case of ovarian tumor (in a childless married woman aged 29), with a history of only eight weeks' growth. The patient was seen by Dr. R. P. Howard a month before the operation, and at that time the tumor was of small size; it grew very rapidly, and in three weeks was quite large. At the time of operation, it was doubtful whether this rapid increase was not due to ascites. However, it proved to be a single ovarian cyst, with a solid base, containing 20 pints of thick fluid, and weighing some five pounds. The patient did well, and was able to return to her home in four weeks.

Undeveloped Bones in an Idiot.—DR. R. L. MACDONNELL showed the bones of the lower extremity of an idiot, which had been sent to the dissecting-room of McGill University from one of the institutions of the city. The individual was said to be 20 years of age, and had never spoken or walked. The bones, although of good length, were remarkably small, the femur not being thicker than an ordinary sized finger. The hip-joints were ankylosed in the flexed position, and there was contraction of the knees. The muscles of the lower extremities were strings of fibrous tissue with a little muscular tissue about them. The head, although somewhat microcephalic, was of good shape. In both femurs there was a well-developed third trochanter.

DR. HY. HOWARD said such cases were common in all lunatic asylums.

Hemorrhage into the Pons Varolii.—DR. R. L. MACDONNELL read the history of a case of hemorrhage into the pons Varolii. An old man, aged 62, was admitted into the General Hospital on 31st July, 1885. He had been picked up by the police in the streets, and was in a semi-unconscious condition, unable to communicate anything whatever regarding his history. He was a tall, thin man, very anæmic, with wasted and flabby muscles. His expression was dull and listless, and though he could utter words when spoken to, he was by no means rational. The pupils were equal, but the left was more sluggish than the right. There was slight paresis of the left side of the face, and the right side of the body was weaker than the left. There was increase of the superficial reflexes, but normal patellar reflex. The urine and fæces passed in bed; he was always in a semi-comatose

condition; pulse 90, and feeble. On the 3rd of August, his breathing was stertorous, the paresis of the left side of the face more marked, and coma more profound. Next day the coma was complete, pupils contracted ond unequal; large, moist râles heard at the bases of both lungs; toward evening he died comatose. The brain alone was examined after death, when a fresh clot was found in the pons Varolii, occupying the posterior or lower part, and situated rather more to the left than the right side. Dr. MacDonnell remarked that the central situation of the clot was shown by the equality of the paralysis on either side, and the greater weakness of the right side being accounted for by the position of the clot. It was a case of alternate hemiplegia, the left side of the face being paralyzed, though to a slight degree. This is characteristic of pontine hemiplegia, especially when the lower half of the pons is injured, though usually the fifth and sixth nerves are also involved. There was nothing distinctive in the condition of the pupils, which were not, as usually described, contracted, but merely sluggish in their reaction to light. In hemorrhage into the pons, one of two opposite conditions is usually observed: contraction of the pupils when the lesion is sudden and situated in the upper part of the pons, causing irritation of the nuclei of the third nerve; and dilatation from complete invasion and destruction of these nuclei.

Dr. Hy. Howard asked if, at the post-mortem, the ruptured vessel had been found, as it was most important to know exactly the source of the hemorrhage.

Dr. Wilkins related a case of very extensive hemorrhage into the pons, where the patient lived for eight days.

Dr. Stewart asked if the whole of the left facial was affected or only the respiratory branches?

Dr. MacDonnell, in reply, stated that the ruptured vessel had not been found, and that the whole of the facial was paretic.

Cerebral Syphilis.—Dr. Geo. Ross reported a case of supposed cerebral syphilis which had occurred in his wards in the General Hospital since his paper on that subject was read before the Society. The patient died a few days after admission, and a post-mortem was obtained. He came into hospital complaining of very severe pain in the head and vomiting. In a day or two he was quite maniacal, and then gradually became comatose. He died comatose five days after admission. At the post-mortem, Dr. Wyatt Johnston found at the base of the brain a single small flake of recent lymph, lying on and attached to the inferior surface of the facial nerve in the right side, near its origin. On slitting up the vessels at the base, this exudation was seen to

correspond to a small lateral branch of the basilar artery, where it crossed the nerve. The thrombus extended in this vessel as far as its origin from the basilar, at which point a small roughened, reddish patch existed in the intima, and its wall was thickened, but no thrombus present. The right posterior cerebral artery presented a thickened wall and narrow lumen, and was thrombosed in its whole course ; other cerebral vessels normal. On dissecting the brain, no local degenerative changes were recognized anywere. Dr. Ross remarked that it was singular that such apparently simple lesions should produce such grave symptoms. He had expected to find much more marked pathological changes in the brain.

Erysipelas in Infants treated with Zinc Paste.—Dr. A. D. Blackader read a short paper entitled "Notes on some cases of Erysipelas in the Infant, with a plea for the use of white zinc paint in its local treatment." Brief reports of the cases were given ; the last two of which had been treated by the application of white zinc paint over all the erysipelatous surface, in the manner recommended by Mr. Barwell with white lead. The same advantages were claimed for the zinc as had been for the lead, without danger of absorption of any poison which, in infants, was perhaps to be feared with the latter. These were immediate relief to pain and restlessness, followed rapidly, as a rule, by subsidence of pyrexia and arrest of the disease. The fact that erysipelas was a constitutional and not merely a local disease was not overlooked ; but it was contended that if by these local measures we moderate and assuage the local inflammation, we, at the same time, control at least some of the factors in the systemic disorder. Special advantages were claimed for it in infants. It is easily applied, drying quickly, and forming a complete dressing by itself, which cannot be soiled by the secretions, nor easily rubbed off by the restlessness of the infant. If desired, some disinfectant may be added. Soap and warm water readily remove it after the attack is over.

Dr. Hingston said that he had had himself repeated attacks of erysipelas of the face. He found nothing so comforting as frequent dusting with a puff of flour. He believed that when the system was in ill health the disease spread ; if not, that it would not do so.

Dr Trenholme said he had never seen an infant die of erysipelas. He employs a paint of elderberry tea thickened with calcined magnesia.

Dr. Hy. Howard said that last winter there were between fifty and sixty cases of erysipelas in the Longue Pointe Asylum.

All were treated by painting with a weak solution of iodine, and all recovered.

DR. SMITH said he had seen marked effects produced by one grain doses of quinine given every three hours.

The PRESIDENT said that a favorite prescription for cutaneous erysipelas with the late Dr. Fraser was the oxide of lead and glycerine. He himself uses a lotion of lead and opium, usually warm, but sometimes cold. He believed that great benefit followed the internal use of the tincture of iron in large doses. Patients have a tolerance for it. His usual dose for an adult is 40 minims of the tincture with 5 or 10 of chloric ether every four hours.

Extensive Posterior Cervical Laceration of Os Uteri.—DR. ALLOWAY related the following case, and illustrated by means of diagrams an extensive posterior laceration of the cervix uteri of long standing, and also demonstrated the operation performed for its cure :—

On the 17th of June last he was requested to see a lady stated to be in a dying condition. He found the patient in a hysterical fit, lying on her back in bed, making most exaggerated respiratory efforts—" gasping for breath,"—pulse and temperature normal, but seemed unconscious of his presence. Gave her a hypodermic injection of morphia, and assured her friends that she would not die. At the morning visit next day he obtained the following history : She was 48 years old ; had given birth to eight full-term children ; one miscarriage at third month about ten years ago ; oldest child 25 years of age, youngest 14. She stated she had not been able to do her house-work for some years past. She suffers from intense pain in the back, limbs and head. Has constant irritation of bladder. States that when young she was an exceptionally strong and robust woman, but for some years has been gradually losing flesh. She takes " nervous fits or spells " somewhat like the one in which she was found the day previous. These spells come upon her without warning, and have been increasing in frequency of late years. Her attendants and friends become greatly alarmed during the attacks, which gives her the appearance of being in a dying condition. She has been treated for ' heart disease,' ' liver complaint,' epilepsy, passing of gall-stones, ' ulceration of the womb,' and a host of other maladies, without benefit. She suffers from intolerable attacks of indigestion, reflex pains in almost every part of her body, particularly her head, back and sides. She spends nearly all her time in bed, and carries a mixture of bromide and another of laudanum to make her condition tolerable. Her menstrual

function is still active, but irregular; the flow has always been, until the last year, very excessive in quantity, and accompanied with pain. On vaginal examination, the pelvic peritoneum and parametric cellular tissue are found quite free from callosities or other evidences of past inflammation. The uterus is freely moveable, and all pelvic parts painless to the touch. The vaginal walls are normal; the uterus is acutely anteflexed. If the perineum be now well-retracted by Sims' speculum, a very odd-looking, large tongue-like body is seen hanging down two inches and a half into the vagina from the vault above. In searching for the external os, none can be found, but high up on the posterior surface of this cervix-like body, about half an inch from the vaginal vault, the sound suddenly passes into an opening and disappears forwards to the depth of about two and a half inches. On carefully examining this peculiar cervix, the anterior surface appears to be of the normal squamous epithelium of the portio-vaginalis exterior, while the posterior surface has the macroscopic appearance of the gland tissue lining the cervical canal. The case now appeared to be an extensive posterior laceration of very long standing. Hypertrophy had taken place from the advanced state of cystic degeneration and other chronic changes consequent upon constant and long-continued irritation to which the exposed gland tissue had been subjected. The operation for the cure of the lesion consisted in making a long horse-shoe shaped denudation three-eighths of an inch wide and very deep, so as to excise as much cicatricial and cystic tissue as possible, and then drawing the edges together by six wire sutures, rolling the denuded edges of the cervix inwards upon its longitudinal axis. In this way the cervix was re-formed back to its normal condition and shape, the external os being formed at the apex of the body of the last suture. Union was complete throughout; the sutures were removed on the tenth day. The convalescence was slightly protracted from debility, but the patient is now in perfect health, and takes a great deal of exercise. She is free from pain, dyspepsia, and "nervous spell." She is no longer troubled with her heart or liver, *and has not passed any more "gall-stones."* The flow has returned two or three times since operation, but when last heard from she stated that seven weeks had elapsed since her last period; probably the menopause had set in.

Dr. Alloway drew attention to the extreme rarity of this lesion. Emmet states that of 164 operations, only 4 were for posterior laceration. Goodell, in 113 successful cases, records no posterior laceration; and in no other reliable authority can he find reference to this rare lesion. Emmet supposes that when

it does occur it heals spontaneously, but that it often causes parametric inflammation, with cicatricial bands and retroflexion resulting.

Salivary Calculus.—DR. HINGSTON exhibited a salivary calculus which had ulcerated its way out of the sublingual duct. The patient had been sent to him to be operated on for supposed malignant disease. The parts about the floor of the mouth were greatly inflamed. This condition had lasted for months.

DR. JAS. BELL said that some time ago he had removed a similar calculus from Wharton's duct. The patient had been sent to him from the country to be treated for cancer of the mouth.

DR. SMITH mentioned having removed last year a phosphatic calculus from the tonsil 1¼ inch long.

CHATHAM MEDICAL AND SURGICAL SOCIETY.

Stated Meeting, Feb.-6th, 1886.

DR. G. D. FLEMMING IN THE CHAIR.

(From our own Correspondent.)

Myeloid Sarcomata.—Dr. Holmes exhibited several tumors removed at a post-mortem recently, also kidneys and a portion of the liver of the same subject, presenting secondary deposits. The largest tumor involved the anterior portion of the 4th rib on the left side; other ribs were also involved, and the body of the 9th dorsal vertebra. There were a few deposits in the liver; the right kidney was enlarged and cystic, weighing 8 ozs. There were also a number of secondary deposits upon the upper surface of the diaphragm. The pancreas, spleen, lungs and left kidney were apparently healthy. The stomach and duodenum were very much contracted. The patient was first taken ill about 18 months previous to his death. First complained of pain in his left side; this pain persisted in spite of treatment. About two months subsequently a small enlargement appeared on the 4th rib. He afterwards suffered great pain in his back and down his left leg. The last three months of his life he suffered from nausea, distressing diarrhœa, and great wasting. Dr. Jas. Stewart of Montreal saw the patient in September, and diagnosed either syphilis or multiple sarcoma. Iodide of potash as much as ʒi was given three times a day for some time, without relief however to his symptoms.

Enlarged Tonsils and their Removal.—Dr. Rutherford read a paper on this subject. After referring to the etiology of

hypertrophied tonsils, of which age plays a most important part; and touching upon their pathology, he spoke at length of both the local and constitutional consequences of these enlargements. He considered that they often impaired the general health from disturbed sleep, loss of proper rest, development of dyspeptic symptoms, etc. Deafness, as the result of inflammatory changes extending up the Eustachian tube to middle ear, not infrequently occurs. Catarrh of the nasal and pharyngeal mucus membrane is frequently the result of this condition. The reporter has frequently observed anæmia, chronic cough, abnormal voice and deafness to disappear after the removal of enlarged tonsils, without any specific or general treatment. In his remarks on the treatment of these diseased structures, he first referred to constitutional remedies, such as syrup of the iodide of iron, cod liver oil, etc., which are important especially in strumous subjects. Locally, astringents had not proved very effectual in his hands. Escharotics are more tedious and painful than the knife. The indications for excision were the presence of symptoms of impaired nutrition, relapsing inflammations, interference with respiration, etc. He considered that the operation was a perfectly safe one, easily performed, productive of much good in suitable cases, and a procedure too frequently relegated to the specialist. He always uses McKenzie's tonsillotome, and removes both tonsils at one sitting. Cocaïne, 4 per cent. solution, applied freely to the surface of the tonsils and fauces (unnecessary to inject the gland), not only allays the pain of the operation, but, what is more important, limits materially spasm of the constrictors of the pharynx, and thus facilitates greatly the operation.

Dr. Tye did not approve of the indiscriminate removal of enlarged tonsils; preferred palliative measures in most cases. Believed the enlargement was generally due to constitutional causes, and required general treatment. Had used locally, with benefit, equal parts of tr. iodine and glycerine.

Dr. Holmes only removed enlarged tonsils with the knife after other measures had failed to give relief. Considered loss of sleep and deafness prominent indications of their removal. Prefers scissors or bistoury and vulsellum forceps to more complicated instruments.

Dr. Flemming has removed enlarged tonsils for deafness and frequent recurrent attacks of quinsey. Does not consider it necessary to remove the entire gland.

TORONTO MEDICAL SOCIETY.

Stated Meeting, Feb. 11th, 1886.

DR. CASSIDY, PRESIDENT, IN THE CHAIR.

(*From our own Correspondent.*)

DR. POWELL related a case of injury, and showed specimens of bulbous enlargements of the ends of nerves, which were the cause of neuralgic pains in the stump of an amputated arm. The Doctor went on to say that, about six years ago, a saw-mill in the neighborhood in which he was then practising "ran away with itself"—that is, the control of the machinery was lost—and one of the circular saws flew in pieces, a fragment of which came in contact with his patient, producing a wound extending from the angle of the scapula to the region of the left kidney, cutting through several of the ribs—portions of which he afterwards removed for necrosis; the accident also produced such injury of the left arm as to require amputation. The patient recovered, and a good stump was formed. Some three years subsequent to the accident, the patient again consulted him for neuralgic pains in the stump. On examination of the stump it was found that bulbous enlargements existed in the ends of the nerves, but somewhat higher up than the cicatricial tissue of the stump. It is important to observe this, as it is by some asserted that these neuralgic pains which sometimes occur in stumps are due to pressure of the ends of the nerves by the cicatricial tissue of the scar. There were two bulbous enlargements—one at the inner and anterior aspect of the arm, involving the ends of the median, ulnar and internal cutaneous nerves, where they are in close contact with the brachial artery; the other enlargement existed at the cut end of the musculo-spiral nerve. Both these bulbous enlargements were removed, and the patient made a perfect recovery. The specimens of the condition of the affected ends of the nerves, which were shown the members, illustrated well the diseased condition.

The PRESIDENT related a case in connection with this, under the care of Dr. McFarlane at the General Hospital, where a girl had received a bullet wound in the region of the musculo-spiral nerve, producing pain in the arm beyond the seat of the injury. In this case, there being no wound of exit of the bullet, the surgeon concluded the missile to be still in the arm, and pressing down upon it, removed the bullet, and pain disappeared.

DR. CAMERON showed a specimen of an acephalic monster, with spina bifida extending down the spine throughout nearly

the whole of its extent. There was nothing to account for the production of this condition. The mother had had some family disagreements some time prior to the birth of the child.

An interesting discussion ensued upon the possibility of maternal impressions affecting the fœtus.

Dr. Powell related several cases in his practice where fright to the mother in the pregnant condition had been followed by a monstrous condition of the fœtus.

Dr. Cameron desired an explanation of how these maternal impressions affected the fœtus.

Dr. Davidson related a case in his practice where in the new-born child there was an absence of all the fingers of the right hand and the first phalanx of the thumb on the same hand. The mother had been in the habit of seeing a girl sitting in church, just in front of her, having a hand presenting a similar appearance to that of her child. The condition of the hand in this girl was produced by a burn, and the mother thought she had thus got the impression.

Dr. Atherton, on the 22nd of October last, removed a fibroid tumor of the uterus weighing about 60 lbs. The patient is 35 years of age, and the tumor first showed itself immediately after marriage, 12 years ago. Its seat of growth was in the anterior wall of the uterus and was firmly adherent to the abdominal wall, evidently receiving a large part of its blood-supply through the enlarged branches of the epigastric arteries. The patient has done well, and will likely make a perfect recovery. She has gained 28 lbs. since the operation.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

Eightieth Annual Meetiny, held in Albany, Tuesday, Wednesday and Thursday, Feb. 2nd, 3rd and 4th, 1886.

The President, Dr. A. Vander Veer of Albany, in the Chair.

(*From our own Correspondent.*)

The President called the meeting to order at 10 a.m., Tuesday.

The President's Address.—In his address, the President recommended that the delegates from the county societies and permanent members be increased fourfold. He expressed his strong disapproval of the action of the meeting of the American Medical Association at New Orleans concerning the Congress at Washington in 1887. He strongly urged the necessity of a

State law for stringent regulations regulating the entrance of members of the profession to practice.

The first paper read was by DR. STILES of Oswego. He gave the history of a case of *Abscess of the Kidney*, which terminated favorably. Judging from the evidence adduced by Dr. Stiles in his paper, we would consider the case to be one rather of perinephritic abscess bursting into the bladder.

DR. CORNING of New York read a paper on the alleged curative influence of prolonged sleep in cases of neurasthenia.

After DR. SHERMAN of Ogdensburg had reported a case of complete recovery from an acute empyema by free drainage, a very interesting discussion followed on *Compression of the Lung and its Treatment.* The following points were dealt with:—(1) The length of time the lung may be crowded up under the clavicle, and yet be restored to its normal condition; (2) such treatment as will result in the perfect expansion of the lung.

DR. A. L. LOOMIS said, with regard to the first question, that the answer depended upon the extent to which the pulmonary pleura was involved; if it was not involved, or involved only to a slight extent, the lung might remain compressed a long time and yet perfect expansion take place. He considered that in cases of acute suppurative pleurisy, where there was only slight interstitial changes in the pleura, if the pus was evacuated inside of one or even four weeks, we might look to perfect expansion of the lung occurring. The sooner the fluid is removed in acute suppurative pleurisy the better, and this should be done by a free opening. If the pus was sweet, he would not recommend washing out the cavity. He looks upon antiseptic injections as unnecessary, and even injurious in these cases.

DR. ELY of Rochester read a thoughtful paper on "*Pulmonary Gymnastics*," referring specially to their usefulness in warding off phthisis in those predisposed to it.

DR. LOOMIS, from his own personal and general experience, would only recommend these exercises to patients in fairly robust health. He considers their action very injurious in delicate subjects. He said that athletes in his experince frequently die from phthisis.

DR. JACOBI said that deep inpirations and exercise of the respiratory muscles generally, would prove beneficial in persons of narrow chest and early ossification of the costal cartilages. Such exercise would result in some expansion of the lung upward and considerable downward.

Dr. Bendell of Albany read a paper on the treatment of *Aural Polypi by Injection of Carbolic Acid.* Having performed this operation a number of times with considerable success, he recommended it to the profession as a sure and reliable means of getting rid of aural polypi.

In the discussion which followed, it was clearly shown that we had quicker, surer and safer means of dealing with aural polypi.

A carefully prepared paper on the results of the *Operation for Convergent Squint* was then read by Dr. St. John Roosa of New York. He considered that the fundamental condition for the production of convergent strabismus was the loss of vision in one eye. He advocated tenotomy, and said that he always informed his patients that from one to four operations might be necessary. He thought that the best time for an operation was from the fifth to the seventh year. An earlier operation deprived the patient of the assistance of convex glasses. He had had no good results in attempts to cure squint by the use of atropine and glasses, and he had quite abandoned that mode of treatment. The operation, he said, did not improve the vision; for that purpose glasses were necessary. He obtained good results in 80 cases out of 111, and he thought the number might have been increased to 95 if an earlier operation had been allowed. He believed that no substitute had been found for tenotomy.

Dr. G. R. Fowler of Brooklyn read a paper on the *Non-Union of Fractures.* The following is a summary of the treatment recommended by Dr. Fowler in these cases:—1. In all cases of simple delayed union, the percussion method of Thomas, combined with an efficient retention apparatus, will be found to offer the readiest and most efficient means of bringing about union, provided this does not depend upon some dyscrasia. 2. Brainard's method of drilling the fragments, and, this failing, freshening the ends of the bones and uniting the periosteum, combined or otherwise, according to the exigencies of the case, with wire suture of the fragments, should take the place of the old Dieffenbach operation. 3. Cases in which it is found impossible, because of extensive loss of bone substance, to unite the periosteum by sutures, or wire together the ends of the bones, should be treated by bone transplantation, under antiseptic precautions, either by the method of Macewen or that of von Nussbaum.

Dr. Hadden of New York read a paper on "*Rheumatic Affections of he Joints.*" He considers that rheumatoid-arthritis attacks persons who live chiefly on amylaceous and saccha-

rine foods. He recommends the substitution of nitrogeneous for amylaceous and saccharine foods, and by this method, he maintains, good results are obtainable.

A paper on "*Infant Feeding*," by Dr. Brush of Mount Vernon, was followed by one on the use of "*Papayotin in Diphtheria*" by Dr. Jacobi of New York. The action of this agent in dissolving diphtheritic membrane was illustrated. Specimens of egg, meat and cheese digested by a solution of papayotin (1 to 250) were exhibited.

Dr. A. L. Loomis of New York read a very able paper on *General Arterio-Capillary Fibrosis and its Relation to Cardiac and Renal Disease.* In a future number we will refer more particularly to the subject of this paper.

Dr. Hopkins presented a paper on "*Ulcerative Endocarditis*," in which he referred to the labors of Osler and Rosenstein. Several illustrative cases were narrated.

Dr. Willis Ford of Utica then read a paper on the *Early Management of Cases of Mental Depression.* He considers that many cases of grave insanity might be prevented by early proper treatment. Cases of mental depression, where the emotions alone are affected and where there are no delusions, are improved by diversion and travel. In some cases of sudden onset of melancholia, treatment by sedatives has been effective.

Mr. Lawson Tait forwarded a paper on "*Methods of Diagnosis*," which was read by Dr. Ward of Albany.

"Diseases of the Fallopian Tubes, with Reports of Cases and Characteristic Specimens," was the title of the next paper by Dr. W. G. Wylie of New York. Dr. Wylie thinks that four-fifths of the cases described as pelvic abscesses have their origin in inflammation of either the ovaries or tubes.

Dr. J. A. S. Grant-Bey, of Paris, communicated a paper on "*Cholera.*" Dr. Grant looks upon this disease as caused by a living organism, the *habitat* of which is the Delta of the Ganges. All attempts on the part of this organism to form new *habitats* has failed; at least so far as Egypt, Europe and America are concerned, the organism has different stages of development, and it is not capable of inducing a choleraic attack except at a certain stage of its existence. Hence recent choleraic stools are not contagious, but stale ones are highly so.

Second Day—Wednesday, Feb. 3.

Dr. Simmons presented a paper on *Acute Nephritis, especially as following Diphtheria.* Two general plans of treatment

were proposed—the one to increase the excretory action of the kidneys; the other to act on the other excretory organs, the bowels and the skin. A combination of these methods is the best plan.

Dr. W. M. Carpenter of New York read a paper having the title of *Clinical Note on Albuminuria and Glycosuria.*

Dr. Lucien Howe of Buffalo exhibited a white rabbit in which he had transplanted a black eye about three days before. The coloration of the eye showed that the circulation had been partially re-established. This operation had been performed several times by the author, who referred to certain improvements in the *technique.* Some sloughing always took place.

Dr. Mittendorf said the first transplantation of the eye in man, by an operator in Paris, had recently been reported, and it appeared that by the sixth week the cornea had sloughed; therefore the final result of the operation was not successful.

Dr. E. L. Keyes of New York read a paper on *The Treatment of Varicocele and Hydrocele.* For varicocele, he passes a catgut ligature subcutaneously, and ties the dilated spermatic veins high up, above the point where they become tortuous. He has had twelve consecutive successful cases where this procedure was adopted. No unpleasant symptoms or complications had followed. For hydrocele, he strongly recommends carbolic acid injections.

Dr. L. D. Bulkley of New York read a paper on *Non-Venereal Syphilis*, in which he drew the following conclusions: 1. Syphilis was not necessarily a venereal disease, but in a certain proportion of cases acquired quite unconsciously, and in an entirely unexpected manner. 2. Failure to obtain a venereal history should not lead to the conclusion that certain lesions were not those of syphilis. 3. The syphilitic virus could be carried a long distance, and, after some time had passed, be able to cause syphilis in the inoculated. 4. Non-venereal changes are often mistaken for epitheliomata. 5. Non-venereal syphilis often shows great malignancy.

Dr. F. N. Otis of New York read a paper entitled *The Limitation of the Contagious Period of Syphilis in relation to Marriage, etc.* Dr. Otis considers it as absolutely proved that lesions of the tertiary stage are not contagious, and that the limit of contagion may be fixed at a period of five years.

Dr. R. F. Weir of New York read a paper on "*Antiseptic Irrigation of Joints for Chronic Serous Synovitis.*" He recommends this treatment where the synovitis has lasted longer than

a month. He uses a 5 per cent. solution of carbolic acid for irrigation. The moderate reaction which follows soon subsides. The joint is kept immovable for ten days.

In the evening, a very able address was delivered by the President, Dr. Vander Veer, on the *Water Supply of our Cities and Villages.*

Third Day—Thursday, Feb. 4.

Dr. Simmons of Poughkeepsie read a paper on *Leprosy in Japan.* No country, he said, afforded greater evidence than Japan in support of the hereditary transmission of the disease, and many facts tended to confirm the theory of its parasitic nature.

Dr. Bell of Brooklyn called attention to the danger of the spread of leprosy from the Norwegian colonists in the Northwestern States by intermarriage and in other ways.

Dr. W. H. Thomson of New York then read a paper on the *Prevention of Hemiplegia.* He laid stress on the importance of preventing sudden increase in the blood-pressure, and with this end in view he recommended small and repeated doses of corrosive sublimate, 1-30th of a grain, several times daily. The importance of avoiding stimulants and tobacco was referred to, as well as the avoidance of excess in the use of nitrogenous foods.

F. C. Curtis of Albany read a paper on *Ringworm of the Scalp*, with special reference to its treatmont. Dr. Curtis has found a chloroform solution of chrysophanic acid (7 grains to the ounce) as the most effective means in getting rid of this troublesome affection where it has broken out in children's asylums and hospitals. Without depilation, a cure can be effected by this agent.

The Committee on Nominations then presented their report, which was accepted:—

President—W. S. Ely, M.D., Rochester.
Vice-President—S. Van Etten, M.D., of Port Jarvis.
Secretary—W. Manlius Smith, M.D., of Syracuse.
Treasurer—C. H. Porter, M.D., of Albany.

DELEGATES.

To the Canadian Medical Association—Dr. B. F. Sherman, Dr. A. Vander Veer, Dr. W. W. Potter, and Dr. A. M. Phelps.

To the Ontario Medical Association—Dr. L. Howe and Dr. F. Winkel.

To the German Surgical Congress and the British Medical Association—Dr. A. M. Phelps.

After a vote of thanks to the President and other officers, and to the Committees, the Society adjourned, to meet in Albany on the first Tuesday in February, 1887.

CANADA

Medical and Surgical Journal.

MONTREAL, MARCH, 1886.

DIGESTIVE FUNCTIONS OF THE BILE.

A satisfactory answer to the question, What is the genuine digestive function of the bile? has long been a desideratum. True, both the experience of the physician and that of the experimental physiologist have been in accord as to certain of the collateral uses of the bile—*e.g.*, what it prevented, in what respects it was a help to the other digestive juices, but exactly what changes (if any) it wrought in the food were unknown. We are glad to notice that a contribution of a very original and definite sort has recently been furnished by Dr. Landwehr, the principal assistant in the laboratory of Professor Hoppe-Seyler. It is in reality a continuation of work on which this physiological chemist has been engaged for some years. We have a personal acquaintance with the investigator, and know him to be a most enthusiastic and indefatigable worker.

It is commonly stated in works on physiology that the bile has the power to emulsify fats; and this being considered as equivalent to the digestion of fats, it was thought that to answer that the function of the bile was the emulsification of fatty substances was satisfactory. But any one who would make the experiment might ascertain that bile shaken up with fat, even if both were somewhat warmed, formed but the feeblest sort of emulsion; indeed, little better than one with so much water, and, perhaps, no better than the latter with an amount of alkali in it equivalent to what is found in bile. The foundation, then, for this doctrine was most unsatisfactory. The case was very different if pancreatic juice or a watery extract of the gland itself were used. Landwehr has therefore attempted to explain these facts, and

furnish at the same time a consistent theory of biliary digestion. This investigator has spent much time in examining substances derivable from the animal kingdom allied to mucilage or the vegetable gums; and he has isolated from different sources what he has named "animal gum" (mucilage). Mucin, he finds, may be considered as made up of a carbo-hydrate and a globulin substance. The latter, it will be remembered, belongs to that class of albuminous substances characterized by great solubility in weak solutious of common salt. Animal gum was found in chyle and in milk; but what was of greater significance, this substance was extracted in considerable quantity from the pancreatic gland itself and from pancreatic juice, hence the emulsifying power of the latter. Its formula corresponds to that generally assigned to starch, dextrin, etc., viz., $C_6 H_{10} O_5$.

The demonstration of a similar function for bile is somewhat more circuitous. By the addition of acetic acid or alcohol to saliva it can be easily shown that it abounds in *mucin*; and it is well known that the intestines, etc., secrete large quantities of the same, for the existence of which hitherto no adequate need has been suggested, at least none commensurate with the quantity furnished.

It is found that if bile be added to saliva, the mucin of the latter is decomposed into its component carbo-hydrate and animal gum or mucilage, the latter acting on the fats, and, as in the case of the pancreatic juice, emulsifying them. Now, if all this is substantiated by future investigation, it would seem that we have at last found the definite digestive function of the bile, and the explanation of the abundant secretion of mucus in various parts of the alimentary tract. It must be borne in mind also that *mucin* is not decomposed or destroyed by gastric juice, so that in the case of those animals which bolt their food (*carnivora*), and in which it is not easy to understand how there can be any appreciable amylolytic function of the saliva, we can now see how the saliva swallowed with food and at other times may be finally used in furnishing the mucin essential for biliary emulsification. Bile itself, though free from albumen, abounds in mucin.

Dr. Landwehr's researches, with others of recent date, are interesting scientifically, as showing how numerous are the re-

semblances between the animal and vegetable world, and in very unsuspected directions. It has long been known that cholesterin, lecithin, nuclein, etc., occur in plants as well as animals; and Darwin's investigations of the sensitive plant seemed to indicate that it had the power of digesting animal bodies (insects); but what is of startling interest is the fact that very recently an English investigator has shown beyond doubt that in the papaw plant there is a ferment capable of acting in almost all respects like the *trypsin* of the pancreatic juice—*i.e.*, capable of changing albumen into peptone, leucin and tyrosin.

Thus more and more is being fulfilled the prediction (uttered in his public address of two years ago) of that great master, Hoppe-Seyler, that it would be found that animals and plants were, in their vital processes, more alike, fundamentally, than had been hitherto supposed.

Communication.

THE INTERNATIONAL MEDICAL CONGRESS.

To the Editors of THE CANADA MEDICAL & SURGICAL JOURNAL.

SIRS,—In the February number of the CANADA MEDICAL & SURGICAL JOURNAL I read an editorial reply to my letter as published in its January number in reference to the International Medical Congress of 1887, to be held in Washington, United States of America. To my sorrow, it breathes the same spirit as the article which called forth my letter. For some reason or other, your JOURNAL and other Canadian ones seem to have taken their cue from the defunct *Medical Times and Gazette* of London and some journals of the United States whose editors are not members of the American Medical Association, and some of whom have ignored its ethical requirements, and, consequently, cannot join in its consultations. Why you have adopted this course towards the action of so large an association as the A.M.A. I know not, and can only surmise. In fact, it is the largest representative society in the world, so far as figures show. I well know the strong affinity that exists between the Canadian profession and that of Great Britain, and I am not surprised that the London meeting of the International Medical Congress should be considered by you as the perfection of excellence, but, strange to say, no allusion to the Copenhagen Congress or its precedents, and the illustrious men who composed these congresses. Can you show me, in any instance, where the American medical journals used their influence to make them failures, even if their friends did not "roost on the highest pole" or any one of the American profession.

If I am correctly informed, there were jealousies and internal bickerings in the English profession in the organization of the London Congress, in which "science" had no part, and many men as illustrious as those who were made prominent were left in the cold and took back seats. Did the American medical profession try to make the chasm wider, and to dictate who were right and who were wrong? You say

"At present the prospect is that the PEERS of the men who organized the London Congress (why not include Copenhagen) will be absent from Washington." Is not the CANADA MEDICAL & SURGICAL JOURNAL doing its best to promote that absence? Would it not be well for you to take counsel from the London *Lancet?*" Were we to criticise the editorials in the Canadian medical journals, we would not fall *much short* in arriving at the conclusion that they did not want the Washington Congress of 1887 to be a success.

But for fear I may have misjudged, and that ignorance of the facts in the case have led to the editorial expression of the Canadian medical press, I would respectfully refer you to the editorial in the *Chicago Medical Journal and Examiner* for December, 1885, and to the editorial in the January number of the same journal; also to the editorial in the *Journal of the American Medical Association* for Feb. 6th, 1886. I also take pleasure in enclosing "A Medical *coup d'état* in Philadelphia," to show you how they do things in the "city of brotherly love," when law has to yield to force.

I am happy to inform the readers of the C. M. J. that the medical profession abroad will be represented in the Washington Congress by many of its most illustrious men. The A. M. A. will take no back steps at St. Louis, and if the few names of the American medical profession given in the JOURNAL are the only ones to be placated, and the success of the Congress rests wholly upon *their sweet ipse dixit*, then, as you say, "it would be better to abandon the Congress." When the medical savants of Europe come to Washington, they will be much surprised at the scientific papers presented and the discussion had upon their own papers, even should the "men eminent in their respective departments" fail to put in their appearance on the occasion.

Yours respectfully,

WM. BRODIE, M.D., *President A.M.A.*

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Medical Items.

—Dr. G. E. Fenwick, Professor of Surgery, McGill University, has been elected an honorary member of the New York State Medical Society.

—Dr. Stirling, Professor of the Institutes of Medicine in the University of Aberdeen, has accepted the chair of Physiology in the Victoria University, Manchester, rendered vacant by the resignation of Dr. Gamgee. Dr. Stirling was led to prefer Manchester to Aberdeen chiefly on account of the well-equipped laboratories of the Victoria University, which will enable him to engage in original research.

THE NEUROLOGICAL SOCIETY OF LONDON.—At a recent meeting of the prominent neurologists of London, it was decided to form an association to be known as the "Neurological Society of London." Dr. Hughlings Jackson has been elected president for the ensuing year, and Dr. Wilks and Sir James Crichton Brown vice-presidents.

PATHOLOGY OF THE LONDON HERBALIST.—"You know, sir, bad spirits means that the liver is out of order. The doctors gives you a deadly mineral pizen, which they call blue pill, and it certainly do pizen 'em, but then you run the chance of being pizened yerself. You 'ave noticed the 'oles in a sheep's liver after it's cut up, 'aven't you? Well, them 'oles is caused by slugs, and 'uman bein's is infested just the same. So is awsiz (horses), but they don't never take no blue pill. Catch 'em! The doctors knows all about it, bless yer, but they don't talk so plain as me. *I* calls out-of-sort-ishness 'slugs in the liver,' and pizens 'em with three penn'rth of dandelion tea, for which I charges thrippence. *They* calls it 'sluggishness of the liver,' and pizens 'em with a penn'rth of blue pill, for which they charges a guinea, and as often as not they pizens the patient too."—*London Cries.*

COD LIVER OIL WITH HYPOPHOSPHITES.—As a nutrient means of checking and repairing bodily waste, and remedying disease of the throat, chest and lungs, Scott's Emulsion has long held the foremost rank among preparations of cod liver oil. In it not only is the disagreeable flavor and nauseating effect of cod liver oil in its crude state overcome, so that it is pleasant and palatable, but it holds in combination the hypophosphites of lime and soda, a most important remedial agent and adjunct to the cod liver oil. The perfect chemical union of this valuable combination as prepared by this firm give it an exalted position in pharmacy, and brings this hitherto valuable but almost useless article (on account of its repulsive taste and odor) into practical utility for supplying to the depleted system iodine, bromine and phosphorous in the most desirable and acceptable form.—*Townsend's Quarterly Epitome.*

—Trypsin (Fairchild's) is now offered as a solvent for diphtheritic membrane. The well-known properties of this principle of the pancreatic juice give the strongest grounds for anticipating success in its application for this important purpose. Trypsin acts quickly and powerfully upon fibrin and fibrinous membrane. It is not dependent upon the interaction of acid, as is the case with pepsine. It is most active in slightly alkaline media. It may be applied by spray or brush. In practical use the results have been very encouraging. Messrs. Fairchild Bros. & Foster wish to respectfully announce, that, owing to the great cost of this product and their inability to more than keep pace with the actual demand, they cannot offer samples. It may be obtained of the principal drug houses in this country, and is dispensed in ½, ¼, and 1 oz. bottles, with full directions.