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## ORIGINAL ARTICLES AND COMMUNICATIONS.

### METATARSAL NEURALGIA, OR MORTON'S DISEASE.

This condition is a neuralgia chiefly situated at the anterior part of the foot, especially about the head of the fourth metatarsal bone. In most cases the pain is very acute, but in slighter cases it consists merely in a dull ache.

It was first described in 1876 by Dr. T. G. Morton, under the title of "A Peculiar Painful Affection of the Fourth Metatarso-phalangeal Articulation." Since then it has received notices from many writers, with almost as many titles, one of these being of a more classical origin, "Erythromelalgia," which name, however, is not always wholly correct, as in the majority of cases redness is absent. The neuralgia varies in intensity. The immediate cause is pressure on one or more of the digital nerves at the heads of the metatarsal bones. According to Dr. T. G. Morton, the pain is localized at the interspace between the fourth and fifth metatarsal bones; but in many cases it is present in the second or third interspaces, frequently starting about the head of the third metatarsal bone.

With reference to the causation, there can be no doubt that the rheumatic or gouty diathesis plays an important share in the production of the disease, but its incidence is determined by a blow, strain or fall in which the weight comes mainly on the front part of the foot. In other instances it supervenes after long standing and walking, especially in narrow boots. In many cases some degree of flat-foot is present, but occasionally one finds it associated with the reverse condition, namely, the hollow or claw-foot. Its association with flat-foot is very interesting from an ætiological point of view, since there can be no doubt that with the ordinary condition of flat-foot there is associated a falling of the anterior transverse arch in such a way that pressure is made upon the digital nerves.

SYMPTOMS.—Firstly, the attention is called to the patient's foot on account of the pain suffered; frequently it is intense and paroxysmal, and renders movement impossible—such are the severe cases; nor is it confined to the foot, but starting about the head of the third or fourth metatarsal bones it is reflected up the limb. As a rule, no redness is present. In almost all cases the patient will volunteer the statement that there is nothing gives so much relief to the pain as removing the

boot and holding the instep. This description of the pain is very characteristic.

Secondly, deep tenderness is present about the heads of the third and fourth metatarsal bones. In almost all cases pain may be elicited by firmly holding the head of the fourth metatarsal bone between the finger and thumb. In moderately severe cases it requires somewhat continued pressure to do this, but in bad cases the slightest pressure causes exquisite pain.

Thirdly, the afflicted foot is broader across the heads of the metatarsal bones than is normal.

Fourthly, on examining the sole, a large corn may be seen over the heads of either the second, third, or fourth metatarsal bones, one of which is felt to be prominent in this situation. This prominence of the head of one of the metatarsal bones, taken in conjunction with the character and the starting point of the pain, are diagnostic of the disease.

Fifthly, a peculiar twist of the foot has been observed, the portion in front of the tarso-metatarsal articulation being twisted inwards, so that the base of the fifth metatarsal bone is exposed to the pressure of the boot, and the patient complains of constant pain in that spot.

Sixthly, a tracing of the foot is typical. There is a bulging instead of a re-entering angle behind the ball of the great toe.

PATHOLOGY.—The heads of the first three metatarsal bones are nearly on a line with one another, and are less movable than the remaining ones; the head of the fourth is a quarter-of-an-inch behind that of the third, while that of the fifth is nearly half-an-inch behind the head of the fourth; and between the heads of the fourth and fifth, branches of the external plantar nerve pass. When the transverse arch is compressed, the head of the fifth metatarsal bone (it being very mobile) and its proximal phalanx come directly into contact with the head and neck of the fourth metatarsal, and consequently the nerves are compressed.

This supposed pathology is amply proved by the "X" ray.

While this anatomical explanation suffices in the case of the fourth and fifth metatarsal bones, it does not explain the instances of metatarsalgia beginning between the second and third and third and fourth bones.

The theory of treading upon rather than pinching of the nerve is, in the opinion of many, more in accord with clinical observations; and in support of this theory there are three anatomical facts, namely, the proximity of the painful area to the communicating fourth branch of the internal plantar nerve; the collapse of the anterior arch; and in most cases the fact that the bulk of the body weight in walking on the toes is borne on the first and fourth joints.

DIAGNOSIS.—This must be made from flat-foot chiefly by reason of the pain. As already stated in many cases of Morton's disease, flat-foot of a minor degree is present, but it is rarely so marked as to explain the acute and agonizing pain of metatarsalgia. Cases may be considered to partake more of Morton's disease than of flat-foot when the pain begins about the heads of the metatarsal bones, and is of the paroxysmal nature already alluded to. In some cases not a trace of flat-foot exists, but the arch of the foot is exaggerated, so that in this instance no confusion

ought to arise. Again, in Morton's disease the foot is usually of a healthy color and appearance, whereas in painful flat-foot it is blue and congested.

Prognosis should be guarded in all cases. Exacerbations of the pain may take place. These are due to the accompanying neuritis.

TREATMENT.—In all instances evidences of rheumatism, rheumatoid arthritis, and gout should be sought for and treated with the usual remedies. In all moderate cases the first thing is complete rest to the foot for two or three weeks; then the patient may be allowed to walk, but no boot should be worn for a time, merely a canvas shoe with a bandage round the proximal ends of the metatarsal bones. The boot which should be worn when all pain has subsided must be broad in the tread, so as to give plenty of room for the heads of the metatarsal bones, and should be made so as to fit closely over the instep. In cases of great severity, and in those which refuse to yield to treatment, an operation must be carried out. The best form of operation is undoubtedly the removal of the head of the metatarsal bone around which the pain is greatest. The success of this operation is very great indeed. Some recommend excision of the joint, and others merely neurotomy; but this latter procedure is of little avail.

244 Bloor St. West, Toronto.
August, 1898.

A. A. SMALL, M.B.,
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## *PUERPERAL SEPTICÆMIA.

BY H. D. LIVINGSTONE, M.D., ROCKWOOD, ONT.

The question of Puerperal Septicæmia, its cause, site of origin and characteristics have been themes for discussion during many years, and different theories advanced on insufficient data to account for its ætiology.

Earlier investigators on the subject regarded the disease as peculiar to the puerperal state, shrouded it in a veil of mystery, and attributed the causation to a specific bacillus which they were unable to isolate. Pathologists, too, drew their conclusions from post-mortem evidences which today are admitted as fallacious, and only to be viewed as incidents in the course of toxic absorption.

Recent investigation demonstrates the almost universal opinion that puerperal septicæmia is practically identical with the surgical form and its origin entirely independent of pregnancy or the puerperal condition. Reasoning on this hypothesis, we must admit the presence of an initial focus—a starting point for the inception of the poison and its conveyance into the general circulation. For the majority of cases this theory is satisfactory, and, in a large percentage, the cause may be directly traced to some morbid condition of the generative tract, either to a solution of continuity, or to the retention of decomposition products. There are, however, some phases of the disease for which no apparent reason can be assigned, and which sometimes seem to refute the argument that the con-

* A paper read before the Ontario Medical Association, June, 1898.

traction of puerperal septicæmia is impossible unless associated with recent lesions of the parturient system. Perhaps a solution of the difficulty may lie in the fact that the site of absorption has escaped observation, or has occurred in an unexpected quarter. However introduced, the poison rapidly enters the general circulation, and by inducing a toxic condition of the blood gives rise to the constitutional symptoms.

In the treatment of the subjoined cases, it was endeavored to meet this condition by the use of "Aseptolin," formula $C_{11}H_{16}N_2O_2$–OH–$C_6H_{31}$, a remedy proposed by Dr. Cyrus Edson, of New York, consisting of a solution of phenol and pilocarpin phenyl hydroxide, and said to exert an antiseptic effect on the blood.

Case No. 1 was that of a young primipara, aged about twenty-four, in whom labor was very tedious and necessitated the use of forceps. On the fourth morning after confinement she complained of severe and repeated chills, and later developed considerable pain and tenderness in the left breast, subsequently leading to mastitis. On the afternoon of the same day the temperature rose to 104½°, pulse in the neighborhood of 120; pressure elicited tenderness over the uterus and lower portion of the abdomen, and excruciating pain was complained of on right side of chest. The lungs were carefully examined on this and the preceding visit with negative results, and it was not until the second day following that a marked pleuritic friction, accompanied by pneumonic rates, was heard on right half of chest, quickly followed by a similar involvement of left side —ultimate consolidation was limited to the lower lobe of each lung. The lochia were decreased in quantity, but not particularly offensive. I attribute the cause in the foregoing case to the extremely unsanitary surroundings inducing absorption from recent lacerations of the genital tract.

The treatment adopted was both local and constitutional, the former comprising intra-uterine and vaginal irrigations of a 1-4000 solution perchloride of mercury, at first twice and afterwards once daily together, with as thorough antisepsis of the external genitals as possible. 250 minims of "Aseptolin" were injected into the abdominal wall as an initial dose, and thereafter daily injections of from 75 to 100 minims were employed for over a week. The diet consisted mainly of milk, and in as large quantities as the stomach would tolerate. Stimulants were used freely, whiskey being administered every three hours, the amount guided by the general condition, and in addition small doses of strychnine as an adjuvant measure.

Throughout the attack, which lasted about three weeks and terminated favorably, the temperature ranged between 101° and 103°; the pulse rate, as a rule, not exceeding 120. How much to credit the "Aseptolin" in the preceding instance it is difficult to say. It was not used until the third day after the appearance of symptoms, and the existing complications would mask any prompt effect which might otherwise indicate its remedial action. Considering, however, the gravity of the case, the rapid secondary involvements, and the previously debilitated condition of the patient, I am inclined to think it must have acted beneficially.

The second trial of this remedy was in the case of a primipara, age 37,

married seventeen years. On the evening of the third day after confinement, which was much prolonged, she was attacked by a severe chill. I saw her on the following morning, when the temperature indicated 105, pulse 130. An intra-uterine douche of 1-4000 perchloride of mercury solution was administered, followed by a slight drop in the fever, which again rose nearly to its previous height in the evening. The interior of the uterus was then carefully scraped with a dull curette, nothing abnormal being discovered, and the douching was continued daily for five days. During this period the usual systemic treatment was adopted, but, notwithstanding, the constitutional symptoms remained unabated; the temperature not continuously high but fluctuating between 102° and 103°, pulse rate averaging 120, considerable sweating chills and prostration. On the sixth day two drachms of "Aseptolin" were injected, the thermometer registering 104° at the time, pulse 120. The following day the temperature had fallen to normal, the pulse to 80, and the general condition was markedly improved. Fifty minims "Aseptolin" were again injected, and the patient made an uninterrupted recovery, the pulse and temperature never rising above normal.

I am not advocating "Aseptolin" as a specific in this or any similar disease, or to the exclusion of efficient local measures. My experience of the remedy, although extending to the treatment of a few cases of erysipelas and la-grippe with satisfactory results, has been too limited to permit a decided opinion, but in puerperal septicæmia we are dealing with a disease which, although admitted to be local in origin, is not always so manifested, and then presents itself as a constitutional affection of varying severity, and justifiably indicating the employment of any recognized remedy which would appear to combat the circulation of toxic materials in the system.

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A MEDICAL MAN IN THE CABINET.—The sanitary welfare of the people demands a national bureau of public health with a physician as its chief in the President's Cabinet. Sanitation is the salvation of a nation. Health in peace as in war makes enterprise and prosperity possible to a people. Moral degeneracy follows physical, in a people. Hereditary physique and morals go together. Cæsar and Napoleon worked wonders with the world; Napoleon and Cæsar, epileptic, failed, and Napoleon's change of character followed his "epileptic change." Russia's unjust fame as the most tyrannous of nations came from the excesses of the mad filiacide monarch Ivan, The Terrible. A mad English monarch, George the Third, made two peoples out of one, which the coming centuries must tell how much is weal and how much woe for the Anglo-Saxon race.

The evil to nations from neuropathic degeneracy revealed to us in the historic past in the lives of Nero hereditarily tainted with epilepsy and insanity, the acquired degeneracy of Commodus and Heliogabalus warn us in the woe and misery of their subjects against indifference to sanitary states of mind in absolute rules, and teach us the lesson that when the people make the rulers from among themselves they should be first mindful of the health of the people from whom the ruler, the legislator, the judiciary and the army and navy are selected.

# MEDICINE.

IN CHARGE OF

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## TREATMENT OF ANGINA PECTORIS

Sir Douglass Powell, in a Lumleian lecture recently delivered by him before the Royal College of Physicians, of London, devoted a portion of the essay to a discussion of the treatment of angina pectoris, and this portion of the lecture we produce herewith:

The etiology and morbid mechanism of angina pectoris are difficult enough to formulate with regard to prophylactic and remedial treatment. The difficulties diminish when we recognize that there is a continuity in the phenomena presented to us for treatment from the slighter degrees of introspective recognition of the cardio-vascular mechanism, through the more distinct evidence of cardiac anxiety and distress in connection with the higher and more persistent grades of arterial tension to the paroxysmal attacks of acute breast pang associated with a veritable asthma of the blood-vessels which may supervene in any cases of the series; and this continuity is to be observed between so-called false and true angina, although some authors will not admit the term angina except as applicable to the fatal cases of coronary origin.

In a large proportion of cases angina pectoris is an entirely functional disorder, the main feature of which is sudden increase of blood pressure and a correspondingly sudden call upon cardiac effort; it may be on the systemic, it may be on the pulmonary, side of the circulation that the strain arises. The causes of this arterial spasm are almost all within our scope of remedial treatment, and the neurosis that favors its occurrence is subject to considerable modification and control. In all these cases whilst it is the heart that suffers the angina, the conditions which orignate that suffering are outside the heart. There is no essential difference save in degree, and not always in degree, between cases of angina in which the heart is sound and those in which it is unsound, but there is every difference in the gravity of prognosis and the urgency for treatment. The cause of distress is contraction of the peripheral or general visceral or pulmonary vessels, giving rise to muscular strain of one or both cardiac ventricles suddenly induced and of a cramp-like character.

The cardiac pain in vasomotor angina is difficult to explain satisfactorily; it is distinctly a result of intraventricular pressure, and from its

character and radiation it must be primarily an affection of the sensory nerves of the heart caused by stretching of its tissues, so that the contraction of the tissues is attended with pain. The endocardial surface is more sensitive than the pericardial surface, but comparatively insensitive tissues when stretched become very painful. Dr. Allen Sturge observes that reflected pain is only an ordinary sensation conveyed to a nerve center in commotion, by which it is intensified to a painful sensation. Thus may the reflected pains be accounted for as emanating from the centers disturbed through the cardiac nerves. On the other hand, we have only to conceive a slight degree of hyperæsthesia of the organic nerve centers to account for that undue perception of the cardio-vascular mechanism which is the first grade of neurotic disturbance, and which can readily become a painful perception of increased pressure within the heart.

The pain, which is to a certain extent the measure of the strain upon the heart, is to be attacked by remedies which relax arterial spasm. Amyl nitrite, nitro-glycerine, and the nitrites generally, but especially nitro-glycerine (1 min. of the 1 per cent. solution), may be given at intervals of five minutes for 2, 3, 5 or more doses, and at the same time that the anti-spasmodic is given an appropriate cardiac stimulant is required. In the more purely neurotic cases it is most desirable to avoid alcohol. There is no better stimulant than slowly sipped hot water. Dr. Brunton has pointed out that sipping is a physiological stimulant to the heart, and hot drinks tend to relax arterial spasm. A prescription for a carmanative draught, including ammonia, chloric ether, and valerian or cardamoms, is valuable to be taken in several sips. Warmth to the surface, and especially to the extremities, are the further requisites.

The second stage of these cardio-vascular attacks is one of reaction and excitement, to be followed by fatigue. Often by the time the medical observer arrives the cardiac pressure has already been relieved through the depressor nerve of the heart excited by intraventricular pressure bringing about relaxation of arterial spasm; the first violent throbbing or the threatened standstill of the heart has already yielded to quick, perhaps somewhat irregular, beats, the tension of the pulse is no longer apparent, and this fact has no doubt led many observers to question the alleged mechanism of this form of angina. With a few hours' rest in bed the patient may again be fit for the duties of life, although usually a sense of lassitude and fatigue remains for a few days. It is now that the cause of the attacks must be sought out, the conditions of the heart carefully ascertained, and the daily life, diet and surroundings and functions of the patient must be investigated and corrected where in error.

If there be no heart disease present, the patient must be thoroughly re-assured on that point; but if heart lesion be present, much more attention must be given to the after-treatment, and the prognosis depends upon the nature of the lesion present. I would briefly say that the gravest cases are those in which there is enlargement of the heart without, or not accounted for by, valvular defect. I would mention the fibro-fatty heart, the syphilitic heart, the renal heart in this category. Aortic stenosis and aortic regurgitation come next, the regurgitant defect being by far the most common. Mitral stenosis is not infrequently attended with anginal

seizures, sometimes of a fatal kind, and the attacks would probably be more frequent were it not for the readiness with which pulmonary hæmorrhages occur. Mitral regurgitation as the primary disease is rarely accompanied with angina, and when it supervenes on cases due to degenerative hypertrophy and dilatation it tends to preserve the patient from future attacks. On all these cardiac conditions anginal attacks may supervene, having precisely the same mechanism as the attack unattended with cardiac disease. It is most important to bear this in mind, for the treatment is precisely on the same lines, only it must be more urgently pursued.

The initial treatment may be started with nitrite of amyl inhalation, and the patient should always have the drug at hand. But the attack is commonly attended with such acute heart failure that the clinical features of high pressure pulse and laboring heart may be immediately lost. Undoubtedly, the subcutaneous injection of pure ether, to which a minim of nitro-glycerine solution may be added, if not already otherwise taken, is the best treatment in severe cases if caught at the right moment. The sense of prostration is greater and more defined in these cases. Alcoholic stimulants, so much to be avoided in pure vasomotor cases, are in these imperative. A full dose of brandy should be given in some hot drink. In those cases, and they are many, in which flatulent distension forms a marked feature of the attack, if it be not concerned in producing it, a draft of ether, ammonia, soda, cardamoms and spirits of chloroform is of much service at the earliest stage.

The heart is left in an exhausted or fatigued condition after the attack, and there is a decided tendency to a series of several attacks. For this a mixture of strychnine or caffeine may be prescribed with digitalis, so that 15 or 20 minims of liquor strychninæ and 20, or 30, or 40 of tincture of digitalis are given in 24 hours, and the strychnine may be given subcutaneously in, of course, equivalent doses, or the caffeine in the form of salicylate. It is probable that digitalis and strychnine influence the heart muscles before that of the vessels, but if the pulse become tightened, as it may be in exceptional cases, the digitalis must be lessened or its effect on the vessels moderated by the addition of $\frac{1}{2}$ minim or 1 minim doses of nitro-glycerine to the prescription. There is another remedy which is a powerful restorative to the fatigued heart, and that is oxygen inhalation, which may be given for five or ten minutes every hour or two or three hours as may be required.

These cases often come to us with a history of a recent attack, and we have to consider what form of angina it has been, how to avert fresh seizures and how to repair, if it may be, the failing heart which renders each attack so dangerous.

The presence or absence of heart disease must be rigorously ascertained:

1. The soundness or otherwise of valve function.
2. The presence or absence of enlargement, dilatation, or hypertrophy of the organ.

It is important not to form too hasty a judgment, and it is often impossible to come to a final diagnosis at or immediately after a seizure. In tumultuous action, whether from excitement or violent work, the loco-

motion of the heart is greatly increased, and an inexperienced observer is apt to find great enlargement, displaced apex beat, etc., when none exists. On the other hand, one hears it sometimes maintained at inquests and the like that considerable organic disease of the heart may exist without any recognizable signs. I would venture to say that a careful investigation of the sounds and dimensions of the heart will always establish in such cases a displaced apex beat, an increase in the dimensions, or a recognizable alteration in the sounds of the heart. The converse is, however, frequently true, namely, that much alteration in the heart is conceived to be present when none exists. It requires great precision and diagnostic courage to prove a negative, and in the presence of functional disturbance and discomfort and anæmic *brutis*, mistakes in diagnosis are very frequent and easily made.

With mitral regurgitation of rheumatic origin, high tension pulses do not often supervene, but mitral insufficiency is frequently a sequel to the dilatation of the heart consequent upon chronic high tension and secondary cardio-vascular changes, and under these circumstances it is undoubtedly a safeguard against over-distension of the ventricle. I have seen cases in which the establishment of mitral incompetence has produced a cessation of anginal attacks which had previously occurred from time to time. In senile hearts mitral regurgitation is common, and is not to be looked upon seriously, but rather as a favorable element in prognosis, a condition normal to the senile heart.

## SUMMER DIARRHŒA.

BY WILLIAM LELAND STOWELL, M.D.,

Visiting Physician to Infants' and Randall's Island Hospitals, Demilt Dispensary, etc.

Solomon said: "To everything there is a season, and a time to every purpose under the sun: a time to heal and a time to speak," etc. This is the beginning of the diarrhœa season, and the fitting time to speak of successful healing treatment.

Summer diarrhœa, or gastro-intestinal catarrh, or mycotic diarrhœa, may be due to any one of about forty bacteria which have been isolated. If a given germ always produced a certain set of symptoms, and we could recognize them, our treatment might not be quite so empirical as now. We don't know what the conditions are in which the germs flourish except in a few instances. The results we do know. The gastric juice is a powerful germicide, and abundantly able to destroy the invading army of germs, unless they are in overwhelming numbers, or the digestive fluid is very scanty. Owing to excessive summer heat or sudden change to cold, or nervous perturbations, this physiological anti-septic may be enfeebled. The same physiological conditions may interfere with the formation and elimination of bile, the intestinal anti-septic and fat emulsifier.

The cause of trouble may be a food proper in itself, but given in too great quantity or too often, as milk that has commenced to ferment, or fruit that is beginning to decay.

If there is much gastric disturbance in a child, the intestine is similarly affected, probably later the colon. Gastro-intestinal catarrh is therefore one disease, not two. The symptoms are restlessness, pain, vomiting of stomach contents with mucus, and frequent stools containing the same. If the offending cause is still in the digestive tract, sweep it and its products out with a dose of castor oil. In a child more than a year old add tinctura opii camphorata or tincture of opium. Next change the diet for twenty-four or forty-eighty hours, if not longer, no matter how well it agreed before.

To a baby give egg albumin and sweetened water, or beef juice, not beef tea. Another of my favorites is wine whey, made by adding a glass of sherry to half a pint of hot milk. The sweetened whey may be taken cold without limit. It is refreshing, nutritious, and slightly stimulating. If desired, the whey can be prepared with essence of pepsin. In fact, the peptonoids given with water are very helpful. In the hospital (Infants' Hospital, Randall's Island) this is a routine treatment at times. Mutton broth should be mentioned too.

Often the stools are very green, and the accompanying mucus also. This shows that the bilirubinhas been changed to biliverdin, from what cause is disputed. We know, however, that the best treatment is mercury with an alkali. Give ten grains of hydrarg. cum creta at one dose, or a tenth of a grain of calomel, and half a grain of bicarbonate of sodium every half hour for ten doses. The calomel may increase the greenness of the stools for a time, but they will become less frequent and return to normal color soon.

If mucus is very abundant, and surrounds small flocculent masses or curds, the chief trouble is in the colon. If there are streaks of blood also, the rectum is involved—a colitis and proctitis. Babies with this form of diarrhœa have griping and tenesmus, with occasional prolapse of the rectum. It is my habit to have all such hospital cases given frequent intestinal irrigations of warm salt solution, one drachm to the pint. There is nothing better than the salt, though it may seem more elegant to use one of the numerous germicide and anti-septic preparations, of which there are so many.

In cholera infantum the copious saline injections not only lessen the frequency of stools, but, being readily absorbed, help to replace the great loss of fluid. The collapse is overcome, and the weak, fluttering pulse becomes stronger.

If it becomes necessary to keep the young infant off from milk for a considerable time, we must choose carefully from the numerous infant foods. Malted milk and Mellin's food are easily tolerated in an enfeebled digestive tract. It must be remembered that these two foods are almost devoid of fat, and if they are to be used long cream must be added.

The manufacturers of food products seem to be giving more attention to the subject of nutrition than the majority of physicians do. Nearly all of these foods have virtues which appear in their advertisements, and all have deficiencies which are not so apparent. Babies need fats, proteids, and carbohydrates just as adults do, but in varying proportions.

The infant needs to get his heat chiefly from soluble carbohydrates—

*i.e.*, sugar—not insoluble starch, which he must first convert into a sugar. The fuel of a baby should come to him ready for use, as sugar, for he is not able to split his own kindling—*i.e.*, starch—until six or eight months of age.

If a child a year or more old, who could digest some starch, fails to do so temporarily, he may have one of the malt preparations after his meal of bread, cracker, or baked potato. In the same circumstances we may use a proprietary food, even though it does contain unconverted starch. The addition of maltzyme or other malts will quickly make the change. Hudson's whole-meal food and Carnick's soluble food I find the best. The babies like them, and the offensive stools come back to normal characteristics under such feeding.

Milk is after all the only ideal food, and all these others are makeshifts for temporary use. Milk must be the main reliance if we would avoid rickets, scurvy, and faulty development in general.

Very rich mother's milk contains four per cent. of fat, seven per cent. of sugar, and two per cent. of proteid or casein. Remember that cow's milk has the same fat, with less sugar, but with twice the quantity of casein. Gravity cream contains sixteen per cent. of fat, which can be readily brought to four per cent. by dilution with three parts of sugar water. The sugar water consists of two ounces of either milk sugar or cane sugar to a pint of water. This is an approximation to mother's milk which any one can easily prepare. It is wise sometimes to replace one part of sugar water by one of lime water. More accurate percentage modification may be worked out by the methods of Colt, Baner, Rotch or Holt.

Finally, as to a few drugs. They will be needed, as the food ideal in theory is not always so in practice.

For a simple diarrhœa in a baby give bismuth with equal parts of chalk mixture and mucilage of gum arabic

To older children a little opiate is not harmful—*e.g*, chalk mixture, mucilage of gum arabic, aromatic syrup of rhubarb, and paregoric, of each, half an ounce. Give a teaspoonful after every stool.

When fermentation is marked, give salol and bismuth. Resorcin and naphthaline are often efficient, but I find myself using salol all the time. Creosote is another good remedy, and subgallate of bismuth also, each easily administered in combination with liquid peptonoids, to check diarrhœa and to stop vomiting.

The best results are obtained by giving to the digestive tract complete rest, next change of food, then irrigation.—*N. Y. Med. Jour.*

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## USE OF THE STOMACH-TUBE.

Dr. A. L. Bennett, of Buffalo, concludes a paper on this subject in a style which has become popular on account of its terseness:

1. Don't use the stomach-tube simply because you want to be considered scientific and "up-to-date."

2. Don't withdraw stomach contents for examination unless you are prepared to examine them.

3. Don't discard external means of physical diagnosis because you have a stomach-tube.

4. Don't expect too much from diaphanes, electric buzzers, buckets, complicated tubes, etc. All these have their uses, but in general they are available in very rare cases.

5. Don't pass the tube without first inspecting the mouth and throat and examining the heart and arteries, and at least inquiring as to pregnancy, piles, and other possible contraindications.

6. Don't pass the tube as a means of treatment unless you know precisely what you want to accomplish with it.

7. Don't introduce a weight and bulk of water which you would consider injurious if swallowed. As a rule, don't introduce more than a pint at once, and almost never more than a quart. Don't be deceived by the ball-valve action of a particle of food or any other cause which may allow water to remain in the stomach. Make sure that you withdraw as much as you introduce, except that you may allow a little for leakage through the pylorus, or possibly absorption. Remember that the more a stomach can hold the less it ought to.

8. Don't imagine that the gastric douche will cure all of the diseases of the stomach; you would laugh at a gynecologist who held such a view about the vaginal douche.

9. Don't imagine that a stomach is doing well till it can digest plain but varied diet without mechanical interference. Don't speak of a case as cured till a patient can indulge in all the ordinary food without medical aid and without injury.

10. Don't let the patient learn to pass the tube himself. This rule holds for his benefit as well as yours.

11. Don't fail to use the tube or to have it used when the indications out-weigh the contraindications.—*Am. Med. Surg. Bulletin.*

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## TREATMENT OF HEMOPTYSIS.

In severe cases of phthisical hemorrhage of all kinds, ergot is perhaps the most reliable drug, administered in full dose initially of the fluid extract (2 to 3 fl. dr.), and afterwards in smaller dose of 20 to 30 minims every hour for a few doses, or hypodermically in full dose, 15 minims of a solution of four to five grains of ergotine. The hypodermic injection is the more potent agent: it should be made deeply into the muscles. The subsequent action may be maintained either by injections or by doses of the fluid extract, 20 minims every half-hour for a few doses.

Digitalis is indicated in the same class of cases as that which calls for the use of ergot, but in general it developes its effects slowly. If employed as a means of controlling a sudden large hemorrhage it should be given hypodermically, 20 to 30 minims of the tincture; the dose to be repeated in half-an-hour if need be.

Tincture of hamamelis is useful in hemoptysis, and may succeed when other remedies fail. It is indicated in case of small but persistent blood-spitting, in 10 to 20 minim doses every four or six hours. In employing

gallic or tannic acids the remedy must be repeated frequently, and the initial dose be maximal, *e.g.*, of gallic or tannic acid, 20 or 30 grn., in one ounce of water, at once, and subsequently a teaspoonful of such solution every twenty minutes.

The application of firm ligatures around the thighs and the upper arms appears in some cases to have been effective; the *modus operandi* is perhaps by starving the pulmonary circulation by the arrest of the blood returning from the limbs. If this be the explanation, this method will secure a lower blood-pressure.

The treatment by calcium chloride, which is based on physiological findings, seeks neither to close the rent in the vessels nor to reduce the blood-pressure, but to heighten the coagubility of the blood generally, and so to favor thrombosis at the bleeding points. The salt must be given in full doses of from 15 to 45 grn. every four to six hours, or in great emergencies from 20 to 30 grn. as an initial dose, and then from 4 to 5 grn. every quarter of an hour for a few doses, subsequently as above. Investigations seem to indicate that the coagubility of the blood increases during the administration of calcium chloride up to a certain point, and then declines and may fall even below the normal. For three or four days the coagubility increases, and therefore, during a period not exceeding this, the drug may be given, dissolved in either water or milk, or with the addition of some extract of licorice.—*Dr. H. Painsbury, in Treatment.*

## AN ASSOCIATION FOR THE PREVENTION OF CONSUMPTION AND OTHER FORMS OF TUBERCULOSIS.

We desire to call attention to this Association, which has been formed with the object of preventing the spread of the most fatal disease to which mankind is subject. It has gradually become definitely known that tuberculous disease, of which pulmonary consumption or phthisis is an example, is not inherent in the constitution, but is communicated indirectly from pre-existing cases, and the principal methods by which it is spread have been identified. Tuberculous disease, which in one or other of its forms is responsible for at least 1 in 10 of the deaths from all causes, and, according to some calculations, for 1 in 6 of the deaths among adults, is therefore preventable.

For this the education of the public is needed in the methods of prevention and eradication, and the stimulation of individual effort in carrying them out. The objects of the Association are the dissemination of information, the arousing of public feeling as to the necessity for defensive measures, and the provision of sanatoria, which will be both preventive and curative, for the open-air treatment of consumption. In order to enlist the co-operation of large numbers the annual subscription for membership has been fixed at 5s., and the donation for life membership at £5 5s. All members will receive a full description of the measures which are proposed, and information as to the organization of the Association. The office of the Association is at 20 Hanover Square, W., where members can now be at once enrolled.

We are permitted to state that the Prince of Wales takes a deep interest in the movement.

(Signed) SAMUEL WILKES, President of the Royal College of Physicians, London.
WILLIAM MAC CORMACK, President of the Royal College of Surgeons.
W. H. BROADBENT, M.D., F.R.S., Chairman of the Provisional Committee.
MALCOLM MORRIS, Hon. Treasurer.

All communications respecting the Association should be addressed to St. Clair Thomson, M.D., Hon. Secretary.

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STROPHANTHUS *vs.* DIGITALIS.—Dr. Reynold W. Wilcox, of New York, contends that the advantages of approved preparations of strophanthus over digitalis are: (1) greater rapidity of action; (2) absence of so-called cumulative effects; (3) non-interference with the caliber of the arteries. He lays stress on the marked safety of strophanthus as a heart tonic for the aged, the nephritic, the gouty, and the atheromatous. It is the best cardiac remedy for children.

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USE OF THE POULTICE.—Dr. J. M. Carter, in November number of *Medicine*, makes a plea for the more rational use of the poultice. In my opinion, the objection to their use because they grow cold and thus may become the exciting cause of disease, is puerile. If not properly used it would be valueless and might be harmful, but, under similar application, so would be the use of quinine or any other valuable remedy.

The poultice is of great benefit in relieving pain and dissipate congestion by causing local dilation of the capillaries. Now, if these are the objects I sought when it is properly used, it becomes of value in the chest applications of children especially. It should not be used, however, in those cases when, because of poverty, coldness of the room or want of careful nursing, the definite directions of the physician cannot be carried out. It must be borne in mind that it is not a panacea for all the chest diseases.

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Dr. Charles E. Page, in the *Medical Times* of November, 1897, has given an interesting article upon the treatment of rheumatism and the acute fevers. He protests strongly against the present methods adopted by the profession at large—not only in the matter of medication, but in that of feeding. He produces strong arguments and cites cases and authorities to prove that in rheumatism, fasting and not feeding is what nature cries out for—that the stomach is unable to digest the food, and that the pathological condition is being continued and aggravated by the conscientious but ignorant efforts of the medical attendant; he advises the withholding of all food for a time; the exhibition of water in large quantities, two or three quarts in the twenty-four hours, frequent baths and placing of the joints in cold packs. He objects to rectal feeding in these cases in the following words: "Some degree of putrescence of the nutritive material injected into the lower bowel, a process altogether unnatural, of course, adds still further to the patient's toxic state."

# SURGERY.

IN CHARGE OF

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## PERIRECTAL ABSCESS.

BY A. B. COOKE, A.M., M.D.

The designation, perirectal abscess, is not the one ordinarily applied to this complaint. Under the names "circumscribed periproctitis," * "periproctitis (ischio-rectal abscess),"† and "rectal abscess,"‡ different authors have written of it, while one prominent authority § only accords it incidental mention in his chapter on "Fistula in Ano." The term employed in the title seems to me more accurate, both as to the nature of the trouble and the pathology involved, and at the same time sufficiently comprehensive to include the various forms under which it is met.

While a more attractive and perhaps more interesting subject might have been chosen for this occasion, from the standpoint of practical importance I know none more worthy of earnest consideration. When we stop to think that abscess is the invariable precursor and cause of fistula, that the latter, as a rule, is a preventable sequence, and then run over each for himself the cases of fistula which have fallen under his own observation, no argument is needed to justify my selection.

Two years ago, at the Pulaski meeting of this Association, I had the honor to present a paper on "The Operative Treatment of Rectal Fistula." This should have had precedence. For I unreservedly claim, in the light of my own experience and with the weight of authority to sustain me, that were the initial abscesses properly treated fistulæ would be notable chiefly for their rarity.

Of my last twenty-five rectal cases, taken consecutively from my case-book, eight were fistulæ and three abscesses. Expressed in other words, thirty-two per cent. were cases of fistula, twelve per cent. of abscess. Or, basing the calculation on the recognized fact that fistula invariably originates in abscess, the latter disease was represented in forty-four per cent. of twenty-five consecutive cases. This proportion is probably somewhat in excess of the true average, but it is nearly enough accurate to be strikingly suggestive. And from it we may deduce at least two pertinent and significant conclusions: First, perirectal abscess is a very frequent dis-

* Ball. † Gant. ‡ Cripps. § Mathews.

ease; second, the frequency with which these cases result in the formation of fistula under the usual methods of treatment and the fact that in the large majority of cases such result is altogether preventable, commend the subject to the serious attention of every physician who has at heart the interests of his patients and the high purpose of his calling.

The rectum is surrounded by and imbedded in loose cellular or areolar connective tissue, the structure most favorable to the suppurative process. Abscess in this region occurs in three situations, two beneath the levator ani muscle, called respectively superficial or marginal and ischio-rectal, and one above that muscle in the so-called "superior pelvi-rectal space" of Richet. We shall consider them in the order named. But before taking them up separately it were well to consider briefly a general question pertaining alike to all. Whether or not pyogenic bacteria are essential in every case to pus formation, our friends of the microscope have not yet fully determined. In this locality, however, they are invariably present. And this is not a cause for wonder when we remember the peculiar function of the rectum and the fact that an abrasion, however slight, furnishes a means of ready egress to any evil-disposed cocci which may be lurking in the vicinity. The etiology of the large class of so-called idiopathic abscesses occurring in this region is doubtless traceable to this source, and viewed from this standpoint the only wonder is that they are not of even more frequent occurrence.

The location and nature of superficial or marginal abscess is sufficiently indicated by its name. More correctly speaking, it should be called perianal abscess. A large proportion, perhaps the majority, of these cases result from inflamed external piles. Particularly is this true of the thrombotic variety, in which the clot acts as a foreign body and is itself liable to degenerative changes. Other causes are infection through anal fissures, irritating discharges from above and in the female from the vagina, the use of rough detergents, etc. They may occur at any point of the anal circumference.

As might be supposed from its location, the chief symptom of perianal abscess is pain, often excessive in character. Constitutional disturbance occasionally, though rarely, takes place. Aside from the pain, this form of abscess is of comparative insignificance; but if allowed to pursue its own course marginal fistula is the certain result. Such result follows more frequently in this than in the other varieties for the reason that, though painful, the patient generally regards his trouble merely as an "attack of piles" and postpones seeking medical advice until the damage has been done. If seen in the initial stage remedies looking to the resolution of the inflammation may be employed with some hope of success. Of these, crushed ice applied locally and a brisk saline purge constitute the best. When suppuration ensues the indications are fulfilled by immediate incision, cleanliness and the usual applications. There is no place here nor in any other form of abscess for the use of that surgical abomination, the poultice.

Ischio-rectal abscess is the most frequent form of this affection and far more serious than the one just considered. The ischio-rectal fossa, from which it takes its name, is a pyramidal-shaped space lying upon each side

of the bowel, bounded below by the integument, above by the under surface of the levator ani muscle, upon the inner side by the rectum, and upon the outer side by the tuberosity of the ischium and contiguous portion of the internal surface of the pelvic wall. It is filled in the natural state by connective tissue and fat. The causes of abscess in this situation are various. Infection through a breach in the mucous membrane probably heads the list. This is effected in many ways by the lodgement of foreign bodies above the sphincter muscles, injury from the syringe nozzle, the injection treatment of internal hemorrhoids, etc. Other causes are traumatism from without, sitting on cold seats, ulceration and perforation due to stricture, acute phlebitis, and depraved states of the general health.

Pus developing within the boundaries named tends in the direction of least resistance, and, if left to itself, as a rule breaks sooner or later upon both the mucous and cutaneous surfaces, forming a complete fistula. It may, however, break at only one point, resulting in a blind internal or blind external fistula, as the case may be. The former is the more usual for the reason that the rectal wall offers weaker resistance, though in such cases a cutaneous opening is almost certain to form later because of imperfect drainage and the entrance of contaminating matter from the bowel. In the large majority of instances the mucous opening will be found in the sulcus between the two sphincter muscles, the insertion of the levat or ani preventing the pus from making its way further upward. The cutaneous opening may occur at any point in the ano-perineal region Though usually pointing over the ischiorectal fossa, the pus may burrow forward to the perineum or backward between the rectum and coccyx, making its appearance in the fossa or at any point upon the opposite side. In the latter event horseshoe fistula would result.

The symptoms of ischio-rectal abscess are, in the beginning, a dull throbbing pain in the region of the rectum which constantly increases in severity. Constitutional symptoms soon supervene, occasionally being ushered in by a chill followed by fever, furred tongue, headache and general malaise. The overlying skin becomes red, indurated and œdematous. In neglected cases the brawny induration sometimes involves an entire buttock and presents a very characteristic appearance. It sometimes happens that the inflammatory process assumes the nature of an acute cellulitis and spreads with great rapidity. These are cases of exceeding gravity as regards the life of the patient as well as the local result. When the pus makes its way forward into the perineum retention of urine from pressure may occur.

The prognosis in ischio-rectal abscess depends almost absolutely upon the plan of treatment adopted. If poulticed and allowed to take its own course, fistula is the practically inevitable result, to say nothing of the days of suffering such a course necessarily entails. And, be it said to the shame of our profession, this is the course habitually pursued, with the result that fistula, a preventable malady, is perhaps the most common of all rectal affections.

As a rule it is vain to hope for resolution in these cases, and the time spent in palliative treatment is worse than wasted. Early and free in-

cision constitutes the only rational treatment. It is neither necessary nor advisable to wait for the physical signs of pus. This is usually present long before it can be accurately located. For the sake of thoroughness the operation is best done under general anæsthesia, though I have used cocaine with considerable satisfaction in a few cases. The character of the incision is a matter of some moment. The bistoury should be passed directly inward until pus oozes out beside the blade. As the knife is withdrawn the parts should be freely incised *in a direction perpendicular to the transverse axis of the bowel.* In other words, the cut should be across the radiating anal folds, not between them, as in the latter event the normal contracted condition of the parts would tend to close it and impede drainage. The finger or curette should be introduced into the wound and all loculi broken down and the debris removed. The cavity should then be irrigated with hot bichloride solution (one to one thousand), and lightly packed with iodoform gauze. The dressings should be removed as soon as soiled, and thereafter renewed daily. For all irrigations after the first I habitually use a solution of permanganate of potash (one to two or three thousand) which in my hands has seemed to hasten granulation more rapidly than any agent of that class. In the later stages of protracted cases, or where, for any reason, healing is retarded, stimulation of the wound becomes necessary. For this purpose balsam of Peru or a weak solution of nitrate of silver answers well. But better than these is protonuclein specially applied on gauze or by means of an insufflator. This agent has a remarkable power of stimulating indolent granulations, and the effect of even a few applications is sometimes truly astonishing. When practicable it is advisable to keep the patient in the recumbent position until the healing process is well established.

Unless the rectal wall is already penetrated or hopelessly encroached upon, this plan of treatment, faithfully carried out, will rarely prove disappointing. I have never failed in a single instance to prevent the formation of fistula.

A common difficulty which the surgeon has to contend with in these cases consists in the fact that evacuation of the pus is followed by such great and immediate relief that a false sense of security resulting in carelessness is engendered. For that reason the nature of the trouble should be fully explained to the patient, the inevitable consequences of neglect pointed out, and all responsibility for failure to follow the advice offered thrown upon the party most concerned.

Strange as it may appear, the idea has prevailed and is yet prevalent to greater or less extent in the profession that abscess and fistula are one and the same disease. And the advice is not infrequently given patients to apply a poultice and wait till the acute symptoms subside, then have the fistula "cut out." Of course this is a ridiculous error, and of course no member of this Association would ever be guilty of falling into it.

Abscess of the superior pelvi-rectal space is a far more serious, but, happily, a much rarer disease than either of the two considered. This space lies above the levator ani muscle and was first described and named by M. Richet. It is the interval between the pelvic fascia which overlies that muscle, the peritoneum, rectum and pelvic wall. It is filled in the

natural state with loose cellular tissue sometimes containing fat in its meshes, and communicates by direct continuity with similar tissue in the iliac fossæ, lower abdomen, and pelvis. It also communicates with the gluteal region through the sciatic notch, and in the female is continuous with like tissue in the broad ligaments. It is easily understood from this description how abscess in this space may assume such extensive proportions. Pus once formed may burrow in almost any direction, reaching practically any part of the pelvis and lower abdomen, perforating the rectum or bladder at any point, and making its appearance in the lumbar or inguinal region or escaping into the thigh through the femoral, sciatic or obturator openings.

The causes assigned for this form of perirectal abscess include those mentioned in connection with the ischio-rectal variety, and certain others. Among the latter are parturition, sepsis, acute diseases of the genito-urinary organs, traumatism inflicted by means of the rectal bougie, necrosis of bone, etc. The symptoms in these cases are often very obscure. There may be some pain or ill-defined uneasiness in the pelvis. This is seldom severe and may or may not be increased by defecation. Fever ushered in by a chill may be slight, or, on the other hand, so severe as to rapidly exhaust the patient's vitality. More or less disturbance of the urinary function is apt to occur from pressure upon the bladder and deep urethra, manifesting itself in great vesical irritability, with incontinence, or in retention.

The diagnosis of pelvi-rectal abscess is very difficult to make. The subjective symptoms cannot be relied on, and until the pus points or the tumor appears there are no physical signs to serve as guides. And even when most pronounced the physical signs may result only in confusion and error. Instances are recorded in which pericecal abscess and hip joint disease were so closely simulated as to utterly mislead the surgeon. In the female the same possibility is conceivable with reference to suppurative disease of the adnexa. Should the pus discharge into the rectum or bladder the diagnosis would be greatly facilitated. Careful digital examination of the rectum will occasionally clear up the most obscure case.

The prognosis is always and necessarily extremely grave. Twenty per cent. of the recorded cases have terminated fatally, generally by rupture of the abscess into the peritoneal cavity. Should this not occur the patient would still be exposed to all the dangers of pyæmia and a prolonged and exhausting suppurative process. In the comparatively small proportion of cases which tend to spontaneous healing there remains to be encountered the dangers of vicious cicatrization. From this cause either obstruction, or, if the anus is involved, incontinence of feces may result, neither of which conditions can be lightly reckoned in determining the question of prognosis. But even in this class of cases healing is rarely complete, a permanent fistulous tract usually remaining. Such a tract may open into the rectum, bladder or urethra, or upon the surface of the body in any of the various situations above alluded to. The depth and extent of these fistulæ in the large majority of cases render them inoperable.

No definite rules can be laid down for the treatment of this variety of perirectal abscess. If the pus can be located its evacuation is the first indication. As a general rule this should be accomplished by incision over the most prominent part of the tumor. In some cases the pus is best reached through the rectum, in others abdominal section offers the easiest and most effective route. But by whatever means and from whatever point attached, the only principles of treatment to be relied on may be expressed in two words, viz., incision and drainage.

A special kind of perirectal abscess which deserves a word of separate notice is that of tubercular origin. This is not infrequently met with in this region, conforming in point of location to either of the three ordinary varieties. Localized tuberculosis here, as elsewhere, is generally chronic in its nature, and the symptoms of tubercular abscess in this region are by no means so pronounced as in the usual forms. But the item calling for special mention in this connection pertains to the treatment. After evacuation of the pus free use of the curette or cautery is indicated and active stimulation of the wound is usually demanded from the beginning.

The correct diagnosis of tubercular abscess is a matter of paramount importance to the welfare of the patient, and where the trouble is even suspected to be of such character the evidence of the microscope should invariably be sought.

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In conclusion, Mr. President, I desire again to emphasize the fact that rectal fistula is a preventable disease and that the method by which its prevention is to be accomplished consists in judicious treatment of the initial abscess. The method which, in my hands, has proven successful to that end I have endeavored to set forth clearly and concisely. It involves no intricacies either of technique or of remedial agencies—merely painstaking observance of those principles which render similar troubles in other localities among the most satisfactory to treat of all surgical affections.

The aim and purpose of modern medicine have undergone great advancement in recent years. Now the prevention of disease engages our thought and effort equally with its cure. And the physician who aspires to accomplish the worthiest and best must appropriate this truth and apply it without discrimination in his work.

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## SURGERY OF PANCREATIC CYSTS.

Lauwers of Courtrai (*Revue de Gynéc. et de Chir. Abdom.*, November and December, 1897) operated in June, 1897, on a woman aged 44. She had been in good health till the preceding April, when she suffered from dull, continuous and increasing epigastric pain. In May, Lauwers detected a large oval tumor distending the abdomen. It fluctuated and could be moved laterally. It filled the epigastrium and part of the hypochrondria, came downwards a little below the umbilicus and inclined more to the left than to the right. Stomach resonance was heard over the upper part of its anterior aspect. For this reason aspiration was not

undertaken. The urine was free from sugar and albumen. On opening the abdomen the stomach was found stretched over its anterior surface, the lower segment being transversely bisected by the colon; but the cyst extended at the same time so far upwards as to pass well above the lesser curvature of the stomach. This upper part was chosen for puncture, and about five pints of a transparent, yellowish, greasy fluid, containing shreds of fibrin were removed. Lauwers explored the cyst from the inside. He could feel the vertebral column through the posterior walls, but could not actually define the pancreas, and no calculi were detected. The wall of the cyst was so closely fused with the posterior aspect of the stomach that the operator did not attempt enucleation. The edges of the incision in the cyst were sewn to the peritoneal layer of the abdominal incision at its lower angle, and the cavity of the cyst packed with iodoform gauze. For a week there was such free discharge from the cyst that the dressings had to be changed every day, and at the end of the week a drainage tube was substituted for the gauze. During the third week, as the discharge threatened to continue indefinitely, Lauwers injected 10g. of pure tincture of iodine. This caused great pain, relieved by morphine. The discharge rapidly diminished; 5g. of the tincture were injected a week later. Six weeks after the operation the secretion had ceased, and the fistula completely closed. In October the patient was in perfect health, free from abdominal pain, and digestion was easy. The abdomen was flat. The fluid from the cyst was examined twice, but, as has happened in other cases of undoubted pancreatic cyst, no sugar, bile nor amylolytic material was detected on analysis.

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## DISLOCATION OF CERVICAL VERTEBRÆ.

James P., colored, male, age 23 years, laborer, admitted to Nashville City Hospital on March 30, 1898. Fell from a derrick, striking the ground upon left shoulder and side of neck, a beam from the derrick falling across him. Upon examination he was found to have both motor and sensory paralysis from his neck down; experienced great pain in cervical region; the spinous processes of the sixth and seventh cervical vertebræ were very prominent; above the sixth there was a marked depression. The patient complained of "having a lump in his throat." The dislocation was reduced by extension, counter extension and manipulation. Extension was applied by a bandage around the head and a cord attached to the bandage. This cord ran over a pulley at the head of the bed with a weight attached to its free extremity. Counter extension was accomplished by elevating the head of the bed and having also a pulley and weight applied to the lower extremity. This apparatus was applied constantly for about ten days, during which time patient suffered great pain, controlled only by large doses of morphia. A laxative was required to cause movement of bowels, but there was no control over the actions. Kidneys acted very well, but urine was voided involuntarily. Physical condition of patient has remained good, very little flesh lost, face is full, and the patient says were it not for paralyzed condition that he would

feel as well as ever. At the time of the accident a portion of skin over the lower lumbar region was rubbed off at this point. A very bad bed sore developed, but with proper treatment it has now almost healed. Sensation in the paralytic areas to return in two days after admittance, and at the end of two weeks was normal. The motor paralysis remained unchanged for three weeks, but at this time motion began to exhibit itself, first in great toe, then in lesser toes, and has gradually gone upward, and now he can move lower extremities slightly. The pain in the neck has disappeared and patient rests well without any opiate at all.

The medical treatment in this case was at first increasing doses of iodide of potassium. This was continued for about four weeks, when large doses of strychnia were given and electrical stimulation applied principally along spinal column. This treatment is now applied daily and patient improving.—*Med. and Surg. Bulletin.*

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CARE OF PATIENTS AFTER THE OPERATION FOR APPENDICITIS.—J. M. Barton, M.D., *Philadelphia Polyclinic*, separates the cases into four groups, (1) where the abscess is opened without entering the peritoneal cavity; (2) where an operation is performed between attacks and no pus is present; (3) where the general peritoneal cavity is opened and the abscess emptied; (4) where general septic peritonitis exists at the time of operation. In all operations for appendicitis there is but little danger from shock, and none from hemorrhage after the operation is finished. If there is any shock it will readily yield to heat and strychnia. Death is caused by general septic peritonitis. There is some difference in treatment of each class, but speaking generally (not saying anything of the last group) the treatment consists in perfect rest in bed, no food at all for twenty-four hours, and but a limited amount of water. By the third day he can have ordinary diet in moderate amounts, such as soft boiled eggs, stewed chicken or mutton, milk and dried toast, etc. The soiled dressings should be removed once or twice daily, but syringing out of the cavity is not advisable. The stitches may be removed from the seventh to the ninth day; at this time the drainage tube (if one has been used) may be shortened and taken out the fifteenth day. There is no hurry about the bowels being opened, and under no circumstances is it advisable to purge for several days. To prevent hernia the wound should be strongly supported from the first by a rubber plaster fitted with tapes, and continued for months.

TAXIS IN STRANGULATED HERNIA.—The following method of performing taxis in cases of strangulated hernia is offered by Dr. William B. DeGarmo, who claims for it a very large proposition of successful reductions. His large experience with this class of cases should give such a recommendation great weight. The instructions are to take hold of the tumor and draw it down, in this way lengthening the part in the canal at the point of constriction. Then, without attempting to push it up, steady pressure is to be made on the tumor with the idea of forcing out its contents. If the patient is a child, it is also well to suspend the little one by one leg while taxis is being made.—*Atlanta Medical and Surgical Journal.*

# NERVOUS DISEASES AND ELECTRO-THERAPEUTICS.

IN CHARGE OF
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## RECURRENT MULTIPLE NEURITIS OF SPECIFIC ORIGIN.

BY PROFESSOR B. SACHS, M D.

Let me refer in this connection to another rare affection, giving you the history of a patient whom I have had an opportunity of observing for some years, and whose condition has always been of special interest to me, because he exhibited a form of palsy not commonly met with after specific infection. Syphilitic multiple neuritis is so rare that Oppenheimer merely concedes that it may occur. Dana does not mention syphilis as one of the possible causes, and in an article published some years ago on the "Syphilitic Affections of the Nervous System," I was able to report upon cases of specific neuralgia, but could not give a satisfactory account of cases of syphilitic multiple neuritis. The history of the patient is briefly as follows:

Mr. F. J. L., temperate, and moderate in all habits, was seen by me in consultation, Nov. 12, 1895. He was thirty-five years of age, and had been married two years. Three years previous to the examination he had acquired a specific sore, was treated for it by one of our ablest dermatologists, and was allowed to marry at the end of one year. For six months previous to his first visit to me he had been subjected to a great deal of excitement; but with that exception everything had been going on well. In order that he might have a short vacation he went to Europe Oct. 1, 1895, and was gone only four weeks. While in Paris he noted that he had considerable difficulty in dragging himself up and down stairs, and even walking on level ground. There was a peculiar tingling sensation in both legs, and they often felt as though they were going to sleep. After his return from Europe, on Nov. 1st, the legs grew weaker and weaker, until he was but barely able to stand on them, and to walk about with the assistance of a stick. During this time he also experienced special difficulty in raising himself from the bed. When once on the feet was able to move about with the assistance aforesaid. He had never experienced the slightest trouble in controlling the vesical and rectal functions.

At the time of my first examination I noted very marked paresis of both lower extremities. Considerable atrophy of the anterior thigh muscles, weakness of these and of the lower spinal muscles. Below the

knees the muscles seemed to be less affected, yet there was distinct atrophy of both anterior tibial groups. The anterior thigh muscles did not respond to the faradic current, and there was a diminished galvanic response, but the formula was not altered. The knee jerks were wholly absent. There was no evidence of spasticity. This peculiar association of symptoms suggested the possibility either of a mild form of anterior poliomyelitis, or of a multiple neuritis. If we bear in mind the fact that there was no pain along the nerve tracts, and that the subjective symptoms complained of were very slight, we can well see why there was some hesitation at the time in making the diagnosis multiple neuritis. The gradual onset of paralysis, the changes in electrical reaction, and the objective sensory symptoms would have been quite in keeping with the supposition of myelitis of the anterior half of the cord; there was a striking clinical resemblance to at least one other case, which I reported upon several years ago; but the further history of this patient has shown that the condition was in all probability one due to a multiple neuritis.

After my first visit the patient was put through a course of mercurial inunction, receiving thirty inunctions of one drachm each, with the result of an immediate improvement setting in (January, 1896), and continuing during the next four weeks. The right knee jerk soon returned. The left one could only be obtained by reinforcement. The volume of the thigh muscles improved, but the right leg improved more rapidly than the left, and the patient was soon able to walk about without the need of assistance. In eight weeks he was able to go about, and during the first half of 1896 had improved so much that by the summer of that year was able to walk about as freely as anyone else, and had even, at my suggestion, taken up bicycle riding, and has often ridden twenty or thirty miles a day. With the exception of occasional cramps in the legs he has had no reminder of his former trouble, nor are his legs at all involved at the present time; only once (in April) did he complain of difficulty in raising the left arm. In June and Nov., 1896, he complained of numbness in small finger of right hand, which disappeared promptly after inunctions. In July, 1896, had slight difficulty in turning tongue to left side. The patient consulted me again in May, 1897, on account of a slight left ptosis. The pupils reacted at that period sluggishly to light and sluggishly to accommodation. The right knee jerk could not be elicited at that time; the left knee jerk was noted as normal. After a course of inunctions the ptosis disappeared. There was no further trouble until November, 1897, when the patient again visited me, complaining of a numbness during the past three days in the left hand and fingers, not in the arm. On examination I found that the grasp was almost nil, that there was distinct weakness and atrophy of the extensor and ulnar muscles, in the distal half of the forearm and in the hand, while the muscles supplied by the median nerve seemed to be of usual strength. An electrical examination made at the time showed there was a marked diminution of faradic response in the distal distribution of the extensor and ulnar nerves, the muscles responding only to strongest currents, and the cathodal contractions being equal to anodal contractions. The contractions were distinctly slow. Since Nov. 11th only few changes

have taken place in the patient's condition. The thenar eminence has become distinctly atrophic, and the inter-osseous spaces more and more distinct. Now the median muscles are paretic as well. The objective disturbances of sensation have appeared in the ulnar area, inasmuch as in this part heat cannot be perceived. All other forms of sensation have, however, remained undisturbed. The electrical changes have become more pronounced. The thenar and the inter-ossei muscles of the left hand do not respond to the faradic current, and in the inter-ossei the anodal closure contraction is equal to the cathodal closure contraction; while in the thenar muscles the anodal closure contradition is greater than the cathodal closure contraction.

The mild character of the symptoms in this upper extremity, the gradual involvement of the musculo-spiral, median and ulnar nerves, the fact that only the distal ends of these nerves are affected, the upper portion remaining entirely normal, the appearance of objective disturbances of sensation, all these symptoms leave no doubt as to the neuritic character of the present affection. The vacillating behavior of the knee jerks, the immobility of the pupils, the transitory ptosis, and transitory palsy of the tongue, and the subjective disturbances of the sensation every now and then during the past two years are quite in keeping with the diagnosis of syphilitic changes in the nervous system. Taken in conjunction with the illness of two years ago, there seems to me little doubt that all the symptoms must be attributed to a multiple neuritis, and in this respect the case is somewhat exceptional, for of the large number of cases of paralysis due to syphilis which have come under my notice, this is the one of two in which I have been able to state that the peripheral nerves have been involved, the other being a case of facial palsy in which the paralysis appeared very soon after specific infection, and in that case, while the specific origin of the palsy seemed very probable, the relation between the initial infection and the paralysis did not appear to be as firmly established as in the case just recorded.—*New York Polyclinic.*

## NEURASTHENIA.

BY C. C. HERSMAN, M.D., PITTSBURGH, PA.

"Neurasthenia" is not accepted by all the profession as a term expressing a wide meaning. In fact, it is a word to cover our ignorance for want of a name for the existing condition, they say. However, "neurasthenia" possibly expresses the condition better than any other, and as it is established in medical literature we shall not get rid of it.

It is not a disease, but a condition. It is not limited to any part of the nervous system, but is extremely generalized. It is more often associated with other functional diseases than existing alone. In fact, this is true to such a degree that many medical men deny its existence as a separate trouble; but symptomatology and pathology both point in the same direction, showing a well-marked clinical picture.

Causes: Heredity, most fruitful of all. Other causes are tuberculosis,

inherited syphilis, strumous diathesis in parents, gout, consanguinity (the latter possibly more neuropathic than neurasthenic). Further causes are: Example, defective education, etc. Never tell a child or others in its presence that it is nervous. Subordinate that nature to all others. Too close attention to school and especially to set studies is dangerous Excesses in alcohol, drugs, tea, and coffee, dissipation, sexual excesses, continued loss of sleep, etc.

Long continued sedentary lives such as teaching, banking, stenographing, etc., without proper outdoor exercise and vacations often prove most disastrous. Any great strain, uncertainty, excitement or worry may develop neurasthenia. A number of times have I had to advise teachers to quit the school-room, and book-keepers, bank tellers and others to seek a change of scenery, atmosphere and climate. Sometimes even a change of vocation.

The symptoms are legion. In many will be found the stomachic and cardiac crisis, atonic dyspepsia, gaseous eructations, palpitation and intermittent pulse. These symptoms we often find in men still attempting to attend to business. They have to be assured and reassured by their physician in order to keep up their courage. So long as they are near a street car line or any other method of readily reaching help or home, or even accompanied by a small child who can run for aid, the symptoms are at abeyance. But so soon as they are beyond reach of anyone, a fear comes over them that an attack may come on and the patient becomes pale, perspires freely, heart palpitates, breathing is labored, gaseous eructations, fullness in precordial and stomachic regions—a pitiable condition. They are moral cowards. With others, mostly women, there is an indescribable uneasiness, a fear that something will happen, often that death or insanity will overtake them. Patient complains of muscular weakness, easily fatigued, sometimes muscular tremor, tendon reaction easily exhausted. One may complain of feeling tired, dizzy, heavy, a feeling of uncertainty, formication and vague sensations. Visual weakness and disorders of hearing, smell and taste may be present.

Patient is easily fatigued mentally or physically. Also disturbances of the digestion, secretion, circulation and the sexal functions exist.

PATHOLOGY.--Little is known as to the true pathological condition of neurasthenia. In a great measure it is speculative. The most plausible theory to my mind is a toxic condition of the fluids of the body. The uræmic and lithæmic diatheses the most often found. The neuron theory advocated by Dercum of this country and one or two authors abroad leads to a better understanding of the physiology and pathology of the nervous system. Many of the profession look upon nervous disease as something beyond their domain; that it is to be relegated to the specialist; that to him alone belongs the province of seeing something more than an abyss black as the river Styx. This is a very great mistake. Until we associate the nervous system with other organs; until we associate nerve cell and nerve tissue; until we see that it is not a system, independent, but a part of a great system, each dependent upon the other, in its correct physiological action as a whole, will it be so. We must apply to the nervous system the pathologic principles we do to any organ or system.

The brain, cord and nervous system must be studied, as coming under the jurisdiction of the general pathologic law governing the system as a whole. Nerve cell and nerve fiber is not governed by a pathologic law peculiar to itself. Van Gieson has said so tritely that I can do no better than quote him: "The nervous system is a part of the organism as a whole and must be amenable to the same laws of disease and decay."

DIAGNOSIS.—Neurasthenia simplex is readily recognized; but when it is association with organic trouble or accompanied by other disease, functional or otherwise, we may have a very complicated clinical picture. I have known traumatic neurasthenia, possibly complicated by the presence of hysterical symptoms, to be diagnosed as a true hysteria. Also have I seen some of the psychoses confounded with neurasthenia. The psychosis has been taken for the inability of intellectual effort of cerebral neurasthenia.

PROGNOSIS.—Neurasthenia is said to be chronic in its course as most nervous and mental troubles are. I deny that many nervous troubles are chronic, because of the time to cure. Just as well compare the course of typhoid to that of cholera morbus and say that typhoid is chronic. Many cases, however, are chronic, as are other cases of disease, beginning as acute. It is a condition of slow recovery, but many times under proper treatment uneventful.

TREATMENT.—Rest, and in many cases, absolute rest in bed. The patient is to go to bed at an early hour and rise late. Serve the breakfast in bed in severe cases. I have followed this plan with great success. Twelve to sixteen hours in bed and some cases the full twenty-four hours. Massage over the abdomen and stomach following the course of the colon, especially when indigestion and constipation are present. Massage the extremities well but gently. Warm sponge bath at bed time and passive motion of joints. These are to be done daily on retiring. Mild faradism two or three times a week. These are to take the place of exercise. These increase the metabolism. I find this is not so successful at home as when the patient is sent away, either to a hospital or, preferably, a private place. Only a few months ago I saw a very rapid recovery of a most aggravated case by this treatment in a private place.

FOOD IS NEXT IMPORTANT.—Milk and eggs is the sheet anchor. Egg lemonade (egg phosphate) is excellent. Milk can be taken by almost anyone in small quantities oft repeated, but some cannot take it. Recently I treated a case who protested, but I insisted, rewarded by two or three attacks of what proved to be extremely severe biliousness, followed by copious vomiting and of course a relapse each time. I put my patient on malted milk with most happy effect. I had no more bilious attacks to contend with and my patient went on to rapid recovery. So soon as exercise is safe, driving is one of the best, provided the patient enjoys it. I have found that any exercise in which the patient takes no interest is to be abandoned at once. With the beginning exercise, cold sponge baths in mornings may be commenced. Many cases need no drugs except to prescribe occasionally for indigestion or acid urine and occasionally a weak heart. When found necessary to give other drugs the following have been found to do good: iron and quinine (bark and steel), phosphates and

phosphites, hypophosphites, strychnia, if there is no irritability of the nervous system.

MORAL SUASION AND MORAL IMPRESSION.—The one thing indispensable is to gain the confidence of the patient. I have seen decidedly good results from a trip to the seashore or to some of the numerous springs when it is not necessary to put the patient to bed all the time. For headaches, joint-aches, bone-aches, etc., accompanying these diseases, I have been using Antipyrin since 1884. Sometimes I combine it with Caffein citrate or Sodium Salicylate. ℞. Caffein citrate, gr. ij to gr. iv; Antipyrin gr. xxx; Elix. Lactopeptine or Elix. Simplicis, oz. j. Misce. Sig.: Teaspoonful every hour till relieved. ℞. Sodium Salicylate and Antipyrin aa gr. xxx; Elix. Lactopeptine or Elix. Simplicis, oz. j Misce. Sig.: Teaspoonful in water every hour till relieved. This is a good prescription where there is any rheumatic diathesis to aggravate the pains.

I find that a small dose oft repeated usually acts nicely. However, I have given Antipyrin in gr. x and even gr. xx at a single dose. There is only one objection to Antipyrin noticed by me. If there is an elevation of temperature it is likely to produce too severe a diaphoresis. If the stomach is irritable the sodium salicylate, though the dose is small, may produce emesis.—*Alienist and Neurologist.*

## BED TREATMENT OF MELANCHOLIA.

Dr. Serieux reviewing this question, so much discussed of late as new, points out that Dr. Hurd, of Baltimore, some fourteen years ago urged its employment in certain selected cases of melancholia (Alienist and Neurologist 1883). Serieux claims (*Jour de Méd. de Paris*, Sept. 19, 1897) that cases of acute melancholia of diverse forms (simple, anxious, stuporous) are above all susceptible to rest treatment. Among the symptoms, which according to Serieux indicate in a more or less special fashion bed treatment, are cerebral anæmia, cyanosis, extremity œdema, neurasthenic symptoms, emaciation, chlorosis, stupor, agitation, tendencies to suicide and auto-mutilation, insomnia and circulatory disorder (brachycardy, etc.), respiratory disorder, digestive disturbance and low temperature. Serieux states that all the good physical effects of rest cure are thus obtainable, but also admits that in certain cases the psychic effect, both in the direction of abulia and delusion, may be bad.—*Alienist and Neurologist.*

## CARDIAC NEUROSIS OF SEXUAL ORIGIN.

Under this name, Kisch, of Prague (*Presse medicale*) describes a set of symptoms that he has observed in certain nervous young women whose husbands made it a practice to withdraw just before the instant of ejaculation, leaving them overexcited and unsatisfied. The physiological tachycardia of coitus, he says, becomes particularly intense in such women and assumes the form of a very distressing palpitation which at first persists for sometime after each incomplete copulation, and after a while

occurs during the day, repeatedly and without appreciable cause. For a time this palpitation is the only manifestation of the neurosis, but soon the clinical picture is completed by a feeling of anguish, headache, vertigo, syncope, and general weakness. The women are depressed and irritable; they weep on the slightest occasion and take a gloomy view of life. The appetite is impaired, digestion becomes difficult, and they are constipated. The pulse is small, soft, and accelerated, often intermittent and arrhythmical. The arteries, however, are supple, and auscultation of the heart discloses nothing abnormal. All these symptoms will disappear as by enchantment when the practice on which they depend is given up.—*N. Y. Medical Journal.*

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MASS MOVEMENTS OF THE HEART.—The diminution in volume undergone by the heart as its ventricles expel their content of blood is accompanied by a change in its form. If the diameters of the heart *in situ* be measured in the opened chest of a supine animal, it is found that during systole the side to side diameter diminishes much—more than the front to back. That is; in systole the heart becomes more or less ellipsoid in cross-section. Probably in the unopened chest and in the erect position its cross-section in diastole as well as in systole is nearly circular. In systole the ventricles are somewhat shortened; but the apex shifts little; it is the base which moves, descending and coming forward towards the apex. This movement of the base is accompanied by a lengthening of the aorta and pulmonary arteries. The latter causes descent of the base of the contracting ventricles, and the descent compensates the shortening of the ventricles, and retains the apex in contact with the chest wall. The cardiac impulse is a protrusion of the chest wall over the surface of the ventricles at the moment just before the expansion of the artery at the wrist. As the ventricles suddenly become hard their long axis becomes more horizontal to the vertical plane of the chest, and is tilted against the resistance of the chest wall. Around the spot where the soft parts of the chest are protruded by the impulse they are found slightly drawn in at the time of each systole. This "negative impulse" is caused by the shrinkage of heart in the air-tight chest as it empties itself, being followed inward by the lungs and to a small extent by the soft parts of the chest wall under the pressure of the atmosphere.

Graphic records of the cardiac impulse can be obtained by one or other of the different forms of cardiographs. Cardiograms, however, in spite of much attention bestowed on their elucidation, still remain unsatisfactory, on account of their variability and the difficulty of disentangling their component factors.

# OBSTETRICS AND GYNAECOLOGY.

IN CHARGE OF
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## THE COMPARATIVE VALUE OF CELIOHYSTEROTOMY AND CELIOHYSTERECTOMY IN CASES REQUIRING A CESAREAN SECTION.

BY BARTON COOK HIRST, M.D., PHILADELPHIA.

The impression prevails among physicians in general, I think, that the classical conservative Cesarean section is a safer and better operation than the Porro-Cesarean section or the removal of the uterus after the extraction of the child. On entering practice and for some years afterward I entertained this view, believing that hysterectomy should only be performed when a woman had been very long in labor and many futile attempts at delivery had been made, probably infecting the endometrium; if there was uncontrollable hemorrhage from uterine atony in case of such insuperable obstacles to drainage of lochia as a cancer of the cervix or a bony tumor of the pelvis; or in the presence of a uterine tumor which could only be removed with the womb. Experience has compelled me to change my mind and to regard celiohysterectomy in a case requiring Cesarean section as the preferable operation, with a lower mortality and a greater freedom from complications, not only in the puerperium, but in the patient's future existence.

It is easy to understand the prejudice againt the Porro operation and in favor of the classical Cesarean section, if one recalls the history of abdominal and uterine section for the termination of insuperably obstructed labors.

During the first two hundred and sixty-six years in which Cesarean section was practised upon the living woman the mortality of the operation had been so frightful that any expedient to avoid it was thought justifiable. Induction of abortion for a deformedpelvis symphyseotomy, laparo-elytrotomy, each had its origin in a desire to escape the dangers of Cesarean section, while for the same reason much ingenuity was devoted to the improvement of the technique and to the invention of new instruments in the oldest obstetrical operation—embrotomy.

Finally, in the spring of 1876, Edward Porro performed the first successful celiohysterectomy for obstructed labor. This method of operating so obviously avoided the most fatal dangers of the older plan that it was widely adopted, and in the hands of such men as Carl Braun, Breisky, Leopold, Krassowsky, Frank, Fehling, Tait, and Porro himself, the mor-

tality of Cesarean section was reduced to less than half of what it had been. Scarcely, however, were these results beginning to be appreciated by the medical world at large when Sanger proposed the close and and accurate suturing of the uterine wound, including the peritoneal coveri 'g Coincident almost with the adoption of this great improvement in the operation there began the aseptic area in abdominal surgery and the appreciation of the common-sense rule that Cesarean section, when required at all, should not be postponed until the patient is at the last gasp, after every other means of delivery had been tried in vain.

By a combination of the three factors—close suturing of the uterine wound, aseptic technique, and early operations—results were secured of such brilliancy as to throw the achievements of Porro and his followers completely into the shade. Meanwhile, however, Cesarean section by celiohysterectomy has undergone an evolution from which the attention of the profession has been distracted by the glamor of the results following the Sanger operation. All gynecologists are familiar with the improvement in the technique of hysterectomy which has made the intraperitoneal treatment of the stump a much safer as well as a much more satisfactory method of operating than the extraperitoneal fixation of the cervix used to be. I had an opportunity of witnessing one of Dr. Baer's early operations by this method, and immediately adopted it in my next Cesarean section, which, it is my impression, was the first to be performed by this technique in America. In the past six years a number of Cesarean sections followed by hysterectomy have been performed by the best and most modern technique ligating the arteries of the broad ligament, dropping the cervix and sewing over it a peritoneal flap. It is too soon, however, to collect statistics of this operation and to compare its results with those of celiohysterotomy. There are disadvantages, moreover, in the mere statistical study of any subject which the practical worker has often reason to appreciate. Without an array of figures, therefore, to support my statement, I can say from my own experience that not only does it add nothing to the danger of a Cesarean section to remove the womb, but on the contrary, it diminishes the risk of the operation, for it eliminates the possibility of postpartum hemorrhage and lessens enormously the chance of puerperal infection. Certain complications in the puerperum also, as well as others at later periods in the individual's life, are surely avoided by a hysterectomy. These are: retention and decomposition of the lochial discharge, to which the undilated cervical canal does not give free vent if the operation is performed before labor; adhesions between the anterior uterine and abdominal walls; persistent fistulæ communicating with the uterine cavity; rupture of the uterus in subsequent pregnancies and labors; and the necessity for repeated Cesarean sections if the woman is allowed to become pregnant again.

If these incontrovertible facts are taken into consideration, it must be patent to any one that the statistics of the future, studied with discrimination, and taking into account the woman's life history, will demonstrate the superiority in results of the modern Porro operation over the conservative classical Cesarean section.

Whatever one's predilection may be in favor of hysterotomy or hysterectomy, he will admit that certain conditions in parturient women forbid a freedom of choice and compel the selection of the latter operation. It is interesting, therefore, to study the proportion of cases, if only in the light of one physician's experience, in which the Porro operation must be performed and a mere hysterotomy should not be relied upon.

My experience in Cesarean section now amounts to twenty operations performed for the following indications: fibroid tumors, two; dermoid cysts impacted in pelvis, two; cancer of the cervix, one: partial atresia of vagina, one; contracted pelves, fourteen, of which there were one kyphotic pelvis, one obliquely contracted and flat, one transversely contracted, eleven flat rachitic. Out of this number I should have been compelled to perform a Porro operation, no matter what my preference may have been, in eleven cases. In six of the operations for contracted pelvis the patient had been in labor many hours. Futile attempts at delivery had been made with forceps, and in two instances by craniotomy. The uterus was already infected, and the birth canal injured by slipping instruments or by the exercise of unjustifiable force in efforts at extraction. In one of the cases of impacted dermoids the woman had been in labor four days. The pelvic connective tissue and lower uterine segment were extraordinarily edematous, and the endometrium was almost black in color. In the two cases of fibroids attached to the lower uterine segment a hysterectomy was necessary to remove the tumors. In the cases of atresia of the vagina and of cancer of the cervix it was obviously improper to leave the womb behind.

If I may be permitted to judge by my own experience alone, it appears that a Porro operation will be absolutely required in practice a little more frequently than a Sanger, and it seems clear to me that this experience represents about what may be expected by any one who may be called upon to perform these operations. The casess have been distributed over a period of ten years. The women have come to me from all sorts of sources. One case only occurred among my own patients; the others have been referred to the various hospitals with which I have been connected, have been brought to me in emergencies in cabs and ambulances, have been specially referred to me from a distance, or I have seen them in their own homes at the request of their physicians.

It seems fair to assume, therefore, that any one in a position to receive such patients, any practitioner at a distance from expert surgical aid who may have such an operation thrust upon him at a moment's notice, should be prepared at least as often as not to perform a modern hysterectomy as a part of a Cesarean section.

As a matter of fact, among the twenty operations cited above, seventeen have been hysterectomies and only three hysterotomies, and I am convinced that this is about the numerical relation that the two operations should bear to one another. Whether the womb should be removed in the great majority of cases, however, depends entirely upon one's view-point in regard to the justifiability of repeated pregnancies in women who can only be delivered by a Cesarean section. On this matter I am perfectly clear in my own mind. I could not reconcile it with

my conscience to condemn a woman to the probability of a repeated Cesarean section unless she herself and her husband demanded it. This, however, is a remote contingency. In every case in which the matter has been submitted to the patient or her friends, I have been urgently requested to prevent the possibility of another conception. The arguments of those surgeons who advocate a different plan are of course entitled to and certainly receive from me respectful attention, but they are, in my judgment, inconclusive. I read, for example, in one debate upon the subject, the remarkable statement that a physician must take into account only the present condition; that it is nothing to him if his patient becomes pregnant in the future, even though a Cesarean section is again required. As if a physician or surgeon should ignore the future comfort, happiness or safety of his patient, so long as he extricates her from a present difficulty. Luckily the general level of medical intelligence, conscientiousness, and foresight is higher than it would appear to be if such a statement really reflected professional opinion.

Another participator in this same debate claimed that there was no reason nowadays for avoiding a Cesarean section, as the mortality of repeated operations was scarcely greater than that of natural labor. And yet I happen to know that this operator's mortality in the operation has been thirty-three per cent. Even if it were possible for the most skilful and experienced operator, dealing with a patient in the most favorable condition and amid the best surroundings, to eliminate the dangers of Cesarean section, it would still be impossible to be certain that a woman would on the next occasion be so situated that she could command the best attention. Hence Cesarean section is and will remain a dangerous procedure, with a considerable mortality. It has to-day, in this country, a death-rate, of about forty per cent. taking into account all the operations of which a record can be procured, and the statistics have not improved in recent years.

The history of a patient referred to me last autumn for a Cesarean section well illustrates, I think, the fate in store for many women who can only be delivered by uterine section. She had given birth to two or three children previously with the greatest difficulty, even after embryotomy, and her physician told me she could not, in his opinion, survive another such operation as he had been compelled to perform the last time. I found rachitic pelvis with a conjugate of about seven and three-quarter centimetres or a little less, and an overgrown child, the head of which, even at the seventh month, could not be pressed into the superior strait. The woman stated that her other children had all been overgrown at birth, none of them, she said, weighing less than twelve pounds. As she and her husband desired a living child, I recommended a Cesarean section at term. This recommendation was accepted by the family physician, the husband, and the wife, after careful consideration. The patient accordingly entered the University Maternity to await the date of the operation. Unfortunately she grew very homesick and begged me to allow her to return home for a week, promising faithfully to return to the hospital in good time for the operation. I cautioned her against staying away long, pointing out to her the difficulties and dangers

of her former labors, and warning her not to run the risk of falling in labor in the small town in which she lived, and where she could not obtain the skilled attention that she needed, and whence she could not perperhaps be transported to the city in time. She seemed to be impressed by what I said, and I had no doubt she would return. As it appeared later, however, she was not only homesick but frightened, and when she left the hospital she evidently determined not to come back. On her return home she failed to notify her physician, and deliberately kept him in ignorance of the fact that she was in labor till she had had hard pains for thirty-six hours. The os was then dilated, and her physician thought it too late to send her to the city. He was led to believe, moreover, that there was a chance for spontaneous delivery, as the head appeared to be descending the pelvic canal; but he was deceived, as many another has been, by a steadily increasing caput succedaneum and the shallow pelvis of rachitis. While he was awaiting further progress the woman ruptured her uterus and died with the child undelivered. Now, this woman had considerable intelligence; she had had a practical demonstration of the dangers of delivery by the natural passage in several dreadful experiences of inordinary delayed labors, prolonged anesthetizations, difficult embryotomies, and complicated convalescences; she had been impressively warned never to incur the risk of delivery by the vagina again; her physician and her husband had urged her to have the Cesarean operation performed and she had consented; yet she deliberately chose to accept the risks of another difficult labor, either because she thought the Cesarean section was unnecessary or was afraid to undergo it. What is to be expected, therefore, of the more ignorant hospital patient? She has a Cesarean section performed, say in her first pregnancy or labor. She recovers from the anesthetic and finds herself safely delivered without any difficulty to herself and with very little suffering afterward. She is told that she can never have a child in the natural way and must be always operated upon in subsequent labors. It is doubtful often if she believes it or whether she will remember the warning; or she may be so placed that it is impossible for her to secure the services of an expert; so that her next labor will find her not improbably in the slums under the care of a midwife, or of a physician not much better informed as to contracted pelves, and her life will very likely pay the forfeit.

Taking into account, therefore, the unavoidable though small mortality of Cesarean section under the most favorable circumstances; considering, moreover, the impossibility of always securing the best circumstances in many cases, it seems perfectly clear to me that it is unjustifiable to subject a woman with an insuperably obstructed pelvis to the dangers of subsequent pregnancies and of a repeated Cesarean section. Once this point is conceded it is unnecessary to argue further for a hysterectomy. No one can contrast in actual practice the greater facility and rapidity with which a Porro operation can be done, the entire freedom from many of the risks of the puerperium after the removal of the womb, the impossibility of many complications that are likely in the Sanger operation, without preferring the former to the latter operation.

One argument that has appealed to me more strongly than any other against hysterectomy, and that would influence me had I not found its answer in my own experience, is the disadvantage of the early artificial menopause, the symptoms of which are rather more annoying, I think, after a hysterectomy than they are after a simple oophorectomy. But there is something in the function of lactation which seems to neutralize the effect of the removal of the sexual organs. I have been many times struck with the absence of the disagreeable phenomena in the woman who nurses her child after a Porro operation. Nor do these symptons appear later, for by the time the child is weaned the system is adjusted to the absence of the uterus and ovaries, so that the woman experiences none of the troubles usually incidental to the artificial menopause.

In still another direction the consequences of puerperal hysterectomy differ apparently from those which follow the operation at other times. We have all, I dare say, had reason to deplore in some cases the contraction of the vagina and the entire loss of sexual feeling which are occasionally observed after a hysterectomy, say, for a fibroid tumor. It is always difficult to obtain information about these matters, but as far as I can learn there has not been such a result after any of my Porro operations.

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## SOME COMMON MISTAKES IN GYNECOLOGICAL DIAGNOSIS.

BY. DR. J. C. WEBSTER.

Symptomatology and clinical history are determinate and often cannot be distinctly correlated with various lesions. Other than local factors must be taken into account. Of chief importance among these is the neuropathic state. A neurotic condition may be developed from causes foreign to the pelvis, and this may manifest itself in intense pain referred by the patient to the pelvic lesion. In another set the symptoms of pelvic pain are developed as one of the phenomena of a neuropathic state, there being no local lesion of any kind.

Mrs. H. complained of pain in the bladder and was treated for cystitis without success. Cystoscopic examination showed a normal mucosa except a congestion of the right ureteric orifice. Palpation of the loins revealed anenlargement on the right side. Bacteriological examination of the urine showed the tubercle bacilli. Operation resulted in the removal of a tuberculous kidney.

Another case is cited in which painful micturition was an early symptom of locomotor ataxia. A chronic parametritic abscess had given symptoms of cystitis. A Russian lady-doctor was treated for cystitis for some time without success. Examination showed a small fibroid on the anterior uterine wall near the attachment of the bladder. Cancer of the rectum gave symptoms referable to the coccyx which was excised under the belief that coccygodynia was the trouble. Papillomata of the bladder may give rise to hematuria which may often suggest the kidney as the source.—*Post Graduate.*

# NOSE AND THROAT.

IN CHARGE OF

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## THE LOCAL TREATMENT OF PAINFUL ULCERATIONS BY ORTHOFORM,

### WITH SPECIAL REFERENCE TO THE UPPER AIR PASSAGES.*

BY EUGENE S. YONGE, M.D., EDINBURGH.

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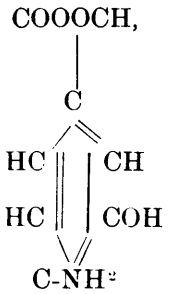
Under the name of orothoform, a new synthetic product related in constitution to cocaine has been introduced by Professor Einhorn and Dr. Heinz, of Munich, for the production of local anæsthesia. From a chemical point of view the history of the building up of orthoform is of some interest, and may be epitomised as follows:—The authors of the investigation set themselves the task of finding the hypothetical molecule hidden in cocaine or its derivatives which would produce local anæsthesia without accompanying toxic effects.

It is assumed that cocaine is constituted of a double ring in which a benzoyl-oxy-piperidine-carboxylic methyl-ester (having a methyl group attached to the nitrogen) is associated with a hydro-aromatic ring of the hydr-benzoyl-oxybenzoic methyl-ester. The analytical observations of Stockman, Filehne, Ehrlich and Poulsson, who split up the molecule, and showed that none of the products obtained by this process were capable of producing local anæsthesia; and the more or less synthetical experiments of Liebreich, Poulsson and Ehrlich elucidated matters so far that it became a question as to whether the peculiar anæsthetic quality of cocaine was dependent on its double-ring nature, on some property of the first ring, or on an influence existing in the hydro-aromatic ring. The last was a reasonable hypothesis, more especially since it was known that certain other aromatic substances, such as methylene blue, possessed the property of relieving pain. Impelled by the foregoing considerations, a prolonged and elaborate investigation was undertaken by Einhorn and Heinz into a large number of these substances, with the result that they were led to conclude that all aromatic amidoxyesters cause local anæsthesia, though in differing degrees of intensity, and with varying powers of irritation. A substance (p-methyl amido-m-oxybenzoic acid) of this class,

*Read before the Manchester Therapeutical Society.

to which the trade name of "orthoform" has been given, appeared to act most strongly as an anæsthetic, and not at all as an irritant. It has the following constitutional formula:




Orthoform is a white voluminous crystalline powder without taste or smell; it is not hydroscopic, and melts at 120° C. Free orthoform combines with hydrochloric acid, forming a hydrochloride which is more soluble than the basis powder, but causes irritation to some mucous membranes on account of its acid reaction. The hydrochloride (price 6s. 6d. per ounce) is the preparation on the market, and the dose is eight to sixteen grains. The anæsthetic presents a triple claim to recognition, in that it is sparingly soluble, is non-toxic, and is powerfully antiseptic. On the other hand, it is a disadvantage that the substance will not act on unbroken skin, nor, with certain reservations, on intact mucous membranes, for its strong anæsthetic properties are only manifested where nerve endings are exposed. The slow solubility leads the anodyne to exert its action economically on the tissues, and, unlike its rapidly soluble congener cocaine, only sufficient is dissolved to produce and keep up local insensibility, which therefore becomes prolonged. In from five to ten minutes after application anæsthesia of the denuded surface to both touch and pain commences, and it reaches its consummation within a short period of time. The effect lasts from a few hours to five or six days, and there is, in the majority of cases, perfect or nearly perfect analgesia, the patient experiencing the sensation of the offending part having been cicatrised over or "enamelled." Suppuration is usually markedly diminished and healing accelerated.

The observations which I have made on the pharmacology and clinical effect of orthoform have been principally confined, on the one hand, to a consideration of such preparations as would be suitable for applying to the upper air passages, and, on the other hand, to the effect of the drug on ulcerations of these regions. Orthoform is soluble in water, the basis powder very sparingly, and the hydrochloride much more freely. It is also dissolved by ether and spirit. The drug is practically insoluble in normal saline solution, in glycerine, and in paroleine, and although suspended in the last-named vehicle, the particles of powder are too large to pass through the ordinary atomiser. The most suitable preparations appear to be:

(1) *The crude powder*, either alone or mixed with equal parts of lycopodium, which should be accurately insufflated on the required area, since

orthoform only takes effect where it comes in contact with the abraded parts, and its influence does not extend to the tissues beyond.

(2) *Pastilles*, with the following formula: ℞ Orthoformi, gr. iij to v; liq. cocci, q.s.: saccharin, gr. ¼: glyco-gelatini, q.s. The pastilles are useful in mouth, tonsillar and posterior pharyngeal affections, but less so than the two succeeding preparations.

(3) *A saturated solution of orthoform in collodion*, forming a species of "varnish." This is useful in those cases in which an ulcer is exposed to much friction, but as it causes acute smarting it is advisable to primarily anæsthetise the ulcer either with cocaine or with orthoform in powder.

(4) *A spray*, with this formula: ℞ Orthoformi, gr. v: sp. vini rect., acquæ, *ää*, *m* l. This is perhaps the best form in which to administer orthoform for nasal and laryngeal ulceration. The spirit evaporates after contact with the parts, leaving the precipitated powder evenly distributed over the affected area.

(5) *An ointment* (ten per cent.) made with any good ointment basis.

(6) *An aqueous solution* (ten per cent.) of the hydrochloride as a paint.

The action of orthoform on the unbroken mucous membrane of the mouth, naso-pharynx, and larynx is, in my experience, the following: Neither the free orthoform (basis powder) nor the hydrochloride anæsthetise sufficiently to allow of surgical action. When applied to the tongue, inner surface of the cheek, or to the pharynx, a numb sensation supervenes in the course of about five minutes, but there is little anæsthesia. The effect on the larynx is to reduce reflex irritability. A peculiar feeling, described as similar to that produced by cocaine, is experienced in five minutes: in a few more minutes this relative loss of sensation vanishes, but if before its subsidence a probe be introduced, and the vocal cords and interior of the larynx touched, although a species of "gagging" ensues, there is no laryngeal spasm or cough. In the same patient a similar procedure without the previous introduction of orthoform causes intense discomfort and a fit of coughing. The intact nasal mucous membrane is also slightly amenable to the influence of the drug. A feeling of numbness is evidenced in about two minutes, and this merges into real anæsthesia, which is, however, feeble and transient.

I have had the opportunity of testing the anæsthetic value of orthoform in eighteen patients who suffered from painful ulcerations of the upper respiratory tract.

Toxic effects were not noted in any of the cases, but there was occasionally some slight burning for a few minutes after the application of the hydrochloride. This failure to discover toxicity is compatible with the statements that over twelve drachms have been sprinkled on a broken surface in the course of the week, also that thirty to sixty grains have been administered daily to rabbits, and forty-five to ninety grains to dogs, without evil effects during life or the *post-mortem* discovery of viscereal changes. Orthoform fails to produce any results on an ulcer unless the dual precaution is taken to apply the drug directly to the loss of surface, and to ensure its retention there.

No relief was experienced by patients suffering from either catarrhal pharyngitis or quinsy.

The drug in doses of eight to sixteen grains is said to be of value as an anodyne in ulcer or cancer of the stomach. In cases of ulcer, complete relief for three or four hours has been obtained, and one patient with cancer benefited in this way for twelve hours. Orthoform is also declared useful in burns, ulceration of the vulva, chronic cystitis, traumatic lesions of the urethra, gonorrhœa, and other cases.

The antiseptic action of orthoform appears to be demonstrated by the rapid diminution of purulent exudation in several of the cases encountered, and the speedy healing of the ulcer. In a case of acute gonorrhœa injections of orthoform solutions were followed by the disappearance of gonococci in four days, and the complete cessation of the blenorrhagia.

Finally, if further observations confirm the results already published, it would appear that orthoform is entitled to take a position in the gamut of local anæsthetics applicable to the upper air passages. It seems probable that it will replace—by virtue of its insolubility and innocuousness—its relative, cocaine, when long anæsthesia on ulcerated surfaces is wished for: be replaced by the more reputed drug when short insensibility of intact mucous membrane is desirable, and on occasion supplement it. —*British Medical Journal.*

## THE MICROBES OF THE NOSE IN HEALTH.

BY W. H. PARK AND J. WRIGHT.

"Annal. des Mal. de l'Oreille," Feb., 1898.

The authors report in a short paper the results of their experiments which were undertaken in view of the divergence of opinion expressed by various authors on this point. As Thomson and Hewlett's results seemed to indicate some source of error in Wright's previous research, particular attention was paid to the danger of contamination of specimens in their passage through the vestibule. A series of thirty-six normal individuals were chosen, the vibrissæ were removed with sterilized scissors, and the skin of the vestibule washed with 1 in 2,000 perchloride. A freshly sterilized speculum was used for each patient, and the mucus was taken from between the septum and inferior turbinate as far back as possible, either with a platinum loop or a cotton swab sterilized and passed through a flame. Tubes of gelatine and serum or agar and serum plates were employed.

The results of culture were as follows:

| | | |
|---|---|---|
| No bacteria in the cultures in | 6 | cases. |
| Less than fifty colonies in | 8 | " |
| Between fifty and one hundred colonies in | 8 | " |
| More than one hundred colonies in | 14 | " |
| | 36 | " |

Sterile ..... 6
Non-sterile ..... 30

In five out the six sterile cases the mucus was withdrawn on the plati-

num loop, and the quantity was so small that this may in part explain the negative results.

Two rabbits were killed, the crania contents removed antiseptically, and the nose entered from the upper surface. Cultures of the nasal mucus contained numerous colonies.

Differentiation of the micro-organisms was not attempted, except in the case of streptococci, which were never met with. This result contrasts markedly with cultures made from children living in a "home," for among them streptococcus was present in sixty per cent. In none of these cases was the nasal mucus quite normal in character.

With regard to the supposed bactericidal property of nasal mucus, the authors object that diphtheria or pseudo-diphtheria bacilli persist in the nasal mucus of patients convalescent from benign nasal diphtheria. The result of a test of this supposed quality in the nasal mucus of the rabbit is striking. One drop of an extremely virulent culture of streptococci was instilled into the noses of two rabbits. Both animals died with general septicæmia within three days. The cocci had penetrated the mucosa and reached the tissues of the pharynx.

A specimen of nasal mucus repeatedly sterilized by heat (55° C.) was found to have no apparent bactericidal effect on the bacillus of diphtheria, pseudo-diphtheria, staphylococcus, streptococcus, and a coccus found in normal mucus from the nose. A similar result was obtained with non-sterilized mucus, though this had a markedly bactericidal effect on bac. anthracis.

These results are therefore at variance with both those of Wurtz and Lermoyez and of Thomson and Hewlett. At the same time they demonstrate that the nasal fossæ are not so rich in microbes as was formerly supposed *à priori*. This, no doubt, is due—

1. To the action of gravity, causing a constant flow of fresh mucus from the upper parts which are not freely accessible from the air currents.
2. To the action of the cilia, which aids the effects of gravity.
3. To the fact that the mucus, though not bactericidal to most microbes, is not a good culture medium.
4. To the filter action of the vibrissæ (these hairs are absent in children and sparse in women).
5. To the fact that inspired air usually contains few pathogenic germs.

The authors conclude that the nasal mucus is ineffectual as a safeguard against the bacteria which can develop in the blood, or the secretions o other individuals, and that it is unable to cope with virulent organisms introduced upon nasal instruments.—*Journal of Laryngology.*

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## LARYNGEAL NECROSIS IN ENTERIC FEVER.

Sir George F. Duffey, M.D., made a communication on this uncommon complication of enteric fever, based on a case that had been recently under his care in the City of Dublin Hospital. He referred generally to the occurrence of laryngeal complications in enteric fever and their relationship to the typhoid process, and mentioned the opinions that had been

advanced as to their being of a specific or of a non-specific nature. The patient was a delicate-looking laboring man, aged 22. His attack of fever was characterised by a continuously high temperature, bronchitis, drowsiness, and great prostration. In the fifth week, when he appeared to be convalescing, he complained one morning, after a fit of coughing, of pain in his throat and difficulty of breathing. These symptoms were slightly relieved by treatment, but recurred next day in an aggravated form, and accompanied with noisy stridor, hoarse and weak voice, slight dysphagia, and great prostration. The epiglottis was very dependent, but there was no obstruction to the entrance of air into the lungs. He died on the seventh day after the onset of the laryngeal symptoms—the forty-fourth day of his illness. *Post-mortem* examination showed typical typhoid ulceration in the ileum in process of cicatrisation, with enlargement of the mesenteric glands and of the spleen. The larynx, which was exhibited, presented on its removal a small dirty-yellowish spot on the external and posterior surface of the plate of the cricoid. An incision through this spot opened a small abscess, which contained about half a drachm of pus. The abscess cavity separated the swollen perichondrium from the underlying cartilage, which was roughened and eroded. The President referred to a very similar case that he had reported seventeen years ago, and to the comparatively few cases of the kind occurring in Great Britain and Ireland. He quoted statistics as to the frequency of laryngeal complications in enteric fever, and discussed the question of performing the operation of tracheotomy in cases presenting such urgent symptoms as those that had occurred in both his cases.—Royal Academy of Medicine in Ireland.—*British Medical Journal, Feb., '98.*

## DANGERS OF THE NASAL DOUCHE.

Irrigation is called for only when the nasal fossæ rcequire leaning of pus and crusts, for instance, in idiopathic ozæna. This affection is mainly limited to the nasal fossæ properly so called, and irrigation is in such a case the most fitting form of procedure. An ordinary syringe or enema syringe with suitable nozzle should be used. In all other nasal affections irrigation is inadequate or useless; it is even dangerous. Repeated flooding of the mucous membrane may give rise to olfactory lesions. Antiseptics are highly injurious, and pure water is badly borne; the physiological solutions of sodium chloride, sod. bicarb. or sod. sulph are the only harmless liquids. In numerous cases irrigation has caused the sense of smell to be temporarily or permanently diminished or lost. Distressing frontal or occipital headache may result owing to the liquid passing into the sinuses. The injection of irritating liquids may even set up inflammation of these cavities. The most skilful and careful irrigation is insufficient in many cases to prevent the resulting headache. A very grave complication s the penetration of the liquid into the middle ear, suppurating otitis media occasionally supervening. In acute coryza, especially in children, douching should never be practised. In one such case known to the author, mastoiditis followed irrigation of the nasal cavities. The predis-

position to otitis is increased after retro-nasal operations, in particular after ablation of adenoid vegetations. (LICHTWITZ, *Sem. Med.*, November 26th, 1897.)—*British Medical Journal.*

## WHAT IS THE BEST OPERATION FOR ADENOIDS?

The diligent reader of rhinological literature can hardly have failed to notice that for the removal of masses of lymphoid tissue in the naso-pharynx, commonly termed "adenoids," very different operative procedures are advocated. Galvano-cautery, the cold snare, curettement, forceps, each has its supporters. Some operators seldom use an anesthetic, others invariably do. The position of the patient is as various as the operative features, some surgeons preferring the sitting posture, others what might be termed the recumbent semi-prone, and others again to have the vertex dependent, etc.

The use of Gottstein's curette as the main dependence appears to prevail as against the use of cutting forceps, though many operators combine their use. Dependence upon the curette alone appears to be irrational, and, in fact, has been deceptive in its results by reason of the structure of the lymphoid growths. The lymphoid portions of these are held together and attached to the vault by fibrous and vascular tissue, forming sessile pedicles and septa, a sort of placenta, varying very much in its extent and firmness. Now, when this fibrous tissue prevails, and the growth is, therefore, termed "tough" and fibrous, it is not reasonable to expect that an instrument like Gottstein's curette, which scrapes rather than cuts the growth, will thoroughly remove it. A small, strong, sharp forefinger nail, such as possessed by some surgeons, is eminently superior to Gottstein's instrument, especially in curetting out the narrow recesses on the wall of the space anterior to the Eustachian prominences, and at the entrance of the choanæ; yet it is well known that the portions of fibrous pedicle and lymphoid tissue left after its use often lead to a return of the growth. These cannot be thoroughly removed by even a very strong finger nail, much less by a curette scraping over the surface. Some form of cutting forceps is necessary. Such forceps, undoubtedly, require more skill and care for their use than the curette, but then, skill, care and deliberation are far more necessary for the proper performance of the operation than is generally supposed.

With many operators "ignorance is bliss," for, after a hasty operation with the curette, during which the phenomenal hemorrhage encourages them to believe they have been heroically thorough, they fail to explore the cavity a week or two after, and to discover that close to the choanæ a considerable mass yet blocks the way, and nasal breathing is still obstructed.

Haste in operating is mainly due to the very free hemorrhage, and its menace to respiration. Hence it appears wise to place the patient semi-prone, with the head sufficiently dependent, and to proceed quickly, but without haste. This, of course, necessitates complete anesthesia, and

sufficiently profound to insure the quietness of the patient, say from five to eight minutes, during which time the finger nail and curette can be rapidly used, to be followed by the proper cutting forceps guided along the left forefinger, which (surgeon on the right of the patient) hooks forward the soft palate and constantly touches the sharp edge of the vomer.

The only fairly practicable way of telling whether all the vegetations have been removed is by palpation, and this must be carefully done, or otherwise portions will escape detection.

The above observations are in accord with the experience of many competent operators, and are believed to be in accordance with those general surgical principles which insure safety and success, whereas the methods pursued by many operators are neither safe nor successful. There appears at present to be too much stress laid upon the rapidity of operating and brief anesthesia, and too little upon the difficulties and dangers attendant upon the complete removal of some of these growths.

No matter how complete the operation appears to have been, a careful examination of the naso-pharynx should invariably be made a week or two afterward.—Editorial in *The Laryngoscope.*

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## EMPYEMA OF THE MAXILLARY ANTRUM.

BY DR. A. W. STIRLING.

Among other valuable points brought out, the author alludes to the site of the pain, which he says may be referred to the cheek, but often to the root of the nose and the supra-orbital region. Again, the discharge of pus, though usually through the nose, may be in the throat. He insists that the exploratory puncture is the only certain mode of diagnosis. A warning is given that even in this pus may not be found the first time if the natural opening is large, the pus having drained off before the puncture was made. He places emphasis on the value of application of strong solutions of nitrate of silver after the sinus has opened.—*The Laryngoscope*, June, 1898.

ICHTHYOL INHALATIONS IN ACUTE LARYNGITIS.—According to *Nouveaux remèdes*, May 8th, quoting from *Vratch*, xix, 1898, No. 8, p. 223, Cieglewicz (*Przegl. lek.*, January, 1898) has found that inhalations by means of an atomizer of a cold two-per-cent. solution of ichthyol repeated twice daily, and not too deeply inspired for fear of producing nausea and vomiting, have given excellent results. The author has used the treatment both in adults and children, in the latter in cases of false croup. No ill effects have followed.

FORMALDEHYDE IN ATROPHIC RHINITIS.—Dr. George L. Richards (*Laryngoscope*, May; *Atlantic Medical Weekly*, May 28th) speaks highly of formaldehyde in atrophic rhinitis. He uses it as follows: After removal,

by means of a syringe and cotton applicators, of all the crusts and *débris* with a weak alkaline solution, each nostril is thoroughly washed out with a solution of formaldehyde, containing about five to ten drops of the forty-per-cent. solution to eight ounces of warm water. As it is very irritating even in dilute solutions, a preliminary spraying of the nose with cocaine is advisable. It produces a temporary sense of smarting in all of the nasal mucous membranes with which it comes in contact. At home he has one drop added to the solution which the patient uses in the douche cup for the daily cleansing. Under its use the crusts diminish in number and all unpleasant odor ceases.

## ADENOIDS.

All young patients suffering from acute inflammation of the tympanum have hyperplasia of the pharyngeal tonsil or adenoids. This fact cannot be gainsaid or confuted. Cases occur where the quantity of this adenoid tissue is inconsiderable, but the location of it near the Eustachian tube, and its peculiar erectile properties, explain its evil power. The symptoms which most markedly present the conditions found in the child whose nasopharynx is filled with an excessive amount of adenoid tissue are principally objective. The typical points are the facial appearance and the breathing habits of the individual. The child usually breathes with its mouth open. The breathing, especially at night, is labored and distressed. The results of this mouth-breathing are evident in the pinched look given the face, while the obstructed nose causes an imperfect growth in the facial bones (as pointed out by Meyer and Ziem), which is shown by the high-arched palated and narrow upper jaw, with the crowding together of the teeth in consequence of the faulty nutrition, induced by imperfect circulation. EDMUND B. SPEAR.—*Annals of Gynecology and Pediatry.*

---

## EPIDEMIC DIPHTHERIA.

This, as might have been expected from Dr. Newsholme, is an admirably worked-out study of diphtheria statistics. The author makes out a very complete case for his contention that "in diphtheria we have to deal with a disease which creeps slowly from place to place, in which months or even several years may elapse before it takes firm root and begins actively to propagate itself." Nor will it be questioned that some other factor besides personal infection must be concerned in its spread. This other factor is believed by Dr. Newsholme to consist essentially in protracted drought, and it must be allowed that he has a great array of facts to bring forward in support of this somewhat unexpected conclusion.

Review of a research on the origin and spread of the disease from an international standpoint, by Arthur Newsholme, London.—*British Medical Journal.*

# PAEDIATRICS.

IN CHARGE OF

ALLEN M. BAINES, M.D., C.M.

Physician, Victoria Hospital for Sick Children; Physician, Out-door Department Toronto General Hospital. 194 Simcoe Street, and

J. T. FOTHERINGHAM, B.A., M.B., M.D., C.M.,

Physician, St. Michael's Hospital; Physician, Outdoor Department Toronto General Hospital; Physician, Hospital for Sick Children. 39 Carlton Street.

## FIBRINOUS RHINITIS.

In *Pediatrics* of May 1st, '98, there appears a very useful abstract of a paper by A. Hennig in the *Wiener Med. Wochensch.*, 1897, xlvii., 1606, entitled "Chronic Diphtheria."

Cases in which membranous deposits and other local signs persist with more or less intensity for anything over three weeks he calls chronic diphtheria, more particularly if, as is usually the case, the site of the membrane is unusual; *e.g.*, the upper end of the pharynx, the naso-pharynx, or the floor and posterior portions of the nose, or the deeper lacrmæ of the tonsils. He gives as accessory causes certain debilitating constitutional disorders, as syphilis, tuberculosis, and rickets. Fibrinous rhinitis occurred this spring in a very interesting case of sporadic hemophilia under the writer's care in the Hospital for Sick Children. Hennig's cases showed all gradations of severity, from those showing no inclination to spread and little or no subjective and constitutional symptoms to those with very grave constitutional infection, swollen glands, and subsequent paralysis of pharynx and of accommodation. Rhinitis fibrinosa has often been seen to be infective, producing in the infected either a typical rhinitis fibrinosa or a typical diphtheria. Hennig's conclusions are as follows:

1. Rhinitis fibrinosa is intimately related both in a clinical and in a pathologico-anatomical matter to Bretonneau's diphtheria, and must not be looked on as a disease *sui generis*.
2. Lœffler's bacillus cannot be the cause of rhinitis fibrinosa.
3. Thus the view that Lœffler's bacillus is not the cause of the disease clinically called diphtheria has received further confirmation.
4. The etiology of fibrinous rhinitis is still obscure.
5. Both fibrinous rhinitis and diphtheria are influenced by the symbiosis of numerous saprophytic and pathogenic micro-organism, besides other factors which are as yet unknown.

J. T. F.

WHEAT PRODUCTS IN INFANT FEEDING.—Dr. L. Duncan Bulkley, in a brief communication with this title, stated that in the case of infants whose nutrition was at fault, particularly when this was indicated by a

persistent eczema, he had obtained the very best results from adding a certain wheat product to the food. He did not wish to be understood as favoring artificial feeding, and least of all the numerous proprietary infant foods, for he firmly believed that nature and human experience plainly taught us that breast-milk was ordinarily the food *par excellence* for infants. The wheat product to which he had reference, and which he had used extensively for the past ten years, was prepared according to the following directions, which must be rigorously adhered to:

A teaspoonful of wheaten grits or crushed wheat is put in a pint of cold water in a china receptacle, in a double boiler, at the time of preparing the evening meal, and is allowed to cook slowly for two hours. It is then covered and set aside until morning, when it will be found more or less jellified. Some water should now be added so as to make it quite thin, and it is then cooked for two hours more. After this second cooking it is rubbed through a fine sieve with the bowl of a spoon, more water being added if necessary. The hard and indigestible portions of the wheat are left on the sieve, and the gelatinous mass which passes through contains all the nutritive portion of the wheat. This portion will readily pass through the feeding-bottle. It must be prepared fresh every day. For very young infants it is sufficient to add one or two teaspoonfuls to each feeding, while older children may take as much as a tablespoonful of it. It is slightly laxative and exceedingly digestible. The philosophy of this method of preparation is as follows: The prolonged heating extracts all the soluble elements of the whole meal, including the starch, gluten, and phosphates; and at the same time sets up a fermentative change which causes a partial digestion of the mass. This fermentation is checked by the second cooking. The speaker added that this wheat product, when rightly prepared, represented the nearest approach to a complete food, next to milk, and it was very cheap and easily procured. A weak solution of this wheat jelly would be found an admirable substitute for barley water in infant feeding.—*Pediatrics.*

## NOTICE.

The editors of the Pediatric department of THE CANADA LANCET earnestly request such of our many readers who have had any cases of Tetany or Tetanilla in practice to send full notes of such cases occurring in infants and young children—supposed etiology, treatment and results; in fatal cases, post-mortem appearances, macroscopic and microscopic.

It is the wish of THE LANCET to collect as many cases as possible, to arrange in groups, and possibly add some small quota to the very scant literature on this rare and interesting disease.

Kindly address any communications to DR. ALLEN BAINES, 194 Simcoe Street, Toronto.

# "APENTA"

## THE BEST NATURAL APERIENT WATER.

**CONCLUSIONS** *from clinical observations* on the action and value of APENTA WATER in obstinate constipation by PROFESSOR W. S. BOGOSLOWSKY, Director of the Pharmacological Institute of the Moscow University, etc., etc.:—

"Systematic treatment with APENTA WATER is especially indicated for constipation produced by Atony of the bowels, and APENTA possesses without doubt this advantage over other aperients, that its use does not give rise to subsequent constipation.

"By suitable doses of this water the bowels act freely and considerable quantities of bile are evacuated. The action of APENTA WATER is more gentle than that of the bitter waters most known with us because it contains less calcium sulphate and no magnesium chloride. It is probably due to this circumstance that the crampy pains generally observed when aperients are employed, are entirely absent in the case of APENTA.

"The efficiency of APENTA as a remedy for the systematic treatment of obesity in general is clinically established."

# The Canada Lancet

**A Monthly Journal of Medical and Surgical Science, Criticism and News.**

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## Editorial.

### LODGE PRACTICE.

This perennial subject was brought up again at the July meeting of the Medical Council, and after very free discussion the resolution offered was rejected and the question shelved. We are free to admit the wisdom of this action. The time does not seem opportune for waking that dog out of his slumbers. He will prove to be a Cerberus and to have three heads, all "open for business." There is no room for two opinions on the merits of the case. The "fraternal" orders (whose guiding principle is cold-blooded "business," and the bulk of whose "fraternity" is at best nothing more than ordinary neighborliness) hold out, as one of their chief inducements to prospective candidates, the free medical attendance that membership brings with it. We know for a fact that in many cases the cheap insurance is a secondary consideration; and while we wish to give full credit to these orders for the cultivation of a spirit of thrift and foresight among a portion of the public who might otherwise save but little, let us in the name of common honesty request them to cease plundering the profession to whose training and integrity they owe their very exist-

ence. "Plundering" is not too strong a word, for no unbiassed arbiter, chosen say from the bench or the banking circles of the country, could avoid the conclusion that the profession is bled day by day by the system now in vogue.

But, in our opinion, it would be better to settle first the question of contract practice in other forms. The Council should declare it to be "infamous in a professional respect" to do as is done in this city, where large institutions employ, but do not pay, a medical man, and bring pressure to bear on their employees to go to him. In one instance of which we are aware the loss of his position was threatened to a man who preferred, since he had to pay the fees himself, to pay them to his own physician rather than to his master's medical man. Salaried appointments, such as those of jail surgeons, railway surgeons, medical referees of insurance companies, and so on, are, we need scarcely point out, on an entirely different basis.

It will be found on investigation that, as usual, a compromise will be the best thing. No Government could dare to stir up the lodge and corporate influence of the Province by sustaining the Medical Council in declaring lodge practice "infamous in a professional respect," just as, on the other hand, no Government could withstand the adverse influence of the profession, unitedly applied, in the general elections. But some such compromise as the following would, we are convinced, meet the requirements of the case, and could be managed, we think, by conference between the Council and Society representatives. Let the lodges elect their doctors as now. Let the doctor have his books, so far as they refer to his lodge patients, audited, say every six months, by the lodge officers, and his work paid for at living rates, say in Toronto $1 for each visit or consultation. We are in a position to know that this would in many cases lessen the physician's income, and of course save the lodge so much. But it would be professional. And the great advantage would be that the lodge would at once find it to its interest to frown down unnecessary demands upon the doctor, which really constitutes half the work he does. Every one who has tried it knows how careful the worthy member of the lodge is to ask as little as possible of what costs him nothing, and how few such members are, as a rule; while the onus of adding to the expenses of the lodge would thus be laid, not upon the physician, but upon the member who needlessly calls for his services.

## THE ONTARIO MEDICAL LIBRARY ASSOCIATION.

In our last issue we called the attention of the reading portion of the profession to this Library, which has now been in existence for about ten years. Though first contemplated by a few of our prominent Toronto confreres, it has been a Provincial Library from the beginning. The Ontario Medical Association, in recognition of its advantage to the profession throughout the Province, has shown its fraternal interest by voting a substantial bonus each year. Long may it continue to do so, and be an annual reminder to every one of us that we, too, may do something to

encourage an institution whose only aim is the advancement, not only of the actual members of the Association, but also of the individual members of the profession throughout the Province. In fact, our provincial brethren are treated in a more liberal manner than are the city members of the Association; while the latter are compelled to subscribe for stock in the Association and pay an annual fee, the former have only to write to the Librarian and ask for any book or books on the shelves, all the cost entailed being the boxing and express charges. In this way any physician in good standing may consult the authorities on any subject at a trifling cost. Who among us would not give considerable to have at our service the latest literature upon puzzling cases which turn up every few months? The library, with its four or five thousand complete volumes, and its list of monthly and weekly journals, offers the opportunity which we trust our rural and urban readers will promptly and persistently take advantage of.

## Editorial Notes and Clippings.

### THE TONGUE AS A CLINICAL GUIDE IN DISEASE.

A recent number of the *Indian Medical Recorder* gives the following in regard to the tongue:

A broad, pallid tongue, with a loaded base, says atony, and refers you to a want of action of the entire viscera below.

The remedial agents would be cathartics and tonics, especially those mild but effectual in character.

A shrunken tongue, pinched in expression, indicates functional inactivity of digestion, and requires great care in choice of food as well as quantity. In this condition of tongue we have atony also.

It is the tongue of advanced fevers, inflammations of the mucous membranes, and want of assimilation, hence great caution both of remedies and food. Here we must not use cathartics. Mild aperients may be carefully used.

A contracted, pointed tongue, with dryness and dark fur, is the usual tongue of typhoid fever and other low grades of fever, when all thinking minds would use great care in the treatment and food.

The dryness or moisture of the tongue denotes the extent of the disease of the intestines, and will point us in that direction.

A fissured tongue points to the kidneys, either an inflammation or something wrong with secretion.

Yellow coatings are usually associated with morbid liver and want of biliary secretions, and would indicate mild hepatics and tonics.

Raised papillæ, bright red, denote irritation of ganglionic nerves and irritation of stomach, especially the mucous coating. Shows exhaustion; no digestion, and needs rest; nux vomica twenty drops, and the food to be warm and taken in small quantities. Bismuth and pepsin after food.

Broad, thick tongue, papillæ not visible, but looking raw, denotes a septic condition of blood, and favors typhoid fever. Indicates, if deep red, sulphuric acid; if pale, sulphite soda. Liquid food, sipped warm, in small quantities.

Deep, dark-red tongue and dark coating indicates septic condition of blood.

Shades of dark brown and black denote typhoid condition, or septic conditions.

Pale, dirty fur on tongue denotes acidity and a septic condition of system; indicates sulphite of soda; but if membranes are deep red, sulphuric acid will be admissible, because it would show an alkaline condition of blood.

Contracted, pointed, cannot hold still, and drawn to one side of mouth, denotes a wrong with the nerves, and perhaps the brain. Requires great care and study of condition.

Dry tongue always denotes feverishness or inflammatory condition, a wrong with the nerve centers of ganglia.

Thick tongue, and curved edges upward, denotes atony of the nerve centers of ganglia, requiring stimulants, nux vomica or strychnine and quinine.

Pointed, narrow tongue is the tongue of sluggish condition of digestion and assimilation and congestion, especially of the base of brain. Restlessness and constant change of position are usually present.—*Medical Age.*

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## MOVABLE KIDNEY.

McNaughton (*Brooklyn Medical Journal*, February, 1898), reviewing the history of movable kidney, states that while the condition has long been recognized, it has as yet received too little consideration at the hands of the profession. The chief symptoms are those of digestive disturbances, pain near the lower border of the ribs, generally to the left of the median line, and nervous manifestations.

The diagnosis of movable kidney is easy in the majority of cases. The patient should be placed on the back, with legs and thighs moderately flexed. The physician then lightly grasps the side just between the lower rib and iliac crest, with thumb in front and the fingers behind. The patient is directed to take a long breath, when the kidney, if loose and not too tightly held, will be felt passing between the fingers and thumb. The parts should then be more firmly grasped, and the kidney palpated with the other hand and made to slip back to its normal position.

Regarding treatment, the author says that ordinary support of the kidney by means of a belt properly adjusted while the patient is on the back is all that is required in the majority of these cases. The amount of pressure necessary to hold a kidney in place is very slight. Means should also be taken to increase the amount of adipose around the kidney.

McNaughton deprecates the frequent resort to surgical interference in these cases, and finds that very often the operation of "anchoring" is not

only unjustifiable, but may leave the patient in a worse condition than previously existed.

In the discussion of this paper, Prof. Chas. Jewett was under the impression that movable kidney had been detected in nearly half of his office patients, that in a good proportion of these the condition had given rise to no symptoms. He considered that operation had been resorted to much oftener than necessary, and had found that lacing the lower portion of the corsets moderately tight, leaving the upper part loose, and suspending the clothing from the shoulders, had frequently afforded sufficient relief without the inconvenience of extra apparatus.—*Medical Age.*

## DISCOVERY OF A ROMAN HOSPITAL NEAR ZURICH.

The Zurich correspondent of the *Times* writes: "An ancient Roman hospital has been brought to light at Baden, near Zurich, the discovery having been made in connection with recent excavations at Windisch, the Roman Vindonissa. At Vindonissa the two great Roman roads met, the one leading from the Great St. Bernard along Lake Leman and then by Aventicum and Vindonissa to the Roman stations on the Rhine; the other leading from Italy to Lake Constance by the Rhætian Alps, the canton which is now Winterthur, Baden, and Windisch. The last point was the station of the seventh and eighth legions, and close by the Roman road the hospital has been discovered. It contains fourteen rooms supplied with many kinds of medical, pharmaceutical, and surgical apparatus, the latter including probes, tubes, pincers, cauterizing instruments, and even a collection of safety pins used in bandaging wounds. There are also medicine spoons in bone and silvering measuring vessels, jars, and pots for ointment, some still containing traces of the ointment used. The excavations have also revealed a large number of silver and copper coins, the former belonging to the reigns of Vespasian and Hadrian, and the latter bearing the effigies of Claudius, Nero, and Domitian."—*English Exchange.*

## IMPETIGO CONTAGIOSA.

The following method of treatment has yielded uniform good results in the dermatological clinic of the Montreal General Hospital during the last ten years or more.

The crusts of dried pus and serous exudation are picked off the patches of impetigo (in some cases it is necessary to soften them previously with a little sweet oil) and an ointment of the ammonio-chloride of mercury applied directly to the raw surface.

The strength of the ointment varies from the pure unguentum hydrargyrum ammoniatum (B. Ph.) to equal parts of this and unguentum simplex, the latter being used for very young children.

That this preparation of mercury can be used without the slightest danger of causing irritation has been abundantly proved by a long experience of a large number of cases, and that it is also a specific in this

disease the records of the hospital show, as with few exceptions a week or ten days effects a complete cure

F. J. SHEPHERD, *in Montreal Medical Journal.*

## METHYLENE-BLUE.

Methylene-blue has a very pronounced action upon the course of albuminuria. It diminishes the daily amount rapidly, and finally causes it to disappear from the urine. It seems to me to be an undeniable clinical fact.

Upon eight patients submitted to this treatment, in five I observed rapid diminution, and in three disappearance of albumen.

These patients had either acute nephritis or interstitial nephritis, complicated or not with renal congestion. In the patients upon whom this test was made great increase of urea were noted. It seems, therefore, that methylane-blue at once is a diuretic and a modifier of the functions of the kidney.

The daily dose of methylene-blue is 0.25 0.5 centigrams. Its use has no bad effects, provided it contains no impurities, otherwise it causes a slight cystitis.

Abundant drinks and the use of nutmeg for the rest will prevent the occurrence of this condition.—Lemoine, *Compt. Rend. Societe de Biologie*, May, 1897.

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The *Medical World* of Philadelphia has been printing a series of formulæ of well known panaceas, and in so doing has, we think, been rendering the profession a distinct service. We are glad to reprint some of them, with the editorial note with which the editor prefaces them :

"In our issue for last November, we began republishing the formulas for the leading advertised nostrums. We do this believing that physicians have a right to know what the people are taking, and that they *ought* to know in order to administer proper antidotes if called in case of an overdose, which often happens, particularly with the various soothing syrups given to children. Back numbers can still be furnished to those who wish the series complete."

PIERCE'S GOLDEN MEDICAL DISCOVERY.

Take of—

| | |
|---|---|
| Fluid extract of cinchona | 16 oz. |
| Fluid extract of columbo | 4 oz. |
| Fluid extract of guaiacum | 8 oz. |
| Fluid extract of licorice | 4 oz. |
| Tincture of opium | 1 oz. |
| Podophyllin (resinoid) | 120 gr. |
| Glycerine | 6 fl. pt. |
| Alcohol | Sufficient. |

Dissolve the podophyllin in the alcohol, and add the rest of the ingredients.

Mix them. Dose:—A teaspoonful.

—*The Drug Mill.*

PIERCE'S FAVORITE PRESCRIPTION.

Take of—

| | |
|---|---|
| Savin | 150 gr. |
| Cinchona | 150 gr. |
| Agaric | 75 gr. |
| Cinnamon | 75 gr. |
| Water sufficient to make a decoction of | 8 fl. oz. |

To this add—

| | |
|---|---|
| Acacia | 150 gr. |
| Sugar | 75. gr. |
| Tinct. digitalis | ½ fl. dr. |
| Opium | ½ fl. dr. |
| Oil anise | 8 drops. |

Dissolve the gum and sugar in the strained decoction, then add—

Alcohol, 2 fluid ounces, in which the oil has previously been dissolved.

—*Western Druggist*, from Hager.

WARNER'S SAFE CURE.

In Germany each maker of patents must furnish the Government with the formula for the patent he makes. This is the one furnished by Warner for "Safe Kidney and Liver Cure."

Each bottle contains:

| | |
|---|---|
| Ext. of lycopus Virg. (the herb) | 308 gr. |
| Ext. of hepatica (the herb) | 232 gr. |
| Ext. of Gaultheria | 7½ gr. |
| Potassium nitrate | 39 gr. |
| Alcohol (90 deg.) | 2½ oz. |
| Glycerine | 10 dr. |

Water sufficient to make one pint

—*Formulary and Druggists' Magazine.*

"BIG G" INJECTION.

A correspondent sends the following, which he says yields a preparation almost identical in appearance and effect:

| | |
|---|---|
| Berberine hydrochlorate | 15 gr. |
| Zinc acetate | 15 gr. |
| Glycerine | 4 dr. |
| Water to make | 8 oz. |

Mix. —*Druggists' Circular.*

URÆMIC HEADACHE.

| | |
|---|---|
| Potassium citrate | 2 drs. |
| Spirit juniper | 6 fl. drs. |
| Spirit nitrous ether | 2 fl. drs. |
| Infusion broom | 6 fl. ozs. |

Wineglassful three times a day.—*Phila. Med. Journal.*

ANTI-HYSTERIA PILLS.

| | |
|---|---|
| Arsenious acid | ½ gr. |
| Ferrous sulphate | 20 grs. |
| Extract sumbul | 20 grs. |
| Asafetida | 40 grs. |

Make into twenty pills. One three times a day, after meals.—*Phila. Med. Journal.*

NERVINE TONIC.

| | |
|---|---|
| Asafetida | 1 dr. |
| Arsenious acid | ½ gr. |
| Strychnine sulphate | ½ gr. |
| Extract sumbul | 30 grs. |
| Ferric oxide (Brown) | 40 grs. |
| Quinine valerianate | 20 grs. |

Dispense in twenty-four capsules. One capsule after each meal.—*Phila. Med. World.*

CASTORIA.

The following formula, from the *Indiana Pharmacist*, is given as approximating this preparation:

Take of—

| | |
|---|---|
| Senna | 4 dr. |
| Manna | 1 oz. |
| Rochelle salts | 1 oz. |
| Fennel, bruised | 1½ dr. |
| Boiling water | 8 fl. oz. |
| Sugar | 8 oz. |
| Oil of wintergreen | Sufficient. |

Pour the water on the ingredients. Cover and macerate until cool; strain and add the sugar, dissolve by agitation, and add oil of wintergreen to flavor.

GARFIELD TEA.

Our examination showed it to contain chiefly senna leaves and crushed couch-grass. There are perhaps small amounts of other drugs present; but if so, they are relatively of little importance.

—*New Idea.*

AN OINTMENT FOR ACUTE ARTICULAR RHEUMATISM.—Lemoine (*Nord medical; Tribune medicale*, February 9th), gives the following among other formulæ:

| | | |
|---|---|---|
| R | Vaseline | 25 parts. |
| | Salicylic acid | 4 " |
| | Sodium salicylate | 3 " |
| | Extract of belladonna | 1 part. |

M. To be applied and covered with cotton.

—*New York Medical Journal.*

# PUBLISHERS' DEPARTMENT.

## SOMATOSE AND IRON SOMATOSE.

(Analytical Reports, Edinburgh Medical Journal, May, 1898.)

Bayer & Co., of Elberfeld, Germany, have forwarded samples of these well-known preparations, which have caused a very considerable amount of interest among German scientists. Somatose is a remarkably pure albumose isolated from the products of the digestion of meat, in the form of a very fine, almost impalpable, yellow-white powder, extremely soluble in water. In solution it has a pleasant flavor, and gives no precipitate.

| | Analysis, Per Cent. |
|---|---|
| Water | 10.32 |
| Total solids | 89.64 |
| Ash | 7.56 |
| Organic solids | 82 08 |
| Nitrogen | 13.1 |
| Albumose corresponding to nitrogen | 81.8 |
| Organic remainder | 0.28 |

On investigation, the albumose was found to be largely secondary in character, *i e.*, deutero-albumose, and therefore very nearly akin to pure peptones. The amount of Somatose available did not permit of any practical dietetic experiments on it, but reference to Klemperer *(Berl. klin. Wchnschr.*, 28th June, 1897), Bernstein *(ibid.*, 22nd Feb., 1897), and Salkowski *(Deutsche med. Wchnschr.*, Leipzig, 1897, No. 15), shows that the ingestion of Somatose, to the exclusion of all other food, cannot be continued without bringing on diarrhœa; as an adjunct to other food, in teaspoonfuls three or four times a day, it not only acts as a food itself, but as a gastric stimulant and sedative at the same time, owing to its ready digestion and its combination with the acids in the stomach. The Iron Somatose is a similar preparation, containing 2 per cent. of iron in organic combination, and is especially fitted for the treatment of anæmic and chlorotic cases, in doses of 80 grs. twice or 60 grs. thrice daily. There is no doubt that these preparations would be extremely beneficial, in small amounts, during convalescence from enteric fever, pneumonia, etc. They can be, with advantage, given dissolved in milk.

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SANMETTO IN URETHRAL AND BLADDER DISEASES—IN PRE-SENILITY AND ENLARGED PROSTATE.—In nearly thirty years' practice I have never written to the proprietors of any medicine extolling its virtues, but after some years constant use of Sanmetto I can but say it is my sheet anchor in all urethral and bladder diseases. In pre-senility it has no equal. Have recently used it in two cases of enlarged prostate, with marked benefit in both cases.

Berkeley Springs, W. Va. GEORGE E. GILPIN, M.D.

THE BEHRING ANTITOXINE PATENT.—We understand that Parke, Davis & Company have decided to fight the patent recently granted to Behring, and have for that purpose retained the services of Betts, Betts, Sheffield & Betts, the well-known patent attorneys. We think they are to be commended for doing so, inasmuch as we regard that patent as a seriously threatening precedent to American pharmaceutical enterprise, besides being unjust and unfair to others, detrimental to the interests of humanity at large, and a blot upon the dignity and honor of the escutcheon of medicine. We would suggest that Messrs. Parke, Davis & Company should make it a public matter by inviting all the established firms that manufacture anti-toxine to join with them in the attack; and we have little doubt that they will have the hearty commendation and support of the medical profession and the medical press throughout the United States and Canada.

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GOVERNOR OGILVIE'S OUTFIT.—The newly-appointed governor of the Yukon, Mr. Ogilvie, who will shortly leave for Dawson City to assume his duties, is now busy equipping himself for the rigors of that extremely cold climate. In the place of blankets he and his party are taking eiderdown sleeping bags and eiderdown quilts made of strong canvass on the outside and lined with a pure natural wool. By an ingenious device the down interlinings are arranged in such a way that when the bag is in use every seam is protected by a layer of down, either inside or outside, and therefore provides absolute immunity from even the lowest temperature. The bag is waterproof and windproof and its weight is about that of two pairs of blankets.

(Weight is an item of considerable importance in an arctic outfit.) The bags and the quilts are made by the Alaska Feather & Down Co., the well-known makers of high class bedding and down goods, in Montreal.

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The Seventeenth Annual Announcement of the New York Post-Graduate Medical School and Hospital, University of the State of New York, for 1898-99, has just been issued. It shows that 523 Practitioners of Medicine have attended its courses during the past year. They came from the various States of the Union and the Dominion of Canada. There were ten physicians from foreign countries, two of these being from India and one from Japan. Only 96 were from the State of New York.

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BRAND & COMPANY, LIMITED.—Messrs. Brand & Co., Limited, of London, England, with commendable enterprise, are making a large and handsome exhibit of their well-known specialties for invalids at the Industrial Exposition. It goes without saying that all visiting physicians will be made most welcome, and those in charge will be happy to give all information desired regarding these famous products.

# THE GREAT FACT IN MODERN MEDICINE:

*"The Blood is the Life,"*
*And Where Nature fails to make Good Blood,*
*WE CAN INTRODUCE IT.*

BOVININE is Bovine Blood Unaltered from the Arteries of the Bullock;
The Universal Auxiliary of Modern Medicine and Surgery,
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In the more enlightened progress of Modern Medicine, "Blood-letting" has given place to Blood-*getting*.

Aye! Get Good Blood—but How? Not by the Alimentary Process. It has already failed to do its work (else the patient would not be sick); and in acute disease must not even be allowed to do the work it can. Stimulate as you will, the whole sum of the patient's alimentary power when fully forced into play, is unable to keep up the nourishing and supporting contents of the blood. There is absolutely but one thing to do; and, thank God, that can be done, usually with success, as ten-thousand-fold experience has proved. That one thing is this: where Nature fails to PRODUCE good and sufficient Blood, WE CAN INTRODUCE IT from the arteries of the sturdy bullock, by the medium of BOVININE.

The vital activity of this living blood conserve rests on no man's assertion: it speaks for itself, to every properly equipped physician who will test its properties microscopically, physically, or therapeutically.

*TRY IT IN PRACTICE.*

***TRY it*** in ***Anæmia,*** measuring the increase of red cells and hæmaglobin in the blood as you proceed, together with the improving strength and functions of your patient.

***Try it*** in ***Consumption,*** with the same tests from week to week.

***Try it*** in ***Dyspepsia*** or Malnutrition of young or old, and watch the recuperation of the paralysed alimentary powers.

***Try it*** in ***Intestinal*** or gastric irritation, inflammation, or ulceration, that inhibits food itself, and witness the nourishing, supporting and healing work done entirely by absorption, without the slightest functional labor or irritation; even in the most delicate and critical conditions, such as Typhoid Fever and other dangerous gastro-intestinal diseases, Cholera Infantum, Marasmus, Diarrhœa, Dysentery, etc.

***Try it per rectum,*** when the stomach is entirely unavailable or inadequate.

***Try it*** by ***subcutaneous*** injection, when collapse calls for instantaneous blood supply—so much better than blood-*dilution!*

***Try it*** on ***Chronic Ulceration,*** in connection with your antiseptic and stimulating treatment (which affords no nourishment) and prove the certainty and power or topical blood nutrition, abolishing pus, stench, and PAIN, and healing with magical rapidity and *finality.*

***Try it*** in ***Chronic Catarrhal*** Diseases; spraying it on the diseased surfaces, with immediate addition of peroxide of hydrogen; wash off instantly the decomposed exudation, scabs and dead tissue with antiseptic solution (Thiersch's); and then see how the mucous membrane stripped open and clean, will absorb nutrition, vitality and health from intermediate applications of pure bovinine.

***Try it*** on the ***Diphtheritic Membrane*** itself, by the same process; so keeping the parts clean and unobstructed, washing away the poison, and meanwhile sustaining the strength independently of the impaired alimentary process and of exhaustive stimulants.

***Try it*** on ***anything,*** except plethora or unreduced inflammation; but first take time to regulate the secretions and functions.

***Try it*** on the ***patient*** tentatively at first, to see how much and how often, and in what medium, it will prove most acceptable—in water, milk, coffee, wine, grape, lemon or lime juice, broth, etc. A few cases may even have to begin by drops in crushed ice.

**A New Hand-book of Hæmatherapy for 1898, epitomizing the clinical experience of the previous three or four years, from the extensive reports of Hospital and private practice. To be obtained of**

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# New Hospital for Nervous Diseases

DR. MEYERS (M.R.C.S. Eng., L.R.C.P., Lond.) having found increased accommodation necessary, has removed his Private Hospital to Heath St., Deer Park. The situation of the new Hospital is the best and most attractive in the suburbs of Toronto, having three acres of ground shaded by fine old oaks, and laid out for tennis, bicycling, etc. The interior has been completely renovated and possesses all the necessary appliances for the treatment of

DR. MEYERS' PRIVATE HOSPITAL FOR NERVOUS DISEASES.

# Diseases of the Nervous System

Hydrotherapy after the system of Wisternitz, including needle, Russian shower baths, etc., and electricity in its various forms are administered. It has a skilled masseuse and trained nurses, the head nurse having been for several years under Dr. Weir Mitchell, of Philadelphia.

Dr. Meyers devotes his entire attention to Nervous Diseases, having prepared himself especially for this work by several years study both in England and on the continent.

**This is the only Institution at present in Canada devoted exclusively to the treatment of Nervous Diseases.**

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**D. CAMPBELL MEYERS, M.D.,**

***Hours, 2 to 4 p.m.*** ***192 Simcoe St., TORONTO.***

Last September a lady, aged 45, married, called on me, saying: "I would like you to examine my hand. I heard you was good on old sores." I asked her how long her hand had been in that condition. "Five years," she said, "and I have carried it most of the time bound to my shoulder, for when I carried it down the pain nearly made me wild." The case was pronounced tuberculosis of the joints by no less than nine different physicians and treated by all of them—curetted, burnt out with caustic, potash, all kinds of washes, all kinds of salves. The joints were all open, the back part of the hand bone exposed. This was the condition of the hand when I saw it. Amputation had been recommended and refused. To say it was a desperate case is drawing it mild. I gave her a four ounce box of Unguentine (Norwich Pharmacal Co., N.Y.,) and told her to spread it on a linen rag and keep it on continuously, change once a day. I never expected to see the case again. Six weeks after she came back—the hand was better. She had been using Unguentine until the 10th of March, 1898. This hand at the present time is entirely well, no pain, and enjoys splendid health. The case is notorious in this county, Saline and McPherson, where the M.D.'s reside who treated the case. Her name is Mrs. Nygram, and she lives one-half mile north of Bridgeport, Saline Co., Kans. Anyone can write to her and get the facts as I have stated. And Unguentine has done the business.

Yours truly,

C. H. B. GILE, M.D., Falun, Kans.

Among the many Sanitariums located in Western New York, there is none which has a better history than the Gleason Sanitarium, located at Elmira, New York. For nearly fifty years this Sanitarium has been in the van in all matters relating to hydrotherapy. Recently they have added a complete system of Salt Baths, both plain and carbonated. All the appliances are modern and up-to-date. The Medical Department is in charge of John C. Fisher, M.D., for several years connected with the Salt Baths at Warsaw, New York.—*The Gleason Sanitarium*, Elmira, N.Y.

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BLENNOSTASINE IN HAY FEVER.—The drying effect of Blennostasine is most remarkable, and renders it of great value in the treatment of hay fever. Many remedies may benefit this affection, but the most uniform and decided results are obtained from the use of Blennostasine. Its influence on the vaso-mortor system is in many cases remarkable. It produces a dryness of the naso-pharyngeal membrane almost equal to the effect of belladonna, and has the additional advantage of being non-toxic. When possible, treatment should be commenced ten days before the usual date of attack, with five grain doses of Blennostasine three times a day. On the day preceding the usual date of attack twenty grains should be administered, and the dose increased ten grains daily until the symptoms are controlled. If the attack does not appear or is controlled, the dose should be gradually diminished. If the patient is not seen until the attack has begun, full doses (five grains) of Blennostasine should be given and increased as required.


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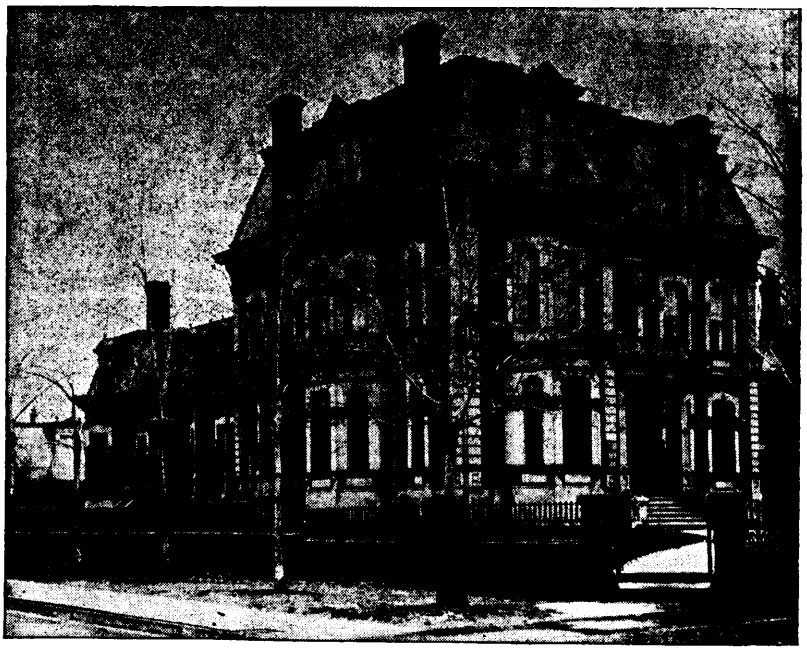

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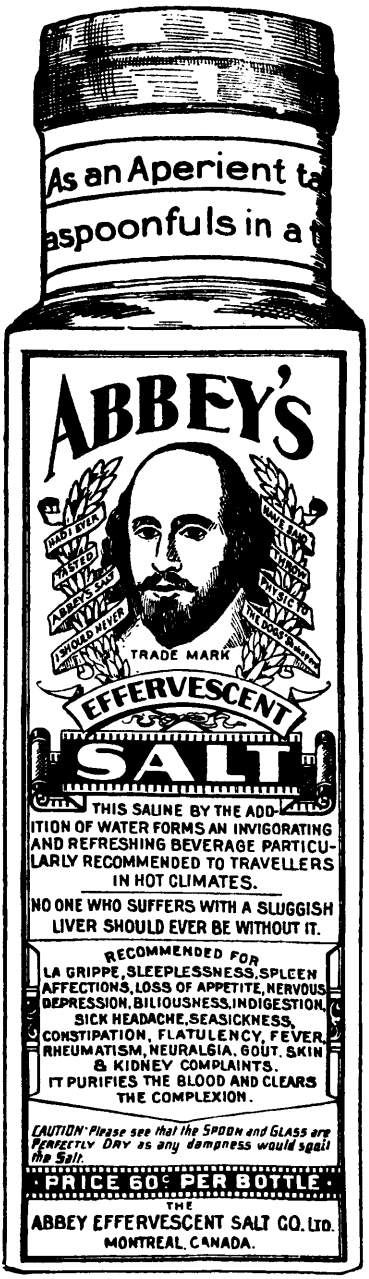


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I am, both in person and in my professional work, greatly indebted to the preparations introduced by Messrs. Brand, and in particular their well-known Essence of Beef. From experience in a considerable number of cases of continued fever, pneumonia and other exhausting diseases, among which typhoid fever deserves especial mention, I can speak most highly of the strengthening properties of the Essence. In ulcerated stomach, whether simple or malignant, and in intractable dyspepsia, not only can the Essence be borne without discomfort, but frequently paves the way to the exhibition of other forms of nutriment. After surgical operations, nothing I have found more rapidly relieves the patient from shock and from the nausea following anaesthetisation than the repeated administration of the Essence with or without the accompaniment of alcoholic stimulants. In short, as a tonic, a stimulant and a very perfect food, I am sure the preparation deserves the attention of every medical man, and the profession, no less than the public, are indebted to Messrs. Brand, the inventors, for a boon of the utmost value in the very class of diseases most fraught with trouble and anxiety.

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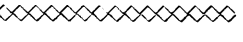

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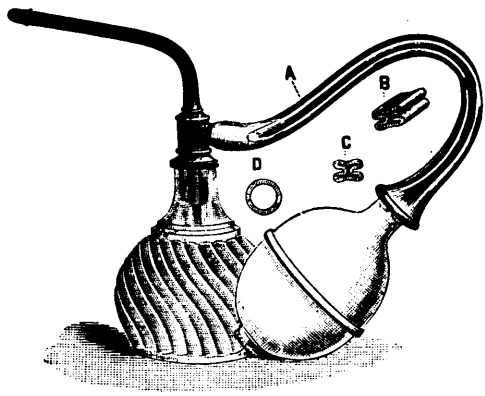


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