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CRITICISM AND NEWS.

Original Communications.

PACHYMENINGITIS HÆMORRHAGICA INTERNA.*

BY J. T. FOTHERINGHAM, M.D., C.M., TORONTO.

I have much pleasure in showing the dura mater and subdural false membrane with clot, from a case of this somewhat rare disease. Clinical notes of the case are as follows:

R. H., æt. 59; tailor; married; born in Yorkshire, Eng. Has always been in fair health till for past few months (a rather indefinite time), has suffered from constant and well distributed vertical headache. For many years had used alcohol, and for last six years to great excess, his wife telling me that every other night he would be wildly drunk, so that they had to lock him up in the house, and that every day he was "soaking." He had not the appearance of a drinker, but was of spare thin frame, medium height, nervous temperament, and a good specimen of the thin apoplectic. His wife volunteered the statement that she had noticed distinct change of character and temper for the past two years, irritability and "nervousness" being marked.

I saw him first at my house on Sept. 9, '94, and for the headache gave bromide and a laxative pill, from which later, he reported no benefit. On Sept. 11, I was sent for to his house, as he was said to have had a "stroke." I found that about an hour before, about 8 p.m., on his way home from the shop, he had fallen in the street, and that there was a transient crossed paralysis, without nausea or convulsions, affecting sensation and motion of left side of face, and of right arm. The legs had recovered, if affected at all. He said that they had given way under him; but they were normal in both sensation and motion

when I saw him. The tongue was protruded slightly to left side, and the disturbance of speech was not aphasic, but motorial, the tongue and lips being slightly paralyzed. Temperature about 98° F.; pulse about 80 and regular. Arteries (radial) stiffened, but not calcareous, and tension not apparently very high. Apex beat of heart in nipple line, but not much lowered; possibly some slight hypertrophy. No murmur, and sounds rather weak; second sound accentuated relatively, but not, I think, absolutely. I diagnosed it to be a case of hæmorrhage low down in the pons, so as to be below the decussation, but high enough to include the facial fibres on their way out. Urinary system apparently normal, as on the eighth day there was no trace of albumen.

Gave ergot and the bromides, but did not apply ice to the head. Coma gradually deepened, though at first he would rouse of his own accord when anyone entered the room, and was always rational, only apparently sleepy. Ate and drank fairly well. Power of speech gradually failed, and tongue grew dry, brown, and very foul. Temperature rose on 7th day a little, 8th day 101½° F., 9th day 101¾° F. (axilla), and 11th day 104° F. (axilla), eight hours before death. Pulse slowly quickened, till 9th day it was at 120, and 11th day 160 or so. Respiration also began to fail about 8th day, rising to 30 on that day, 50 on the 9th day, with opening of nares and sinking of apices and base of thorax on inspiration. It was not slowed at any time. Cyanosis was marked in face, veins of extremities full, capillary circulation feeble. No evidence of pneumonia, but possibly some slight hypostatic congestion; no fine crepitation. No heart murmur. Pupils were at first mobile, moderately distended, reacting well to light; later on became small and fixed. Remained equal throughout. Urine and fæces were voided in bed for last four or five days. Fibrillar tremors of tongue and twitching of eyeballs were seen for last two days, but death occurred very easily, apparently from respiratory failure, on the 11th day. The skin was sometimes very wet with perspiration, even while the temperature was high.

Post-mortem.—Done by Dr. L. M. Sweetnam and myself, about 24 hours after death. Only the cranium opened.

* Read before the Pathological Society of Toronto, Oct. 27, 1894.

1. *Membranes*.—*a. Dura mater*, very adherent and much thickened. Outer surface white, but studded with many bleeding points. Calvarium also studded with similar points, and near posterior end of sagittal suture an area about $1\frac{1}{4}$ inch long and $\frac{3}{4}$ inch wide, where the dura mater seemed to have ossified a little and left little osteophytes sticking to the bone. The calvarium was, if anything, slightly thinner than usual. Over both parietal regions was a well-marked false membrane, simulating the arachnoid, but showing at its line of junction with the dura well-marked sacculations, and separated from it by effusion and bloody clot, so that it seemed at first as if the dura were about $\frac{1}{8}$ th inch thick in places, and full of tawny brown serum and clot. There was a thin clot, about $\frac{1}{8}$ th inch thick, on each side in frontal region, and these thinned off to mere reddish inflammatory infiltration.

b. Pia mater, apparently normal, but for blood-staining, which was not all *post-mortem*.

2. *Cerebrum*.—Convulsions in parietal and frontal regions slightly flattened; whole organ small. No evidence of arterial disease, even vessels entering anterior perforated space seemed normal. White matter slightly congested and pink in color. Very little cerebro-spinal fluid in ventricles, and that sanguineous.

3. *Cerebellum*.—Normal.

4. *Pons and medulla*.—Some areas of pink, but no extravasation. One or two small vessels seemed to ooze too freely on cut surface, as if engorged.

Post-mortem diagnosis.—Pachymeningitis hæmorrhagica interna, not acute but chronic; death due to exacerbation, with at least two effusions large enough to form clots.

Looking up the history of this disease, we find Fagge referring to Virchow, who was the first to elucidate its pathology and gave it the name by which it still goes. Fagge prefers the name *hæmatoma of the dura mater*, but that would seem undesirable, as conveying no distinction between this disease and the condition usually traumatic, in which blood is effused between the dura mater and the bone; a condition different in almost every respect, both as to its anatomy, its etiology, its prognosis and its treatment. Osler remarks the rarity of the disorder and says that "Virchow's view that the delicate vascular

membrane precedes the hæmorrhage is undoubtedly correct." He says, too, that extensive bilateral disease may exist without a single symptom; but this, I think, must occur only in cases of paresis, when subjective symptoms are not apt to be complained of. The three causes given by Fagge and all the other authorities I have been able to see are: *a*, senile decay; *b*, chronic alcoholism; *c*, general paralysis of the insane; and Fagge intimates that he holds the disease to be merely a complication of cerebral atrophy in one of the three above-mentioned conditions. It does not seem to have been so in my case, as there was no evidence of insanity, or even incompetence for business. Idiots and epileptics are said sometimes to have advanced forms of the disease.

Opposed to Virchow's theory, but now no longer held, is that of Huguenin, who held that the initial lesion was a soft layer of blood-clot spread out over the convolutions, and slowly organized to a sort of membrane which was separated from the dura mater by subsequent hæmorrhages or effusions. But this cannot very well have been the case, as one would expect the pia mater to be adherent to one side of the clot and the dura to the other, which seems never to occur.

Delafield and Prudden put the present view of its pathology very well, as follows: "This form of chronic inflammation of the dura mater is characterized by the formation of layers of new delicate connective tissue, with numerous very thin-walled blood-vessels, from which the blood is prone to escape. The membrane may at first appear as a delicate fibrinous pellicle, with small red spots scattered through it; or it may look like a simple reddish or brown staining of the inner surface of the dura mater. Microscopical examination shows this membrane to consist of numerous blood vessels, mostly capillaries with very thin walls, which may be distended or pouched, and which have grown out from the vessels of the dura mater. Between the vessels is a homogeneous or slightly differentiated basement-substance, containing a varying number of fusiform, branching or spheroidal cells. Red blood cells in varying quantity, and blood pigment in various forms, frequently enclosed in the new cells, and small calcareous concretions

(brain sand) also lie in the intervascular spaces. In more advanced stages the new membrane may become greatly thickened, its outermost layers (i.e., next cerebrum) being changed into dense fibrous tissue with obliteration of the vessels, while the more recently formed layers are similar in structure to those at first developed. Considerable blood usually escapes from the vessels of the new membrane by diapedesis in all stages of its formation, and the vessels also are very liable to rupture, giving rise to extensive hæmorrhages either into the substance of the membrane or between it and the pia mater. Sometimes layers of new tissue and blood, from half an inch to an inch or more in thickness, are in this way formed, greatly compressing the brain."

Ziegler expresses practically the same views, but in less detail. Church, of Chicago, in Starr's *American Handbook of the Diseases of Children*, says that this disorder is practically unknown in childhood, as affecting the spinal dura, and I cannot find cerebral pachymeningitis mentioned in the work. It does occur sometimes in rhachitic children, and, as already stated, in idiots, though not usually at a very early age.

PROFUSE MENSTRUATION.

BY DR. CHARLES P. NOBLE, PHILADELPHIA,
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Philadelphia.

We shall consider in this paper that profuse menstruation is synonymous with menorrhagia, or too great loss of blood at the menstrual period. Our subject will then embrace all those conditions which can give rise to this symptom. The terms profuse menstruation and menorrhagia are of practical value and have come down to us from the older gynæcology, which was almost purely clinical and dealt but little with the pathological conditions at the basis of symptoms.

The causes of menorrhagia are numerous. They are best grouped as constitutional, general and local.

Among the constitutional causes we have the hæmorrhagic diathesis and scurvy. Among the general causes cardiac and hepatic diseases are the most important. Whatever will bring about a lack of tone in the general circulation will pre-

dispose to pelvic congestion and menorrhagia. Incompetency of the cardiac valves and cirrhosis of the liver are the most frequent of the general causes of menorrhagia. Chronic Bright's disease is also a cause of menorrhagia; but in such cases it is questionable whether it is the kidney disease itself or the associated morbid condition of the blood vessels and of the heart, which is the real cause of the profuse menstruation.

The local causes of menorrhagia are: Pelvic congestion, endometritis, metritis, adenoma, polypus, fibroid tumors, carcinoma, or sarcoma, retained products of conception, hæmatocele, certain diseases of the uterine appendages, especially cystic degeneration of the ovaries.

A glance at this long list of causes of menorrhagia makes it apparent that it will be impossible in a brief paper to more than glance at the nature of these conditions, and to summarize our knowledge of their treatment.

It is worthy of comment that the common causes of menorrhagia vary with the period of life to which the patients belong. In young virgins shortly after the onset of puberty, menorrhagia at times occurs. Under these circumstances it is due to the fact that the menstrual function has not been perfectly established. There is lack of control on the part of the nervous system, both of the menstrual function itself and of the vasomotor nerves in general. In the cases which have come under my observation this has appeared to be the cause of the profuse menstruation. These girls were plainly "growing too rapidly," they were "shooting up," and had the lax tissues characteristic of such individuals.

Menorrhagia in young child-bearing women is due usually to some mishap in connection with pregnancy and parturition. An incomplete abortion, a sub-involuted uterus, laceration of the cervix, and retroversion of the uterus are the most frequent causes of menorrhagia in women of this class. Inflammatory disease of the uterine appendages is also frequently present in women at this period of their lives, and menorrhagia due to this cause, with co-incident endometritis, is quite common.

Menorrhagia occurring in women approaching the forties, and in those who are older, is of very suspicious import. In younger women, as a rule, it is a symptom of some curable condition, and is

of importance only because of its severity—the loss of blood producing anæmia, and breaking down the patient's health. In older women it has a very different signification. It is almost always due to gross disease of the uterus. These women, as a class, have passed the period of child-bearing, and their sexual organs are being prepared for the retrograde changes which take place at the menopause. As we know, it is a law that tissues, especially glandular tissues, which are undergoing atrophic changes, are most apt to develop malignant growths. The uterus is no exception to this rule, and cancer is extremely common among the class of women under consideration.

The ancient tradition that it is natural and proper for a woman to bleed profusely and irregularly when she approaches the period of the menopause, is the indirect cause of many preventable deaths from cancer of the uterus. This traditional belief is generally accepted by women themselves, and unfortunately is advocated by many physicians who have not given the subject of diseases of women much study. This teaching they received as students, and, although it has long been shown to be false, they have never abandoned it. It is natural that women should hold to this opinion, because it was quite current in the profession a generation or two ago. Popular beliefs are usually a fair reflex of what was the professional teaching of fifty or seventy-five years before. Believing it to be natural at their time of life, women disregard a menorrhagia when they are forty or fifty which would cause them much uneasiness if they were twenty-five or thirty. The same is true of a leucorrhœa. In this way, but too often, carcinoma is permitted to develop to the stage of ulceration and to that of secondary deposit, before the surgeon is consulted. Perhaps a physician is consulted at an earlier period who is a believer in the doctrine of climacteric hæmorrhages, and who soothes the patient with the assurance that there is no occasion for alarm, as "it will all come right at the change of life"; and so the poor victim rests in fancied security, until she has a rude awakening a little later, and discovers that death is inevitable owing to the inroads which the disease has already made. My own experience is so distressing with reference to the management of cases of cancer, that I feel very strongly upon this subject. About one-tenth

of all the cases which come under my observation are the victims of cancer, and of these not more than one in ten have consulted me sufficiently early to enable me to offer any reasonable ground of hope of being able to affect a cure by a radical operation.

While it is true that cancer is a very common, if not the most usual, cause of menorrhagia, in women approaching the menopause, it is by no means the only one. Endometritis, adenoma and fibroid tumors are also frequent causes at this period of life. It is a striking fact that whereas, in young virgins, the causes of menorrhagia usually have to do with the nervous system, and that in young child-bearing women menorrhagia is usually due to some mishap connected with pregnancy, that in older women it is almost always due to gross disease of the uterus.

Treatment.—As loss of tone of the vascular system predisposes to menorrhagia, it follows that by building up the general health and improving the tone of the circulation much can be accomplished in any case of menorrhagia. Digitalis, strychnine and ergot act directly upon the muscular structure of the heart and arteries and lessen pelvic congestion, and can sometimes be depended upon to lessen hæmorrhage from the uterus, provided the local morbid conditions are not of a very marked character.

The local treatment of menorrhagia depends, of course, upon the nature of its cause, so that the most important point is first to make a diagnosis. One of the drawbacks to the older nomenclature, to which our present title belongs, is that it does not tend to favor accurate diagnosis. There is no treatment for menorrhagia, *per se*, and that fact should be distinctly emphasized. Many a woman has gone to her death from unrecognized cancer, or cancer recognized too late for its eradication by operation, because the attending physician was satisfied with the diagnosis of menorrhagia, and addressed his treatment to that entity. Every case of menorrhagia deserves careful study, and this is especially true when it occurs in women who are upwards of thirty years of age. A careful inquiry into the case will usually put the astute physician upon the right track. In a case of short duration, in which the amount of blood lost is inconsiderable, especially if there be no complaint of pelvic pain and no breaking down of

the general health, it may be permissible to treat it upon general principles; that is, to regulate the bowels, the habits of the individual, to treat any symptoms which may be present, to prescribe regular habits of living, and to administer digitalis, strychnine and ergot. Especially is this the case if the patient be unmarried and if the discharges are free from offensive odor. The physician would be the more inclined to make use of general treatment only if in such a case the heart was found to be incompetent, or the liver congested. But he should not permit himself to continue the treatment without an accurate diagnosis unless the patient promptly and steadily improves.

Accurate diagnosis is the keynote to success in the management of cases in which menorrhagia is a symptom. That this is a truism makes it none the less important that it be followed out faithfully in the management of each individual case. With the exceptions already referred to, and young girls, it should be the maxim of the practitioner that every woman having menorrhagia should have a careful pelvic examination. A careful examination should be made to determine whether or not pelvic congestion is present; the size, shape, consistency and position of the uterus; whether or not it be inflamed; whether it contains a tumor or the products of conception. Also the condition of the uterine appendages should be investigated. Whether or not these are healthy, and if not, the morbid condition present; whether this be a tumor, inflammatory trouble, or a hæmatocele. The condition of the general circulation, the heart and the liver, should also be investigated, and in no case should an examination be considered complete until all of these conditions have been considered.

It may prove of interest if I give succinctly my own views concerning the management of the various conditions which give rise to menorrhagia.

Pelvic congestion, when not due to or accompanied by structural disease in the pelvis, and when not the result of a recent parturition, is best treated by medicines addressed to the general health—by tonics, by heart stimulants, and by proper hygienic measures, including active outdoor exercise. Pelvic congestion alone is seldom the cause of menorrhagia, except after parturition, but it predisposes to endometritis, and in this way indirectly becomes a cause.

Endometritis and *metritis* when not complicated by inflammatory disease of the uterine appendages are treated most satisfactorily by dilatation of the cervix, and a careful and thorough use of the sharp uterine curette and cutting curette forceps. In this way more can be done in ten minutes than can be done in ten weeks in any other way. In my hands, in the class of cases referred to, the results obtained have been very satisfactory, and the failures to cure and the recurrences have been exceptional. While stating this in general terms it is admitted, of course, that the final stages of areolar hyperplasia are not specially influenced by the use of the curette, or by any other form of treatment except the ablation of the uterus.

Adenoma is likewise best treated by the use of the sharp curette.

Malignant adenoma calls for pan-hysterectomy.

Polypi should be removed *per vaginam*, and the endometrium thoroughly curetted.

Fibroid tumors which are giving rise to menorrhagia should be removed *per vaginam* when they belong to the sub-mucous variety, and can be removed from below, otherwise they should be removed by hysterectomy.

Carcinoma and *sarcoma* of the uterus call for pan-hysterectomy whenever the disease remains localized in the uterus; otherwise a partial operation, having for its object the removal of necrotic tissue, or the prevention of hæmorrhage or foul smelling discharge, may or may not be advisable in individual cases. When the disease has involved the pelvic glands to any considerable extent, and when pain has become a marked feature in the case, I have seldom found much benefit from operation. It may prevent or control the foul smelling discharges, but it seldom modifies the pain unless this has been of an inflammatory character due to septic absorption from the necrotic surface of the cancer. Every case, however, should be judged upon its merits, and as the result in all cases which are far advanced is an inevitable, and more or less painful and disgusting death, it can at least be said that operation can hardly make matters worse, even though it fails to afford much relief.

The treatment of *retained products of conception* is their removal.

Hæmatocele is due almost always to a ruptured extra-uterine pregnancy, and should be treated by

celiotomy, removal of the pregnant tube and of the effused blood.

When endometritis and menorrhagia are produced by inflammatory disease in the uterine appendages, or by ovarian tumors, the conditions are such, as a rule, to call for celiotomy and the removal of the diseased appendage or appendages.

Cystic degeneration of the ovaries is at times a cause of menorrhagia and metrorrhagia. A number of such cases have come under my care. In these cases the ovaries were not markedly enlarged, and upon bi-manual examination it was only possible to say that the ovaries were rather large and tender. In these cases, curettement, the rest cure, and all manner of internal medication was tried without avail, as the hæmorrhages recurred very promptly, and the patients were not cured until the ovaries were removed. In each of the cases cure promptly resulted.

I have as yet said nothing about the use of electricity in the treatment of menorrhagia. The advocates of electricity claim that this is perhaps the field in which it is of the greatest value, and I am inclined to believe that for simple cases of endometritis or metritis, that it is capable of effecting a cure. But the method of treatment is tedious and painful, and when sufficiently strong currents are employed to assure the effect upon the uterus, the method is not without danger. As compared with the curette, I believe it is more dangerous, less certain, more painful, and much less satisfactory.

My own experience with the use of drugs in the treatment of menorrhagia has not been large. Digitalis, strychnine, and ergot, have proved themselves in my hands to be of real value, and except in those cases in which the local conditions have been so bad as to make it irrational to expect much effect from constitutional remedies, the results from the use of these agents have been satisfactory. My experience with other drugs has been small. Hydrastis Canadensis has been used to some extent, and I have never been able to satisfy myself that it has the slightest action in the way of controlling uterine hæmorrhages.

There are two other forms of treatment of value, especially in bridging over an emergency in the treatment of cases of menorrhagia. These methods are systematic rest in bed, and the use of the vaginal tampon. With the exception of those cases

in which menorrhagia is due to malignant disease to adenoma, or to the retention of the products of conception, rest in bed has a very positive influence in lessening the amount of blood lost. It is of practical value, chiefly in the management of cases which are seen late, after so much blood has been lost that the patients are suffering from acute anæmia and profound prostration, so much so that it might not be safe to anæsthetize them in order to institute any radical method of treatment. This reference applies especially to cases of fibroid tumor. I have again and again in such cases when consulted under the circumstances referred to, been able to greatly improve the condition of the patients by putting them to bed, keeping their bowels regular, and, perhaps, administering strychnine, digitalis and ergotine. I have in this way been enabled, a number of times, to do hysterectomy with success, when I am satisfied had the operation been performed when the patient first came under observation, the result would have been fatal.

In certain cases the use of the vaginal tampon is of great service in temporarily arresting hæmorrhage. In the class of cases just referred to, when the bleeding is aggravated by the onset of the menstrual period, by firmly tamponading the vagina during the days when hæmorrhage otherwise would be most free, it is quite possible to limit the loss of blood to a very small quantity. This has been advocated as a systematic means of managing certain intractable cases of menorrhagia, and I can add my testimony to its value, at least as a temporary expedient, in the management of certain cases of uterine hæmorrhage.

The ligation of the uterine arteries offers another means of controlling hæmorrhage from the uterus, no matter what the immediate cause of the hæmorrhage may be. As a preliminary operation, in dealing with a small class of fibroid tumors, in which a large amount of blood has been lost, and in which acute anæmia is present, this operation offers much. Likewise in certain cases of persistent hæmorrhage after the removal of the uterine appendages, in combination with thorough curettement of the uterus, I believe that this procedure will be of great value.

Certain cases of persistent and recurrent hæmorrhage have come under my observation, which have resisted all the usual methods of treatment.

In such cases the cause is usually malignant adenoma. When the microscope clearly shows this to be the case, or when the trouble recurs time and again after thorough curettement of the uterus, even though the microscope does not demonstrate the presence of malignancy, hysterectomy is indicated. In such cases it is a life-saving measure to prevent death from hæmorrhage. In cases where the microscope does not show malignancy, it would be proper to make use of electricity after the failure of curettement, before resorting to hysterectomy. In one case, in which curettement repeated three times failed to cure, and in which the removal of the somewhat diseased uterine appendages (cystic ovaries, catarrhal salpingitis) likewise failed to cure, this result was accomplished by packing the uterus with gauze squeezed out of fifty per cent. chloride of zinc solution, which brought away a slough of the endometrium and a part of the underlying muscularis. This very radical and somewhat hazardous method of treatment I should recommend only in exceptional cases, and not in any case in which the appendages have not been previously removed.

I have as yet made no mention of the treatment of menorrhagia by the application of carbolic acid, iodine, perchloride of iron, nitric acid, or other caustics, to the endometrium, either by means of a cotton-wrapped applicator or a uterine syringe. The reason for this omission is, that I believe these methods to be either inefficient or dangerous, or both. The milder escharotics are inefficient; the more powerful are dangerous, in that their action cannot be controlled within conservative limits. The experience of the generation preceding us has so well demonstrated the dangers attendant upon this form of treatment, that it is unnecessary for us to go over the same ground.

Conclusions—1. Menorrhægia in young virgins is usually functional, due to disturbances in the vasomotor nervous system or to relaxation of the tissues, in general caused by the rapid growth which at times takes place about the time of puberty. Because of its pathology menorrhagia in young virgins is usually curable by general treatment.

2. Menorrhagia occurring in young child-bearing women is usually due to some mishap in connection with pregnancy or parturition, such as

the retention of products of conception, laceration of the cervix or perineum, retro-displacement of the uterus, sub-involution, inflammation of the uterine appendages, and pelvic congestion. Menorrhagia in this class of women is curable. It usually requires local treatment of an operative nature. When due to sub-involution and malpositions of the womb, operation is unnecessary.

3. Menorrhagia in women approaching the forties, and in those who are older, is usually due to gross diseases of the uterus, such as fibroid tumors, polypi, adenoma, or malignant tumors. Menorrhagia occurring in this class of women, except when due to advanced malignant disease, is curable, but almost invariably requires operative treatment applicable to the disease present in the particular case.

4. As menorrhagia is a symptom and not a disease, an exact diagnosis is requisite in every case. With the exception of young virgins it is desirable that a physical examination of the pelvic organs be promptly made. The importance of this examination is the greater with the increasing age of the patient. Special considerations should influence the practitioner to postpone the local examination in the unmarried, unless it be reasonably certain from the symptoms that gross local disease is present.

5. There is no treatment for menorrhagia *per se*. By general measures, such as rest in bed and the use of digitalis, strychnine and ergotine, pelvic congestion can be lessened, and in that way menorrhagia can be, at least in part, controlled; but it cannot be too strongly insisted upon that in every case of menorrhagia an exact diagnosis must be made, and the appropriate treatment addressed to the disease which is present.

DR. A. CANTALUPI, writing from Naples, Italy, under date of July 24th, 1893, says: BROMIDIA has produced successful results in all the most varied forms of insomnia. Among others who have been benefited by its use is Prof. Cesare Olivieri, well known as a most distinguished surgeon in this city, and who, after undergoing tracheotomy for neoplasm in the larynx, suffered terribly from insomnia, which the usual hypnotics all failed to relieve. Hearing of this from a mutual friend, I advised the use of Bromidia, which promptly produced the desired result.

Selected Articles.

THE COLD POULTICE AS AN ANTIPYRETIC IN HIGH GRADES OF FEVER.

I desire to call attention to this simple, but efficient, agent as an antipyretic in high grades of fever, either typhoid, malarial, or pneumonia. It is an agent that I have used for this purpose for the past fifteen years, with much satisfaction to myself and infinite comfort to my patients. It is an antipyretic that possesses many advantages over the many coal tar agents of this kind, inasmuch as it never depresses the action of the heart or the nervous system, but accomplishes its work speedily, easily, pleasantly, and with comfort to the patient, and always leaving him in a better condition than it found him.

The cold poultice: how it is prepared and applied—A sufficient quantity of flax seed meal to prepare a poultice of suitable dimensions is placed in a common earthen bowl, and over this is poured boiling water, while the meal is constantly stirred with a large spoon until cooked to the consistency of soft mush. This material is then spread on a piece of soft cotton cloth, for an adult, about eighteen inches long and twelve or fourteen wide, or sufficiently long to cover the entire abdomen, from the pubis upward, extending at least half way up the chest, well over the cardiac region, so as to fully cover the heart and half of the chest. This poultice is now covered with another piece of cotton of corresponding dimensions. After being spread and covered, the entire surface to be applied to the person is frequently besprinkled with ice water until its temperature goes down to 68° or 70°, when it is ready for application. At this point, I would suggest that the poultice be not spread too thick, as in that case it would prove oppressive to the patient.

The poultice as thus prepared is applied over the chest, from above the cardiac region to the pubis. In my experience with it, which dates back fifteen years, I have never known it produce shock to the nervous system or discomfort to the patient. On the contrary, patients with high fever, who have learned its advantages, will often request it when they feel sensations of rise of temperature. Its work, different from that of the cold bath, is accomplished slowly, gradually, gently, and effectually. I regard the cold poultice, applied in this way, as a good substitute for the cold bath, and as a measure, while efficient, without its many disadvantages, dangers, and difficulties of application.

In the *treatment of acute disease*, high temperature constitutes one of the greatest difficulties in the practice of our profession, and is a question of vital importance. Of late years, our principal

means for the reduction of high temperature have been the cold bath, cold sponging, the coal tar antipyretics, as antipyrine, antifebrine, phenacetine, salol, quinine. These are all valuable remedies, and occupy an important place in our medical armamentarium.

Of all these agents, the quinine is the most permanent in its effects. But the practitioner frequently meets with cases of fever of dangerously high temperature in which even large doses of quinine accomplish but little, and antifebrine or phenacetine in full doses will reduce temperature only one or two degrees, with an enormously exhausting perspiration and unpleasant cardiac depression; and then the reduction of temperature is only for a short time, and our work has to be gone over again and again, with the same unpleasant results. If this routine is to be continued from day to day, from week to week, there comes a time when the remaining strength and physical powers of our patient will become exhausted. In truth, under such circumstances, we will note, if we are careful, that the waning strength of the patient is leaving him day by day.

It is under just such circumstances that it becomes necessary to resort to other antipyretics that will not shock the general system as the cold bath or depress the vital powers as the coal tar antipyretics. And here, under these circumstances and in this perplexing condition of affairs, is where the simple and unostentatious cold poultice supplies a most important deficiency. It has not the dramatic effect of the cold bath, and not its apparent scientific glamour, with all of its paraphernalia and systematic arrangements. It is too simple to be regarded as scientific. But, far more valuable than all of these, it is effective and innocent. It is a simple and pure antipyretic, efficient and without danger.

It is not designed to cover the entire treatment of fever, but to aid other methods in the treatment of that condition, and to take the place of some and to aid others in their work. It cooperates well with the sulphate of quinine; it takes the place very well of the coal tar preparations, and it does not interfere with the internal administration of antiseptics.

In that class of cases of pneumonia of violent type, with an unyielding temperature of 104° or 105°, frequent, hard, wiry pulse, great frequency and oppression of respiration, I have seen a cold poultice applied over the entire chest, extending back well over the sides, accomplish more in the reduction of temperature, of frequency of cardiac action and respiration than all other local agents combined, and at the same time with infinite comfort to the patient. In the application of the poultice, my rule has been to remove it when the temperature falls to or about the normal, and to replace it when it

begins to rise; or, on the contrary, when the temperature is not reduced to the normal, to continue the poultice until the reduction takes place by the renewal of fresh applications.

For the purpose of illustrating more clearly the action of this remedy as an antipyretic, I will here cite the history of one or two cases:

CASE I.—Mrs. P., a robust and fleshy young married woman, with two children, in the month of September, eighteen years ago, was attacked with typhoid fever of a very violent grade. At a very early period of her case the symptoms were of an alarming character.

On the tenth day of the attack, the pulse was 130; the temperature $105\frac{1}{2}^{\circ}$; almost constant delirium; tympanitis; diarrhoea; dry tongue. This case occurred before the introduction of the modern coal tar antipyretics, consequently I had to depend on the use of quinine and cool sponging. My remedies failed utterly to reduce the temperature a single degree, and it finally reached 106° . My case had now reached a point when death must ensue if relief failed to come. I will note the fact here also that she suffered from constant insomnia, restlessness, and jactitation. This description presents a picture of a case with about as little to base a hope on as we usually meet. In this condition of affairs, the cold poultice suggested itself to my judgment as holding some hope of good results. The entire chest and abdomen were covered promptly with one, and never did a remedy act more gratefully. In fifteen hours the temperature was down to $101\frac{1}{2}^{\circ}$; the pulse 110; the patient was in a pleasant sleep and perspired freely, and the mind comparatively clear. The poultice, when the temperature reached to near the normal point, was removed, and re-applied when it began to rise. With the aid of quinine, some intestinal antiseptics and nourishment, this patient, after an illness of five weeks, made a good recovery.

I present these suggestions of a remedy here simply as an addition to our means of reducing high grades of temperature, and not as a sole means, but one that has in past years served such a good purpose, and still continues to do so. Whatever remedy is capable of reducing the temperature in fever from three to five degrees, without disturbing the equilibrium of the economy, without detriment to the vital processes of nutrition and metabolism, or in any way agitating the nervous centres, is worthy of our adoption.

Now, relative to a rational explanation of the action of this agent, it can be said that, in the first place, the heat is directly subtracted from the great central organs—the heat centres of the system—and not directly from the extremities. In the first place, from a heart that is being crushed down from hyperpyrexia; and,

furthermore, the stomach, liver, spleen and intestines, and even kidneys. But this is by no means all. The great sympathetic and vaso-motor systems are being paralyzed by the ravages of high temperature, and we see in the furious rapidity of the action of the heart that the balance of inhibitory power is lost. This agent relieves the great sympathetic system of the terrible burden which it is carrying and crushing its life out, and in that way restores the equilibrium of health. Cold applied in this way over the great central organs of the body is not a depressant of cardiac and vaso-motor action, but appears to be one of the most certain and invigorating cardiac and vaso-motor tonics that we possess in fever, because it acts as a direct stimulus to the nerves of inhibition. We can readily see or imagine the action of an agent on the general system which subtracts in a few hours four or five degrees of temperature from the great gangliodic system of the abdomen, when the temperature ranges from 103° to 105° . A temperature of 105° is destructive to the organic tissues of the heart and ganglionic systems. The organic structures of these organs undergo rapid degeneration and softening from hyperpyrexia, and hence the absolute necessity of maintaining the temperature of the heart and ganglionic systems at a moderate degree.

In cases of fever, with a dangerous degree of hyperpyrexia, say, 106° or 106.5° , with delirium, insomnia, constant restlessness, contracted pupil, scanty, high-colored urine, these symptoms clearly indicate that this intense degree of temperature is exerting a destructive influence on the great nervous centres—the brain and spinal cord—and, if prompt measures are not taken to reduce this hyperpyrexia to a safe degree, the brain and spinal cord will be overwhelmed in hopeless ruin. This can only be accomplished either by the cold bath, internal antipyretics, or the cold poultice. In certain cases in my practice, the latter measure, applied over the entire spinal column, from the cervical vertebrae to the sacrum, with these symptoms, has exerted a marvellous effect in relieving the nervous system, in subduing inordinate nervous erethism, relieving delirium and restlessness, and in promoting sleep.

In a case of this kind, during a relapse from a four weeks' illness, where the temperature approached 106° , pulse 130, utter sleeplessness and constant restlessness, a long poultice, at 70° , was applied from above the cardiac region to the pubis; another, at the same temperature, ten inches wide, was applied over the nucha to the sacrum, and the head having been shaved, an ice bag was applied over the head. In two hours there was a reduction of two degrees. In twelve hours, a reduction of five degrees, with copious warm perspiration, with the result of refreshing

sleep, nervous composure, relief of delirium, and reduction of the pulse to 100. On one or two occasions subsequently, when there was manifested a disposition of these symptoms to return, the same remedies were applied with identical results, and under the usual treatment, the case terminated in recovery.

In the *treatment of acute peritonitis*, I have not as yet tested the powers of the cold poultice as an antipyretic and antiphlogistic. I feel very sure that in this class of cases poultices, at a temperature of 70°, applied systematically at intervals of one hour, would exert a beneficial influence.

There is a certain degree of art to be observed in the preparation of these poultices. They should not be spread so thick and heavy as to weigh down the patient and cause a sense of oppression, but not over a quarter of an inch in thickness, and then reduced to a uniform temperature, as tested by the clinical thermometer. In cases of temperature not exceeding 102°, I often order a cold poultice at first made with hot water, and then permitted to cool either by the atmosphere or application of ordinary hydrant or pump water, and find in such cases the effects excellent.—Dr. Brown, in *Virginia Med. Monthly*.

SIMPLICITY IN THE TREATMENT OF FRACTURES.

We should always bear in mind the three cardinal points which govern the treatment of all fractures:

1. Make an accurate diagnosis, if you can do so without doing damage to the parts already injured.
2. Restore the fragments to their normal position.

3. Apply such an apparatus as will keep them there and immobilize them.

How much more satisfactory would be our results if we would always keep these three points before us! There are also three things which I would impress upon your minds by my remarks, and they are these:

1. That the treatment of fractures is not as difficult a proposition as it sometimes seems.

2. That you should not treat fractures by any set rule other than the rule which says that you must keep the fragments in their natural position and thoroughly immobilize them.

3. That simplicity in apparatus will give you better results with the least amount of trouble.

1. Most surgeons upon their advent into the arena of actual practice are possessed with the erroneous idea that fractures are very difficult things to treat. I have seen surgeons make as much preparation for fixing up a simple fracture of the lower leg as some would do for their laparotomy. That sort of thing undoubtedly inspires

the ignorant with awe and respect, and enables the surgeon to charge large fees for his services, and might possibly serve as an advertisement for him, but such base methods should be beneath the dignity of him who relies upon his skill for his success. Confidence is what is needed, and that, of course, comes only with experience. In this enlightened age of ours the treatment even of compound fractures is not such a difficult thing with the proper understanding of aseptic methods, for we should be able to convert a large proportion of our compound fractures into simple fractures and treat them as such.

2. We should have no set rule for treating our fractures. We should make the rule fit the case and not the case the rule. I have seen surgeons work conscientiously for a considerable time to make a certain splint fit a case of Colles' fracture when the fact was that it was not the splint at all for that case; the surgeon did not fully understand the anatomy of the parts, but felt that he must make that case fit this particular splint. I have also seen a surgeon apply a roller plaster-of-Paris bandage to a fractured leg, take it off, and re-apply it in his earnest endeavor to make it fit when it would not do so, and when another kind of dressing would have served the purpose perfectly; but he was not enough of a mechanic to see it. The surgeon should study each case of fracture, its nature, the direction of the line, and the direction of the displacement, before saying what kind of an apparatus should be put on. He should study to put on an apparatus which will be light and of sufficient strength (and right here let me say that the tendency is to put too heavy splints on fractures), and which should be as comfortable to the patient as possible. Splints which fit the parts accurately are the most comfortable, and therefore splints which can be molded to the parts are the most serviceable. Heavy wooden or metallic splints are not needed. When I use wooden splints I do not have them over an eighth of an inch thick, and metallic splints I seldom use. To my way of thinking, splints which can be molded are the most serviceable, and I carry two materials which can serve that purpose—one, binder's board in strips, which, when soaked in water, become perfectly pliable, and can be molded to almost any surface; and the other is plaster of Paris, which, when made into a thick paste and incorporated into several layers of bleached butter cloth and folded into proper shape, makes a splint which can be made to fit any surface of the body, and when it becomes hard it will accurately support the parts and keep them perfectly immobilized. It is light, clean, and of good appearance. I have used this splint in almost every case of fracture of the leg below the knee and of the arm in the last three years, and I give it my unqualified approval. These splints can be made to fit

any angle, as, for instance, at the elbow, and can be carried up over the shoulder in the form of a shoulder-cap in cases of fracture about that joint. They are to be held in place by means of an ordinary roller bandage, and in that way the seat of fracture can always be inspected without any difficulty.

3. I have already transgressed a little on this division of my subject—namely, that the simpler the apparatus is which will accomplish the results, the better will be the ultimate outcome of the case—when I spoke of the use of plaster-of-Paris splints. I have already said that the surgeon's paraphernalia for the treatment of fractures need not be expensive or extensive. You may now ask, What have you in your kit? Well, here is the list:

Two yards of bleached butter cloth; one dozen safety pins; two strips of wood four inches wide, a quarter of an inch thick, and thirty inches long; one roll of adhesive plaster three inches wide; two strips of binder's board; two yards of unbleached muslin; four ounces of dental composition; one foot of silver wire; one dozen plaster-of-Paris bandages; three pounds of dental plaster-of-Paris; four sheets of cotton wadding; half a dozen assorted bandages; one long patella splint; two empty sand bags; one pulley and cord—which, together with a pocket knife, will enable you to handle any case that may come along, excluding those which will require operative interference. You will notice that in this list there is no Dr. J——'s splint for Colles' fracture or Dr. S——'s splint for Pott's fracture; they are a superfluity, and would add nothing to your convenience or comfort. It is a mistake that our text-books are filled with descriptions of such a larger number of complicated contrivances; the reader is at a loss to know which is the best, or may conclude that it is simply a matter of taste.

It is not my intention to detain you while I give you a detailed description of the methods of treatment of all of the fractures of the body, but I would like to mention a few to illustrate what I have been saying and to impress upon your minds the truth of my statements:

(a) Fracture of the clavicle—one of the common everyday cases: For the treatment of these cases what is more simple than a piece of unbleached muslin eight inches wide and eight feet long, and, when properly applied as a figure-of-eight bandage of the elbow, what can be more effective or more comfortable to the patient? I have treated ten cases of this injury by this method, and have had better results than when treating them by other methods. You can probably all recall and are familiar with at least a dozen different methods of treatment for this particular injury, and in many of them it would seem that the sole object was to make them as complicated as possible. I will

remember a case which came to me from another town with an apparatus on which probably cost the doctor at least fifteen dollars, and which consisted of a bellyband of leather with a pocket on one side into which fitted an upright steel rod, adjustable in length by means of a screw arrangement; at the upper end was a crutch which fitted into the axilla. The only thing which this apparatus could accomplish was to elevate the shoulder, and this could have been done just as effectively and much more easily by means of a piece of unbleached muslin costing only two cents, and which would have at the same time accomplished all of the other things desired—namely, to draw the shoulder backward and outward.

(b) Fracture of the phalanges: You will find in the market a number of patent splints for the treatment of this fracture. All that is necessary in these cases is to keep the fragments in line both in an antero-posterior position as well as in a lateral, and not to allow the finger to become rotated on its axis. A small, narrow piece of binder's board or a plaster-of-Paris splint is all that is needed, and sometimes even this is not necessary, for simply bandaging the injured finger to those on either side will serve the purpose. In other cases you can take the finger of an old glove, draw it over the injured finger, and stiffen it with glue or varnish painted on the outside.

(c) Colles' fracture: Here is a place where we have an infinite variety of splints. In looking over one of the modern text-books I find no less than twelve different splints pictured for the treatment of this fracture, many of them, too, bearing such distinguished names as Nélaton, Bond, Smith, Hewitt, Dupuytren, Lewis, Hamilton, and Bolles, and it is my experience after treating a large number of these cases that none of them accomplish the objects desired better than two straight pieces of board properly padded, or two plaster-of-Paris splints, neither of which will cost over five cents.

(d) Suppose now that we have a fracture in or near the elbow joint and it is necessary to put the arm up in an angular position, why should the surgeon carry around with him a large supply of angular splints of assorted sizes when with a yard of butter cloth and a pound of plaster-of-Paris he can make an angular splint which will fit any case and which will perfectly immobilize the joint and be more comfortable than any of the ready-made splints? This method I have used in a number of cases of all ages with entire satisfaction to all concerned.

(e) Fracture of both bones of the lower leg is one which is very common and apt to be compound. These cases can be simply and very satisfactorily treated by means of the plaster-of-Paris splint; some surgeons recommend putting on a

temporary dressing for a few days and then encasing the leg in a roller plaster-of-Paris bandage. If that is your method of treatment I would certainly apply the temporary dressing first. It has been my habit to combine the temporary and permanent dressings in one, both in my treatment of simple and compound fractures of the leg, in the shape of a plaster-of-Paris splint long enough to reach from the knee down the leg, underneath the foot, and up on the opposite side of the leg to the knee again, which is to be held in place by means of an ordinary roller bandage. This can be applied to the leg at any time irrespective of the presence or absence of swelling, for as the swelling subsides the outside roller bandage can be slit up and a new one put on tighter than the first without disturbing either the splint or the fragments. It fits every irregularity of the surface; keeps the fragments perfectly immobilized; it does not allow of any motion in the ankle joint and will thereby prevent much ankylosis of that joint; the seat of fracture can be inspected at any time by simply slitting up a few turns of the roller bandage at that point; it is very light, sufficiently strong, decidedly comfortable, and sufficiently cheap for any one. I have used this dressing in upward of forty cases, both simple and compound, and it has always given me perfect satisfaction. If the fracture be near the knee joint this splint can very easily be carried above that joint and thus immobilize it as well as the ankle joint. In compound fractures, after having properly taken care of the wounds, this splint can be applied directly over the dressings, and if it becomes necessary to change the dressings it can be done without disturbing the fragments at all; and how much more simple and comfortable is this than the old-fashioned fracture box, side splints, suspension or extension apparatus!

(f) In fracture of the neck of the femur in old persons, what is more simple than a plaster-of-Paris bandage made to include the pelvis and extending down to below the knee? How much more comfortable is it than the old-fashioned and barbarous apparatus of Desault or Neill!

(g) Fracture of the lower jaw: It has fallen to my lot to treat a number of cases of this kind where the fracture has been either in the body or the ramus. I remember one case which came to me after eight weeks with non-union and necrosis of the edges of the fragments, in which I removed the necrosed portions and secured the fragments by means of an iron wire passed around the teeth on either side of the line of fracture, getting a further purchase on the fragments by passing a fine wire around the other larger one over the seat of fracture, thus making the larger wire on the inside approximate the teeth—taking up the slack, as it were. The patient never wore any other apparatus than this, and in six weeks was dis-

charged well. Another case of compound fracture of the lower maxilla I have recently handled in this same way, and the patient was discharged in five weeks. If more than this is needed I make a mold of dental composition and place it on the outside of the jaw and secure it by proper bandages. If we can get along without complicated appliances here we are certainly doing our patients a favor.

I will not detain you longer by referring to any more fractures, and will thank you for your attention to this paper, which may have seemed to some of you rather elementary; but I am a firm believer in the virtue of simplicity in all surgical procedures, and if I have impressed upon any mind here the necessity and value of simplicity in the dressing for fractures, and the fact that with a proper anatomical knowledge and a proper amount of mechanical skill the treatment of fractures is not the difficult task that many would have us believe, I shall feel that my paper has been of some service.—C. B. Lyman, M.D., in *N. Y. Med. Jour.*

HARVEY'S WORK IN RELATION TO MODERN MEDICINE.

The Harveian Oration at the Royal College of Physicians of London was this year delivered on the 18th inst. by Dr. T. Lauder Brunton, who took as the subject of the Oration Harvey's Work in Relation to Modern Medicine. After alluding in feeling terms to the late president of the Royal College of Physicians, Sir Andrew Clark, Dr. Brunton said that Harvey's person, character, and works has been so fully discussed in previous orations that he proposed to consider some of the modern developments of Harvey's work, more especially in relation to the treatment of diseases of the heart and circulation. He referred to the discovery of muscular sound by Dr. Wollaston, and to the work of Doctors Clendinning, C. J. B. Williams, and Todd on the sounds of the heart, which had been of the utmost importance in the diagnosis of heart disease. Harvey knew drugs might be absorbed into the circulation and produce their characteristic effects, but the first experiments on the injection of drugs into the blood appear to have been made by Christopher Wren, better known as the architect of St. Paul's than as a pharmacologist. Wren's method was utilised by Magendie to ascertain the power of absorption from different parts of the body, and this led to Dr. Alexander Wood's introduction of the hypodermic syringe into practice. The first experiments on the action of drugs on the circulation were made by Blake at the late Professor Sharpey's suggestion. Sharpey's influence upon the progress of physiology in this country is not to be estimated

by his writings but by his teaching and influence; and two of his pupils, Burdon Sanderson and Michael Foster, have revived experimental physiology in this country, and have diffused an extensive and exact knowledge of it amongst medical men. But more than to any one else since the time of Harvey is our knowledge of the circulation due to Carl Ludwig, who has recorded automatically the pressure of blood in the arteries, and invented a plan of artificial circulation by which changes in organs and blood-vessels could be observed apart from the heart, lungs, and nervous system. Harvey's work showed that he was well acquainted with the effect of emotion upon the heart and vessels. He says, "For every affection of the mind which is attended with pain or pleasure, hope or fear, is the cause of an agitation whose influence extends to the heart."

It is only of recent years that the *modus operandi* of the changes in the heart and vessels known to Harvey has been investigated. The amount of blood in the body is now known to be insufficient to fill the whole of the vessels at once, and, like the supply of water to London, it must be turned off from one set of vessels when it is turned on to another. Thus, when a man begins to think, the blood runs from his feet to his head, as has been shown by Mosso, who puts a man on a large and delicate balance so that his head is on one side of the pivot and his feet on the other. When the man begins to think the blood leaves the legs and runs to the head so that the head goes down and the heels go up. The turncocks who effect this change are the vaso motor nerves, which act under the direction of a nervous centre in the medulla oblongata, where the regulating arrangement for the beats of the heart is also situated. The vessels of the skin and the intestines are more under the control of the central nervous system than those of the muscles, and, when they contract, the blood, being unable to run through the cutaneous and intestinal vessels, runs through the muscles more rapidly than before. It is in the muscles that oxidation and consequent development of heat chiefly take place, and, therefore, when the vessels of the skin become contracted, as on a cold day, the circulation blood is driven out of them into the muscles, where circulation and oxidation become increased, and the temperature of the body is thus maintained. When the muscles contract, as they do during exercise, the circulation through them is first stopped by mechanical compression of the vessels which run through them and supply them with blood, but afterwards it is increased by these vessels dilating and the blood flowing more quickly through them. In consequence of this, sudden exertion tends at first to raise the tension in the arteries and obstruct the circulation. In a man with a weakened heart it may thus lead to cardiac pain, varying from slight

discomfort to severe angina pectoris; but if he is able to continue walking the vessels in the muscles dilate, the circulation becomes easier, and the pain may pass away. Over-exertion in even healthy persons tends to cause dilation of the heart, and in young growing boys may lead to permanent mischief. The movements of young animals naturally resemble those of the butterfly and not of the bee. Intermittent exertion, such as is seen in the fitful movements of young animals, the gambols of the lamb, and the frisking of the colt, is well adapted to increase the strength of the body. But steady, long-continued exertion is injurious, preventing development and shortening life.

The rules which have been arrived at by breeders of horses should be carefully considered by masters of schools, and such long-continued and constant exertion as enforced races or paper chases extending over several miles ought not to be allowed, although intermittent exertion in such games as cricket may be very beneficial. Ludwig's discovery of the variations which occur in the circulation of blood through the muscles enables us to understand not only the pathology of angina pectoris, but the *rationale* of the various methods of treating cardiac disease. In most cases the object is a two-fold one—viz., to increase the power of the heart, and also to lessen the resistance which it has to overcome. The resistance may be lessened by increasing the circulation through the muscles, and the methods of doing it may be roughly divided into three, according as the patient lies, stands, or walks. The first method consists in absolute rest in bed with massage; the second, in graduated movements of the muscles of the body and limbs while the patient stands still, as employed by Dr. Schott at Nauenheim; and the third in graduated exercises in walking and climbing, as used by Oertel. These methods are all good of their kind, but each is adapted to very different degrees of cardiac disease. The use of massage is as old as Harvey, who records in his works the case of a man who was relieved by a very rough form of massage. It causes a great increase in the rapidity of the circulation of blood through the muscles, and thus may lessen the resistance that the heart has to overcome and greatly assist its action when weak. Harvey also called attention to the advantage obtained by the mixture of blood from various parts of the body, and this function of the circulation has of recent years become of increased importance. It is by no means improbable that the secretions of various glands which are poured out on the surface of the body, or into the intestinal tract, are of less importance than the alterations which are effected by these glands in the blood returning to the general circulation. One gland, the pancreas, pours into the intestine a secretion

containing a ferment which converts starch into sugar, and this renders it ready for absorption by the blood; while the same gland pours through the lymphatics into the blood a ferment which destroys sugar, breaking it up into carbonic acid and water. If all glandular structures have similar complex functions, our views regarding the *modus operandi* of medicines may require complete revolution, and the chief part of the benefit produced by purgatives and diaphoretics may be due not to the secretions which they cause to be poured out, but to the alterations they produce in the circulating blood. The juices of various parts of the body, although innocuous when they remain *in situ*, may become very dangerous if they pass into the circulation generally, and Woolridge found that the juice of the thyroid gland injected into the blood would cause the blood to clot in the veins and kill an animal as quickly as a rifle bullet. But what is powerful for harm is likewise powerful for good, and the administration of thyroid juice in cases of myxœdema is one of the most remarkable therapeutic discoveries of modern times.

The first definite attempt to cure a disease by supplying a ferment from a solid, non-glandular organ of the body was probably made in Harvey's own hospital more than 20 years ago, but it is only recently that extracts of solid organs have come into much use. The microbes which are the cause of infective diseases appear to form powerful poisons or toxins and also antidotes, and when introduced into the higher animals they give rise in them to the formation of antidotal substances or antitoxins. These antitoxins have the power, not only of preventing disease coming on, but actually of curing it when it has already appeared, and the antitoxins of tetanus and diphtheria have deprived these diseases of much of their terrible power. The orator, as directed by Harvey, next exhorted the Fellows and members of the college to search out the secrets of Nature by way of experiment, directing their attention to fields of research which have received at present little attention, but promise results of great practical value. Lastly, he exhorted them to continue in mutual love and affection among themselves, directing their attention to the examples of Harvey and their late president. They were beloved by their fellows while they lived, their loss was deplored when they died, and they left behind them an example not only of goodness, but of courage. Harvey, seated speechless in his chair, distributing rings and parting gifts to his friends while awaiting the approach of death; or Andrew Clark, steadfastly determining to continue at work and die in harness, in spite of the hæmoptysis which seemed to threaten a speedy death, afforded noble examples which ought to encourage the Fellows and members of the college to follow

the directions of the venerable poet Longfellow, who, taking the organ which Harvey studied, to symbolize such courage as Harvey and Clark showed, says:—

“Let us then be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labour, and to wait.”

—T. Lauder Brunton, M.D., in *Med. Times*.

THE DANGER SIGNAL OF THE CHLOROFORMIST.

The opinion of most of the expert anæsthetists in contradiction to the suggestions of the Hyderabad Chloroform Commission, is that the respiration alone is an imperfect guide to the condition of a patient under chloroform, and the pupil, pulse, and the patient as a whole should be watched.

It certainly seems probable that if we watch the respiration alone, we are in danger of pushing the chloroform to the point of respiratory narcosis; and since this will come on gradually, we may not recognize the condition till the patient is in a state of extreme danger.

It may be true that the patient can always be brought round by artificial respiration; this, involving as it does, the stopping of the operation in many cases, is a most inconvenient and alarming complication, and should never be allowed to occur. Any interference with the respiratory centre by chloroform, however slight, is a sign of overdosing. Again, if respiration alone be watched, how is the beginner to distinguish between shallow and irregular respiration of reflex inhibition, which so often precedes vomiting, and the insidious onset of respiratory narcosis? If chloroform be pushed to the point of affecting the pulse, if this be possible, a dangerous overdose has been given. The heart, too, is liable to reflex inhibitions, and often becomes irregular and depressed during vomiting, and also during the violent irritation of the sympathetic system met with in abdominal operations; in either case, quite independently of the anæsthetic. Therefore, as an indication of the degree of the chloroform narcosis, the pulse is unreliable.

We require some indications which shall tell us when the cerebrum is completely narcotized, and shall also warn us when we are in danger of affecting the respiratory centre. This indication is found in the pupil. The third nerve centre which governs it is the first of the automatic centres of which we have cognizance; it is not a vital centre, like the respiratory, and its narcosis is not in itself followed by dangerous complications. The pupil, which is the visible sign of the condition of this

centre, is the danger signal for which we are looking. The pupil has a regular cycle as the patient goes under. It is first dilated and active, it then becomes contracted, and lastly it becomes dilated and fixed. The first state is a sign of imperfect narcosis, the second of complete and safe narcosis, and the third of danger of imminent narcosis of the respiratory centre. The cause of this cycle is as follows: Imperfect narcosis, going under or coming round, the pupil is dilated because impulses, mental, sensory or sympathetic, affect the half-narcotized cerebrum, and cause reflex inhibition of the third nerve centre; and active because the centre itself has not been reached by the anæsthetic. A similar dilatation is produced under ordinary conditions by fright, pain, or a blow on the abdomen. As narcosis deepens, the pupil contracts because the cerebrum is completely under, all cerebral reflexes are barred, and the third nerve centre is consequently unimpeded in its action. A similar state is seen in deep sleep. If the narcosis be pushed further, the pupil will slowly dilate and become less active to light till it is widely dilated and fixed, because the narcosis has now reached the centre itself, and has gradually overtaken it; consequently nervous control has ceased and the pupil has dilated; at the same time the light reflex has been abolished. A similar condition of pupil is seen in general cerebral compression. This fixed dilatation indicates great danger, for respiratory narcosis is imminent; indeed, under no circumstances should narcosis be pushed to the extent of full dilatation of the pupil. Thus the golden mean of safety is indicated by a contracted pupil, any material dilatation means "Look out." The patient is either coming round and developing reflexes, or going too far toward respiratory narcosis.

It is easy to distinguish between commencing reflex dilatation and early narcosis dilatation. In the first, the pupil is active and other reflexes—shallow respiration, vomiting, or movements will follow; in the second, the patient is stertorous, the pupil sluggish, and the eyeballs fixed. In the first, the indication is for more chloroform, in the second for the suspension of the drug till contraction recurs in consequence of the recovery of the third nerve centre. If the pupil be read in this way all interference with respiration or the heart can be avoided.

For all ordinary operations, a contracted pupil should be maintained, but in abdominal surgery it is sometimes necessary to combat the violent sympathetic irritation by pushing the chloroform till there is slight narcosis dilatation of the pupil. Beyond this, it is useless as well as dangerous to go. Any further abdominal rigidity is due either to inflammatory fibrosis or to the development of abnormal reflex links between the sympathetic and spinal nerves in highly neurotic subjects. In

either case the condition is beyond the control of anæsthesia.

The time during which the closest attention should be paid to the respiration is while a patient is going under. At this time he is liable, intentionally or from too strong a vapor, to hold his breath. The respiratory centre is thus debilitated from lack of oxygen; then when the necessity for breathing overcomes all other impulses, a gasping inspiration is taken, the centre is flooded with chloroform, and cannot resist it, the pupil dilates, and death supervenes. Whether or not the heart is affected is undetermined, the point being to avoid the occurrence in any case. This can be done by encouraging the patient to breathe regularly, and if he holds his breath, by seeing that only a small dose of chloroform is accessible.

In children it is better to use a Junker's inhaler, so that whether they scream or hold their breath, only a limited amount of vapor can be taken in; an overdose is thus avoided. In these cases it is my practice to give chloroform till contraction occurs with slight stertor, and then to suspend the administration until some slight reflex is seen, then to give a little more, and so on. I do not think that the pupil is quite so reliable as in the adult, as sudden overdosing with fixed dilatation seems sometimes to occur. Possibly the pupil reflex is imperfectly developed; this I am sure is the case with the corneal reflex, which is quite unreliable as a sign of narcosis in children. Slight stertor is the reliable indication.—Arthur H. Ward, M. D., in *The Lancet*.

A MODEL SURGICAL CLINIC.

Scene, a spacious room. At a large table in the centre is seated the surgeon; his secretary is opposite, an enormous folio register open before him. A group of students is clustered about the table. Benches filled with waiting patients occupy the sides of the room. The secretary calls No. 120-736. A man aided by crutch and cane limps forward. The surgeon's examination into the biography and genealogy of the patient (four folio pages carefully written out by the secretary) being ended, the attendant removes the multiple wrappings of the right foot, exposing an inflamed great toe with ulceration upon one side of the nail. The surgeon gives it a hasty glance, and turning, addresses the students as follows: "Gentlemen, a few years ago a case of this kind—evidently an ingrowing nail—would have been at once submitted to local treatment, and I admit, with fair prospects of obtaining a good result. But now that we have learned the general interdependence of the different organs of the body, we feel that a thoroughly scientific treatment demands the examination by specialists of these different organs,

in order to detect any conditions likely to be etiological factors in the case. The attendant will therefore take him and a copy of his history to the different rooms in succession, and return here with their respective official reports."

(Some Hours Later.)

Surgeon (loquitur).—"Gentlemen, the patient has now returned to us, and I ask your attention while I read the reports of the various specialists."

Ophthalmological Department.—Case No. 120,736. This patient is myopic. As I recall a case where a similar visual defect was the cause of injury to the great toe in a person who "stubbed" it against the curbstone, I have ordered appropriate lenses to correct the difficulty, as a prophylactic against the recurrence of the disease. It is essential, however, that this treatment should be supplemented by wearing a loosely-fitting shoe.

Otological Department.—Case No. 120,736. I find no defect of audition. As the patient's trouble may have arisen from want of suitable support to the foot, I have thought it best to shorten the stapes leather two holes.

Rhinological Department.—Case No. 120,736. A case of nasal toe nail. Wishing to bring about a radical change in the parts, I have removed with the curette all adenoid growths, together with the adherent mucous membrane, from the cavities and packed them all with aseptic gauze—which should be removed if the patient wishes to sneeze.

Department Abdominal Surgery.—Case No. 120,736. Drs. A—, B—, and C—, in consultation. The history showing that the patient's mother during life lost a set of false teeth, Dr. A— reasoning that "tooth and nail" are generally associated in action, is inclined to think the set may have been swallowed unconsciously and remained in the patient's stomach. Of course, he advises an operation.

Dr. B—, in view of the accepted belief that "Gallia est omnis divisa in partes tres," thinks it possible that one of them may have wandered down to the great toe, and advises an exploratory incision of the gall-bladder to ascertain if either part be missing. The "Gallic boot of love," cited by Dr. O. W. Holmes, seems to indicate a tendency of the gall to the foot.

Dr. C— concurs entirely with both of these opinions, but on general grounds advises the removal of the appendix. The patient, however, avers that this has been already done, and that he has it in a bottle at home, which he will fetch if required. It is therefore deemed advisable to await further development.

Gynæcological Department.—Case No. 120,736. Palpation reveals no abnormal condition of uterus or appendages. A medical student calling our attention to the fact that the patient wears pants

and has well developed male generative organs, we doubt if this is a proper case for this department.

Department Genito-urinary Diseases.—Case No. 120,736. Organs apparently healthy. It, however, is not impossible that the patient may have had a stone (vesical) which was passed naturally and impinged upon and injured the great toe.

Department of Neuroses, etc.—Case No. 120,736. The result of a careful examination of this case indicates a deficient enervation of his lower extremities. Two well marked areas of impaired sensibility or partial anæsthesia are located in the gluteal regions beneath the tuberosities of the ischia. His history not mentioning this, we questioned him as to how long the condition had existed. His replies were unsatisfactory—merely to this effect, that he had "sat so long upon those d—d hard benches that his — got numb." A rubber cushion with two holes is recommended, and the case should be kept under observation.

"There, gentlemen," continued the surgeon, as he finished reading to them the reports, "you have the result of a careful scientific enquiry into this case. I shall now send the patient to the chiropodist around the corner, with instructions to have the toe cleansed and a piece of sheet lead inserted under the roughened edge of the nail. I counsel you all not to lose the opportunity of witnessing the operation. Good-morning, gentlemen!"
—*Boston Medical and Surgical Journal.*

HUMORS OF HOMŒOPATHY.

Richard Bentley, the famous scholar who had as much experience of controversy as any man that ever lived, used to say that no man was ever written down except by himself. We commend this maxim to the attention of the disciples of Hahnemann. These guileless persons often complain that they are evil-entreated by the professors of scientific medicine, their doctrines being misrepresented and their practice unjustly ridiculed. But are not their worst enemies those of their own household? Take the following samples of their teaching as set forth in all seriousness in their own organ. The *American Homœopathist* gravely assures all whom it may concern that if a patient sleeps with his knees apart chamomilla is indicated; if with his legs stretched out at full length, pulsatilla; if with one leg drawn up and the other stretched out, stannum. If the patient has his head always turned to one side, Cina is indicated; if he bends his head forward, Staphysagria; if backward, Hyoscyamus. So much for the head and the legs. The hands and arms are the object of still more mysterious refinements. If the patient lie with his hands on his abdomen, Pulsatilla is indicated; the same drug is to be used

when a woman sleeps with her hands over her head, but when a man does so, he requires nux. There is something suspicious in this difference in which we fear the "New Woman" will see a fresh instance of the denial of equal privilege with the tyrant man. We confess ourselves utterly unable to appreciate the clinical significance of the phenomena that have been enumerated; it would almost seem as if the prophets of the pilular philosophy believed man to be under a curse like that of Ernulphus, and that he is banned in all his limbs—in sleeping, in sitting, in lying, etc. There is one position of the hands which, strangely enough, is not provided for; the resources of homeopathic therapeutics seem to fail before the contingency of a patient who, like the vulgar little boy of the "Ingoldsby Legends," should "put his thumb unto his nose and spread his fingers out." This omission is the more remarkable since the homeopathic practitioner would seem to be prepared for even less decorous manifestations on the part of his patients. Thus we are told that "if a patient 'cusses' you, spits in your face, and pulls your whiskers," you are to soothe her excited feelings with chamomilla. There is a refreshing candor about the following: "If a patient gets suddenly better, it is a bad sign"—for the doctor, we presume. The *North American Journal of Homeopathy* published recently an article on "Some Peculiar Sweats," in which also the subtleties of homeopathic therapeutics are strikingly displayed. Thus we are told that if only the upper half of the body sweats, nux vomica or opium is the thing; if the lower, crocus cyclamen; if the back, ananita or phosphorus; if the right side, aurum or sodium; if the left, fluoric acid and jaborandi; if the face alone, ignatia. Lastly, if the patient sweats "in spots" the soveran'st thing for this distressing condition is tellurium. For sweats in the morning, angostura (to the profane mind more suggestive of dinner-time) is prescribed; for sweats while eating you have a specific in "oleum animalis"; we can only hope that this drug agrees with those to whom it is administered better than the component elements do with each other. It is interesting to learn that if the sweat smells like horse's urine, its natural fragrance may be restored by nitric acid. Then in the *Southern Journal of Homeopathy* we find some curious information about "Peculiar Coughs." Thus, when the cough comes on at the inconvenient hour of 6 a.m., you must put your trust in cedron; if it is worse when the patient lies on his belly, give him baryta; if it is worse when lying on the left side, mercurius. We are unkindly left in the dark as to what is to be done if the cough is worse when the patient lies on his right side or on his back. When the cough is aggravated by music creosote is indicated. We are thankful for this suggestion, but it is disappointing that no infor-

mation is vouchsafed as to how we are to deal with those other common exciting causes of cough—a dull sermon or a drowsy lecture. We could add indefinitely to this *florilegium*, but this would hardly lead to edification. It would be gross flattery to call this stuff heresy or even superstition; it is sheer unadulterated nonsense. It is the homœopaths themselves who write themselves down—what poor Dogberry was so anxious to be written down. Certainly the most malicious "allopath" could not invent anything that tends to laughter more than these simple gentlemen invent on themselves.—*British Medical Journal*.

MASTOIDITIS.

The two cases of mastoiditis here presented are reported chiefly for the purpose of reminding general practitioners of the importance, and, at the same time, the safety, of the operation required. Until quite recent years the opening of the mastoid cavity by surgical means was regarded as too serious an affair to be undertaken, except in the last resort; but experience shows that the operation is almost invariably a safe one, and nearly always results in great improvement, if not a cure.

CASE I.—A. M., male, 25 years old; has had a discharge from his left ear since scarlet fever in early childhood. In April, '94, an abscess developed behind the ear, with a sinus extending under the muscles downward and forward to the left clavicle, where it discharged. The abscess was opened, and a seton passed through the sinus. After a time the abscess recurred and the patient came to the Waldeck Sanatorium, where I was asked to see him with his physician. There were multiple large polypi filling the very narrow meatus, a considerable swelling about the tip of the mastoid, abundant matter flowing from the meatus and from the sinus near the clavicle, and constant pain with high temperature. After consultation and consideration of all attendant circumstances, we (under chloroform anæsthesia) made a free incision through the abscess down to the bone, lifting the periosteum and searching in vain for an opening into the mastoid. After thoroughly scraping some suspicious points of roughness, the wound was packed with iodoform gauze and the polypi thoroughly removed by snare and curette from the auditory meatus, revealing a large tract of exposed and rough bone on the posterior wall of the meatus, which was thoroughly curetted. All symptoms improved after the operation, and the patient went home at the end of a week. He returned, however, in seven days, with the wound healed and a large swelling above as well as behind the auricle, much higher than the previous abscess.

Radical operation being thus clearly indicated,

a free incision behind the auricle allowed the escape of a large amount of pus from the tissues. The periosteum being then opened and pushed back freely, the mastoid cavity was freely opened by chiseling. The bone was unusually hard, and made this part of the operation very tedious. The chiseling was carried well forward, so that very free communication with the meatus and middle ear was assured. There were no traces of cell walls in the mastoid cavity, which was closely packed with cholesteatomatous masses; these were thoroughly scooped out and washed out and the wound well stuffed with iodoform gauze.

Since this operation the sinus in neck has healed, no more polypi have appeared in the meatus, the temperature has been very nearly normal and no pain except an occasional headache. The parts have been irrigated every day with bichloride solution followed by hydrogen peroxide and then stuffed with iodoform or mercuric gauze, and the wound has steadily and slowly healed until, at the end of three weeks, there was only a small sinus left, this being carefully kept open to allow irrigation. Ten days after the operation, after a severe headache and during a severe bilious attack, the eyelid was noticed to be slow in moving, and the next day there was a considerable paresis of all the parts supplied by the left facial nerve. This condition remained stationary for a week and then gradually improved until, at the end of three weeks, it was hardly noticeable, though not yet wholly recovered from.

CASE II.—J., male; 23 years old; has had some little middle ear pain a few times in his life, but nothing of consequence till June, '94, when he had severe pain in and behind the left ear. At my first visit I punctured the membrana tympani, finding very little fluid in the middle ear, but relief of pain followed, and a copious purulent discharge began and continued for some three days, when it ceased and the patient went out of town considering himself well. Late in July the pain returned, especially severe in the mastoid region, but was much relieved by leeches and the application day and night of cold by means of the Leiter coil. Recurrent attacks of pain, however, and the persistence of redness and moderate swelling and tenderness over the mastoid seemed to call for relief, and Aug. 20th, I proceeded to operate in the usual manner for opening the mastoid cavity, but after the first incision and the raising of the periosteum I found nature had anticipated me by making a large sinus (about $\frac{1}{2}$ inch in diameter) through the bone, providing free communication with the middle ear so that fluids injected into the opening found exit, both through the external auditory meatus and through the Eustachian tube in the throat.

Recovery has been uneventful thus far, and with the same treatment detailed in Case I is nearly

complete.—George H. Powers, M.D., in *Pacific Med. Jour.*

THE PRIMITIVE INSTINCTS OF THE MODERN CHILD.

Now that the doctrine of evolution has been placed beyond the realm of mere hypothesis, the inductive reasoning whereby its principles were established may yield somewhat to the use of deductive method; attempt to ascertain the nature of things being made by generalizations from universal to particular. The field of pathology still holds treasures that will be yielded to the investigator by this method, and how much can be gathered in biological fields is indicated by the interesting article in *The North American Review*, for November, by Doctor Louis Robinson, upon the primitive child.

Two most striking characteristics of the new-born child are its prehensile fingers and its fat, plump rotundity of body. The prehensile fingers betray a manifest simian trait, an index of pithecoïd ancestry. How comes the new-born babe to be the fat, plump creature, whose mother exhibits with pride its elephantine limbs? Young monkeys are thin and slight, and their mothers convey them easily from branch to branch. The fatness of babies is a distinctly human characteristic. The use of adipose is that of providing a resource in time of need. Fat animals usually hibernate. Scarcity of food was a frequent complication of the life of primitive man. By becoming fat in prosperous times the body would be able to survive "the hard times." In the struggle for existence fat babies would survive and fat babyhood would inherit inevitable tendencies in bioplasm favorable to the reappearance of a fat type. The fat baby is indeed the melancholy monument of untold suffering, struggle and agony, whereby the human race has secured its survival.

Another typical habit of the little child is that of picking at small objects and putting them into its mouth—a faint echo of the day when the parental hunters, scouring the country for food, left the child to make gastronomical experiments among the *debris* on the floor of the cave, or among the caterpillars in the grass.

The majority of babies are pleasing to the eye. They have a style of beauty distinctly their own, decidedly superior to that of young monkeys. Infantile beauty is a post-arboreal trait, and required special selective agencies for its creation. Yet it is easily explained. The ugly duckling never gets a fair chance. The prettiest children are the most petted, and in a state of society in which, during disastrous times, many would be sacrificed, the prettiest would stand the best chance of surviving—would be the ones most constantly saved by the mother.

Another baby instinct that loudly demands recognition, which is so universal as to imply its deeply-rooted origin, is the perpetual squalling and screeching in infants. This instinct, which makes the night a period of matrimonial penance, shows an expenditure of energy which nature never permits without purpose. The universal distribution of this infantile habit shows that it was certainly an effective means of securing the attainment of the primitive infant's desires. When parents neglected their babies they squalled, and those most persistent in their abjurgations undoubtedly thrived the best, by bringing their progenitors to that state of servile obedience in which contemporary parenthood still lingers.

Children almost invariably exhibit fear of strangers. This is another ancestral trait. In days when merciless war was waged between tribes, the stranger was synonymous with the enemy. The dread of the stranger would become instinctive, and the peculiarity transmitted to the race.

The fear of being alone in the dark is a common failing of little children. Night is not less harmless than day to the modern infant. The fear of darkness is supremely unreasonable. Instinct, however, stronger than reason, proclaims itself through babes and sucklings. In ancient days, when the iguanodon might be prowling around the camp, the imagination of the child might most reasonably have invested objects dimly seen in the dark with gruesome and dangerous attributes. The fear children manifest for the dark is an indefinite one, suggesting a vague apprehension of danger rather than actual risk. It is a short-lived characteristic, as young men and women usually have no dread of going out at night.

Perhaps the most characteristic trait of childhood is the dread of wild animals. There is probably no child whose apprehension cannot be aroused by a reference to bears. Doctor Robinson finds he can frighten his children most effectually by appearing to them in a shaggy coat and acting the animal, and this even when the deception is practised in full view of them. There is little doubt that children retain an inherent dread of animals, just as adult man has an inherent terror of the snake. The germs of such instinct were doubtless amply implanted in days when the tiger and bear were formidable enemies of our race.

These and many not enumerated, are traits distinctly characteristic of child-life. They testify to impressions indelibly engraved upon bioplasm in the long era of savagery, a period longer than that of which we have any conception, founded upon objective analysis. They are voices of a far distant past, penetrating the innermost recesses of consciousness, proclaiming the virulence of a conflict that has left its undying record upon man's nature, and testifying to an ancestry man,

even yet, has barely outlived.—Ed. *Physician and Surgeon.*

MEDICAL NOTES.

In cases of *Aneurism*, no matter what its origin be due to, Prof. Hare says the iodide of potassium is the best drug, that can be administered, and in those cases in which it does not cure it will give great relief.

Prof. Parvin says, as a rule in cases of *Prolonged Pregnancy* the development of fœtal head is greater than when the pregnancy occurs at the regular time.

Prof. Keen says no matter how circumscribed and limited a *Scirrhus* may appear to be, it is one of the rarest pathological curiosities to find it encapsulated.

Prof. Keen says, in *Operations on the Stomach*, if no contraindications are present, chloroform is to be preferred to ether as an anæsthetic, since it is less liable to be followed by retching and vomiting.

Sulphonal, Prof. Hare says, is a somnifacient or hypnotic, valuable in functional nervous insomnia, but in such diseases as cardiac trouble it does not assert its hypnotic powers, but becomes responsible for the patient's wakefulness.

In cases of *Anal Fissure*, Prof. Hare says, a cure can often be brought about by applying a drop of strong carbolic acid to the fissure, and a wash also used, consisting of tannic acid, glycerine and water, if hæmorrhoids are present.

Prof. Parvin says *Spontaneous Abortions* occur usually during the first three months of pregnancy and as a rule at a time which would correspond to the time that in a non-pregnant condition a monthly flow would have occurred.

Prof. Keen says, when a patient has swallowed a *Foreign Body*, no purgative should be given, as it will increase the peristaltic movements of the intestines, and greater danger will arise from its impaction. The patient should be given a light diet of bread and milk for four or five days, and then a laxative may be administered. Or, instead of the bread and milk, the patient may be put on an absolute diet consisting of mashed potatoes.

Prof. Hare recommends the following prescription as a spray in cases of *Diphtheria*. After its use very often an expectoration of creamy mucus mixed with small pieces of false membrane takes place:—

R—Sodii bicarbonatis,
 Sodii boratis, āā gr. xl.
 Aquæ, f ʒ iv. M.
 Sig.—Use in an atomizer.

In cases of *Gastric Ulcer* accompanied by vomiting, Prof. Hare says the vomiting must be checked on account of the danger of hæmorrhage, and for this purpose he advises rectal injections of the following prescription:—

R—Sodii bromidi ʒ j.
Tinct. opii, f ʒ j.
Aquæ, q. s. ad f ʒ iv. M.

According to Prof. Hare, the following prescription will be found very useful in cases of *Subacute Gastritis*, occurring in persons who are careless in eating and are annoyed with belching of food after eating:—

R—Oleoresin. capsici, gtt. xv.
Pancreatin., gr. xx.
Pulv. zingiberis, gr. xv.
Pulv. carbonis ligni, gr. xv.

M.—Fiant pil. xx.

Sig.—One, twice a day.

—*Coll. and Clin. Record.*

SEASONABLE SUGGESTIONS.—With the opening of the winter season, and its attendant bronchial and pulmonary troubles, we are having from many sections reports of a recurrence of the La Grippe epidemic which for the past six or seven years has afflicted the country. This fact makes particularly pertinent a recalling of the salient points of Dr. V. W. Gayle's paper first published in the *Medical World* in the midst of La Grippe's most malignant visit. It will be well to note closely his recommendations and experience in connection with the recurrence of the epidemic which is now apparently upon us. He says: "This disease, by proper treatment of an attack, can be so modified as to be almost aborted. If not properly managed, influenza is particularly liable to grave complications, even in mild cases the tendency is towards prostration, and often the nervous shock is such as to materially debilitate the patient. Where there is much angina with acute bronchial irritation, the following is indicated:

R—Ammon. chloridi, ʒ ij.
Potassii chlorat, ʒ j.
Tinct. ferri chloridi, ʒ ij.
Syr. simplic, ʒ ij.
Aquæ, q. s. ft. ʒ iv.—M

Sig.—Teaspoonful in sweetened water every four hours, also apply to the throat with probang every three hours.

Quinine is the best germ destroyer we have for the microbe of influenza. During the recent epidemic I aborted quite a number of cases with antikamnia and quinine in combination; also with antikamnia and salol. The relief obtained by the administration of antikamnia alone, where the cephalalgia was severe, as in the majority of my

cases, was wonderful. When the pain seemed almost intolerable I have seen a ten-grain dose banish it.

Mustard pediluvia are of great advantage, and a plaster of mustard and lard, one part of the former to two of the latter, applied directly to the chest, answered admirably as a mild counter-irritant.

Expectorants are often needed, and antikamnia should be administered with them, thus:

R—Antikamnia (genuine), ʒ j.
Syr. senega, ʒ j.
Vini ipecac, ʒ ij.
Syr. toltutan, q. s. ft. ʒ iv.

Mix and let stand until effervescence ceases.

Sig.—Teaspoonful every two hours.

The mild chloride of mercury in minimum doses often repeated will be beneficial. The following prescription is a favorite of mine:

R—Hydrarg. chlor. mit., gr. j.
Sodii bicarb., ʒ i.
Lactopeptine (genuine), ʒ ss.

M.—Ft. Chart No. X.

Sig.—One every hour until all are taken, followed by a full dose of Hunyadi Janos water.

Antikamnia and quinine tablets, containing 2½ grains each of antikamnia and quinine, also antikamnia and salol tablets, containing 2½ grains each of antikamnia and salol, offer the best vehicle for exhibiting these combinations, giving one every two or three hours.

Gayle concludes his paper as follows: "What is mostly needed is an antithermic analgesic to relieve the pain and reduce the fever. These properties are found in antikamnia. This, with the germ destroyer, quinine, is all that I really needed in the treatment of this disease. I advocate the use of stimulants in nearly every case. They are frequently needed in the onset of the disease. Sprays of carbolic acid, turpentine or resorcin are frequently efficacious in the laryngeal troubles. The diet should be light and easily digestible, By careful attention and avoidance of exposure, together with the line of treatment mapped out, the vast majority of cases will recover. Of course, there are occasional cases which present symptoms which require other remedial agents, but these, of necessity, must be left to the discretion of the medical attendant."

BISMUTH SUBGALLATE OR DIGESTIVE FERMENTS?

—The present *furore* in favor of bismuth subgallate is likely to prove its worst enemy because its general use in all forms of indigestion will eventually create a reaction against it, causing it to fall into disuse. That the remedy is a useful one in certain forms of functional dyspepsia cannot be denied, but to be successful clinically the diet must

be properly regulated, and with this proper precaution—although the writer has used the subgallate quite extensively during the past three months—the results have been but little, if any, more satisfactory than he has experienced with the same dose of bismuth subcarbonate.

Unfortunately, the profession has gotten into the habit of prescribing bismuth in the form of subnitrate instead of the subcarbonate, and the favorable results following the employment of the latter are not appreciable when the former is given. The reason for this is obvious, since the subcarbonate is an amorphous powder, while the subnitrate is a crystalline substance, and no matter what may be the amount of the dose it always enacts the *role* of an irritant. But even with the administration of subcarbonate, and the rule is equally applicable in the case of subgallate, one or the other of the digestive ferments should be added. In all cases the addition of either pepsin or pancreatin, or the simultaneous exhibition of malt extract, will materially enhance the bismuth effects, and we, therefore, submit this proposition to the profession in the firm belief that it will prevent much disappointment on the part of physicians and patients.

That bismuth preparations act as disinfectants in the alimentary canal is freely admitted, but that they stimulate or measurably improve the digestive function proper there is room for serious doubt, and it would be well, therefore, in estimating the therapeutics of the remedy to take into consideration the physical demands of the patient. With our superior pepsin preparations and the elegant pancreatic extracts now at our command, it seems the part of wisdom to consider the ultimate effects of indiscriminately prescribing the popular remedy of the day.

To give the present article a practical turn, the following formulæ are suggested as a marked improvement over the use of bismuth alone in the treatment of dyspepsia and indigestion :

R—Ext. nucis vomicæ, gr. ½.
 Pepsin pur., gr. i.
 Bismuthi subcarbonas, vel bismuthi subgallas, gr. iv.

M.—Et fiat Tab. vel Chart. No. 1.

Sig.—Take one tablet or powder before and after eating.

R—Ext. nucis vomicæ, gr. ½.
 Ext. pancreatini, gr. iss.
 Bismuthi subcarbonas, vel bismuthi subgallas, gr. iijs.

M.—Et fiat Tab. vel Chart. No. 1.

Sig.—Take one tablet or powder before, and one two hours after meals.

The first of these formulæ will be found avail-

able when the fault lies with the stomach, the second when intestinal digestion is deficient. In the former case the diet should be regulated with a view to lessen the work demanded of the stomach ; in the latter the starchy food-stuffs and fats must be diminished, the diet being principally of a nitrogenous character.—*The American Therapist.*

THE CHANEELS OF INFECTION IN TUBERCULOSIS.

—At the opening meeting of the North London Medico-Chirurgical Society on October 18th, Dr. Sims Woodhead delivered an address on this subject. After briefly adverting to the occasional direct inoculation of tuberculosis into the skin or subcutaneous tissues, he proceeded to consider the circumstances under which tuberculosis may find a point of entrance from the throat. In certain animals and in man (dirty or mixed feeders) there was, he said, a ring of lymphoid tissue surrounding the entrance to the larynx, and a similar ring surrounding the entrance to the œsophagus. The pharyngeal tonsil was a great local development of the two poles of the latter ring. So long as all this lymphoid tissue remained healthy, or was not attacked by an extraordinary number of micro-organisms, it was capable, with the assistance of the epithelium, of dealing with even virulent micro-organisms. But, if overstrained, the lymphoid tissue itself might become the seat of tuberculous disease, or be so disorganized that it allowed the tubercle bacillus to pass into the glands surrounding and immediately connected with them. This method of entrance of tuberculous infection, which had first been worked out in the case of the pig, was probably of comparatively frequent occurrence in children living under insanitary conditions. The very cells which in health destroyed the bacilli—the lymphoid cells—were those which, when the function of the lymphoid tissue was lowered, were responsible for conveying the bacilli from the outer surface to the deeper structures. In children the tuberculous process, started in this way, might extend at first entirely through the lymphatics, the lungs escaping until the glands at their root, or in the pleura, had become distinctly affected. In early life also the primary seat of infection was very frequently in the alimentary tract. The importance of this mode of infection was, in Dr. Woodhead's opinion, not yet fully appreciated. Even when the chief stress of the disease fell upon the lungs, it might be that the infection had obtained entrance from the alimentary canal, and had spread upward by the lymphatics to the glands at the root of the lung. In many farms in Denmark, fortnightly inspection of the cattle had revealed facts which had led the Danish Government to make an annual grant of £3,000 for five years to defray

the expense of carrying out a systematic inspection of cows, of using tuberculin as a diagnostic agent, of killing off cattle undoubtedly affected, and of keeping under observation any animal in which there was any suspicion. If this scheme were thoroughly carried out, Dr. Woodhead believed that the trifling expenditure involved would prevent a large loss to the farmers, and lead to an incalculable saving of infant life. If Koch's tuberculin had done far more harm than it ever had done, the saving of human life, indirectly, through its efficacy as a diagnostic agent in cattle, would still be so enormous that the account to the credit side would have to be reckoned not as hundreds to units, but as thousands. The lecture was illustrated by numerous lantern slides.—Ed. *Brit. Med. Jour.*

THE CONTAGION OF CANCER—Any information capable of shedding a new light on the nature of that mysterious disease, cancer, is eagerly welcomed by the profession. Some facts in this connection brought forward by Dr. Guelliot, of Reims, at the Lyons Surgical Congress, on Oct. 9th, will accordingly be found interesting and instructive by the readers of *The Lancet*. The experiments of Hanau and those of Morau, recently reported in the *Archives de Médecine Expérimentale*, prove that cancer can be grafted on to animals of the same species. Experimental hetero-inoculation is thus an established fact; spontaneous or accidental hetero-inoculation is, therefore, possible. It is to clinical observation that inquirers must have recourse in order to clear up the question, and false deductions are more easily avoided when these observations are made in country districts where the pathological antecedents and mode of life of the population are well known. The very unequal distribution of the disease is an extremely striking phenomenon. Thus 100,000 persons in Paris or Rheims supply 100 victims, the corresponding figures for a village in the Ardennes and a district of the Aisne respectively being 266 and 1,400. Instances have again been known of the inhabitants of a particular district of a town, or a group of houses, being especially visited by the disease. Nay, habitations that may fitly be designated as cancer houses have been known to exist, where three or four denizens have been successively victims of cancer. Dr. Guelliot has collected fifteen such examples, yielding fifty victims. It would seem that nothing short of contagion could explain the foregoing. More instructive still are examples of cancerous affections appearing successively in two persons living constantly under the same roof (*cancer à deux*). Dr. Guelliot cites 103 such instances, 42 of these having been noted by himself. Of these 103 examples, 14 had reference to co-lodgers, relatives, and masters and ser-

vants, and 89 (or more than four-fifths) to husband and wife. The transmission may be direct (through penis and uterus), but more frequently it is effected indirectly through wearing apparel or table utensils. Twice inoculation occurred through a tobacco pipe. In more than one-half of 64 cases of *cancer à deux* the interval separating the appearance of tumors in the two persons was under two years. In 26 instances the cancer was homotopic (affecting the same organ); in 97 heterotopic. Dr. Guelliot opines that the influence of heredity is exaggerated. At most only 12.5 per cent. come under this heading, and if account be taken of persons who, born of cancerous parents, reach extreme old age, the proportion is reduced to 5 or 6 per cent. (from the statistics of fifty old men, ranging from 70 to 90 years of age). He knows of nine examples of practitioners attending special cases of cancer who contracted the disease. Dr. Guelliot concluded his powerful argument in favor of the contagious nature of cancerous tumors by remarking that, although the appreciation of the danger incurred by individuals brought into contact with patients of this class may frighten the public, it is always preferable to look facts, especially disagreeable ones, in the face, and counteract risks of the kind by precautions based on the dictates of common sense.—Paris correspondent of *Lancet*.

SNAKE CANNIBALISM.—F. Z. S. writes to us as follows:—A brief and substantially accurate note in the *Times* of Tuesday last, records the fact that a boa constrictor at the Zoological Gardens has lately swallowed one of its mates. This occurred over a fortnight ago, and the facts are briefly as follows: One compartment of the reptile house contained three boa constrictors, of which one was about nine feet and another eight feet long. During the night the smaller of these two disappeared, and the larger was found to be enormously distended and unable to curl up. The cannibal snake was considerably inconvenienced by his meal, and remained for a week in a lethargic condition and suffered from dyspnoea. It is supposed that the boa had no deliberate intention of eating his companion, but that he began by swallowing part of a pigeon which was projecting from the mouth of his companion, and that the rest of the action was involuntary. It is a very unusual circumstance for one boa constrictor to swallow another, and were this not so they would have to be kept apart—for the sake of economy, if for no other reason. In this case the money value of the deceased snake was probably £7 or £8. Although there was probably only about a foot in the difference of the length of the two snakes, the one which was eaten did not weigh more than half as much as the other. The internal capacity of some snakes is enormous, and there are on record instances of their having

swallowed animals of greater weight than themselves. Dr. Stradling has related the case of an *Elaps lemniscatus* which swallowed and afterwards disgorged an *Amphisbœna* longer than itself and weighing half as much again. Boas are certainly not always very particular as to the nature of their food, and some years ago one at the Zoological Gardens swallowed her blanket. She was, however, male to disgorge it, when Mr. Buckland described it as being like a long flannel sausage. Like other creatures which have the power of consuming an immense amount of nourishment at one time, snakes have also the power of fasting for a considerable period. Catharine Hopley, in her interesting book on the curiosities of serpent life, lends her authority to the story that they may live for two years without food, and there is at any rate evidence to show that a rattlesnake lived at the Zoological Gardens for some months without food.—*Lancet*.

A NEW CURE FOR PERNICIOUS ANÆMIA AND LEUCOCYTHEMIA.—“While sitting alone, and in profound sorrow, in my library, on Sunday morning, the 29th of April last, I suddenly saw a great light.” It is in this somewhat dramatic way that Dr. I. N. Danforth, whose patient was suffering from pernicious anæmia, begins his description of a new method of treating that disease. The light which he saw was reflected from the following paragraph in a London journal: “Professor Frazer, of Edinburgh, read a paper to the Section of Medicine” (of the Eleventh International Medical Congress, at Rome) on “The Effects of Bone Marrow in Pernicious Anæmia,” which attracted considerable attention. He gave particulars of a case in which at the beginning of the disease the hæmatocytes numbered 1,000,000 per cubic millimetre, and the hæmoglobin 25 per cent. After a month’s treatment, first with iron, then with arsenic, afterward with salol, no appreciable improvement was manifested. At the end of that time bone marrow was administered with most remarkable results. The patient gradually improved, and in two months the blood had a composition of 4,000,000 hæmatocytes, and the hæmoglobin had risen to 80 per cent. This case shows, so far as a single case can, that in bone marrow we may perhaps have an effective remedy for what has hitherto been practically held to be an incurable disease.

Dr. Danforth immediately got some bone marrow and began feeding it to his patient, whose condition, despite everything that had been tried, was desperate. She at once began to improve, and in four or five months was comparatively well.

After a time, instead of giving the marrow in its natural state, he cut up several ribs and

allowed them to soak in glycerine. He then made the following mixture:

R—Liq. potas. arsenit., ʒ ijss.
Acid phosphate, ʒ iij.
Ext. bone marrow, ʒ viij.

M. Sig.—ʒ ij. after each meal.

The addition of the arsenic robs the bone marrow of some of the credit. This addition was not made, however, in Professor Frazer’s case.

We note also that Dr. W. G. Bigger reports, in a London journal, a case of leucocythemia in a boy aged 12. The patient was given three or four slices of bread daily, on which the raw bone marrow was thickly spread. The improvement in the boy’s condition after the first week was “little short of marvellous.” The anæmia and jaundice disappeared, and the skin and mucous membrane acquired a healthy color. The symptoms due to the anæmia at the same time passed off, and in three weeks the boy was able to walk about without shortness of breath or palpitation. The temperature also became normal, and has remained so. *Pari passu* with this improvement in the general symptoms, the spleen diminished in size, so that by the end of a fortnight the lower edge had receded to a level with the anterior spine of the ilium, and the inner edge did not extend beyond the middle line.

The boy eventually became entirely well. Both the cases reported are apparently examples of cures of obstinate and dangerous diseases. If we have a remedy for them in bone marrow, therapeutics has made a remarkable advance.—*N. Y. Med. Rec.*

THE TREATMENT OF SYCOSIS MENTI.—Sycosis menti, whether of the simple or the parasitic variety, I have always found to be quickly amenable to treatment. Ointments are slow and nasty; epilation is tedious and painful. Both forms of treatment, whether used separately or together, will, as a rule, have succeeded in disgusting a patient by the time he is beginning to derive some benefit from their employment. The following line of treatment I have invariably found to exert most influence in checking the progress of this disease, and in totally eradicating it in parts where it has been already established. Having cropped the beard close to the skin, and having had the affected area thoroughly washed with superfatted soap and warm water, I apply a strip of lint well soaked in the acetum of the B. P. to the diseased part. This having been carefully covered with a large piece of oiled silk or rubber protective, I allow to remain on for twelve hours. On removing the vinegar dressing I substitute for it a similar piece of lint soaked this time in a solution of the perchloride of mercury (1 in 1200) and applied in

precisely the same manner, and for an identical period. These dressings I repeat every day for four days, at the end of which time I always find that the disease is dying away. Then I decrease the frequency of the applications to one or two a week, and at the end of the third week I find that there is no longer any necessity for further treatment, as the skin is quite sound and the dermatitis has become a thing of the past.—M. G. McElligott, in *Lancet*.

AN APPEAL to the pity and better natures of the Editors and publishers of the *British Medical Journal* and the *Lancet*.—You know, gentlemen, that the paper upon which is printed the "foreign edition" of your otherwise splendid journals, is simply inexpressibly vile. It is at once thicker, and yet more mushy and rotten than tissue-paper, and is, therefore, properly fit for no purpose whatsoever—absolutely none—of civilized or unregenerate man. We can only explain its use on the ground of a contempt of us, the reason of which dates back to Revolutionary times, or perhaps to Simian ages. You certainly would not, and could not, treat residents of the British Islands thus. We beg of you to remember that however remote the relationship we are at least your Teutonic brethren, and that it is your duty to help on the cause of Anglo-Saxon civilization. Please do not forget that even an American can sometimes grumble, and even revolt, after prolonged indignity and injustice.—*Med. News*.

NOCTURNAL ENURESIS :

R—Liquoris atropinæ sulphatis, . . . ʒ iss.
Liquoris strychninæ hydrochlor-
atis, ʒ xl.
Syrupi aurantii, ad ʒ j.

No drink to be taken after 6 p.m.; 5 drops of syrup at 9 p.m. Increase by 5 drops every three nights until 50 drops of the solution be taken nightly, or more if necessary. The secret of success, in obstinate cases treated by the author, was courageous overdosing. In one patient (girl of 17 years), 25 minims were taken nightly, with ultimate success. Strychnine diminishes depressant effect of large doses of atropine, and increases sensitiveness of vesical centres to reflexes from bladder-walls, causing patient to awake at proper time.—*Practitioner*.

DIABETES.—Unschuld (*Berl. klin. Woch.*) draws attention to some of the less noticed symptoms in early diabetes. He quotes a number of illustrative cases in which the disease was masked by the presence of dyspeptic symptoms, nervous symptoms classed as neurasthenia, etc. Sometimes diabetes may quite accidentally be discovered. Here marked thirst and abundant urine were

mostly absent. Frequently cramp in the calves is complained of, a symptom at present but little recognized. During the past eight years the author has found it in as many as 26 per cent. of his cases. In 1891 he found it 33 times among 109 cases. It most often occurs in the morning, but sometimes at night. If such cramps occur and the patient complains of weariness and weakness, the urine should be at once examined for sugar. These cramps may be present in all forms of diabetes, except in the acute disease occurring in young subjects. Massage and attempts at walking generally relieve the cramp. The cause is obscure; perhaps it is due to the diabetic toxins. The recognition of these cramps may lead to the early diagnosis of diabetes.—*British Med. Jour.*

TREATMENT OF ASPHYXIA BY TRACTION UPON THE TONGUE.—Laborde (*Abeille Medical*, 1893, No. 3) believes that asphyxia is to be combated by strong rhythmical traction upon the tongue. Apart from the good results in asphyxia of the new-born, Laborde has applied the method with good results in an adult poisoned with bromidia, who was pulseless and without appreciable movement of heart.

The action of this method is referred by Laborde to the primary excitation of the sensitive nerves and transference of this excitement to the motor nerves of the respiratory muscles, especially excitement of the nervus laryngeus superior, then the glosso-pharyngeus and lingualis, finally, the phrenic.—*Univ. Med. Mag.*

FOR PITYRIASIS CAPITIS.—

R—Sulphuris præcipitati, ʒ jss.
Adipis lanæ hydriosi, ad ʒ ij.

Misce et fiat unguentum.

J.—To be applied to the affected parts every second day.—*The Practitioner*

THE LEUCOCYTE'S LAMENT.

The leucocyte was in a gland with inflammation red,
He grasped a comrade by the hand and with a sob he
said :

"Mid solitary follicles I wend my weary way,
Deep down in crypts of Lieberkuhn far, far from light
of day.

Alas ! this aching nucleus can ne'er be free from pain,
While tissues hide my beauteous bride I ne'er shall see
again.

A rosy-red corpuscle she, the pride of all the spleen,
Her like in this dark gland, I fear, will never more be
seen.

A fierce bacillus captured her, and reft her from my side ;
Carbolic oil his plans did foil, but, ah ! it slew my bride.
With pseudopodia feebly bent and bowed down nucleus, I
Must turn to pus."—And, speaking thus, he wandered
forth to die,

Oh ! lightly they'll talk of that leucocyte true
As they label and mount and degrade him,
But little he'll reck, when with aniline blue
They've stained and in Canada laid him.

—*Bristol Medico-Chirurgical Journal*.

THE CANADA LANCET

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The LANCET has the Largest Circulation of any
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CURETTING THE UTERUS.

This operation, which has been characterized by such men as Scanzoni and Chassagnac as "unscientific and barbarous," has its ups and downs, its ebb and flow in popularity with the profession. There is no doubt that, properly performed, it is of great assistance in the treatment of many uterine and cervical diseases, such as endometritis, fungosities, congested mucous membrane, menorrhagia, etc. The dangers attendant upon this procedure are slight, especially if there has been no previous tenting. Occasionally pelvic peritonitis or cellulitis follows, so that the operation should always be done with the strictest antiseptic precautions, and it is better that it should be done at the patient's residence, and that rest in bed be insisted upon for a few days, and of course longer if any unpleasant symptoms supervene. We remember seeing a case of rapidly fatal cellulitis take place after curettage for fungosities, in a woman aged about 50, by the late Angus MacDonald of Edinburgh, who took occasion to caution his clinical class as to the possible fatal results flowing from even this simple operation.

Dr. Dorsett, of St. Louis, in a paper read before the American Association of Obstetricians, at Toronto, in September last, introduced a somewhat new idea as to the value of curettage in diseases outside the womb. He says:

"Did it ever occur to the neurologists, after a faithful trial of bromides, chloral, nux vomica, lady's-slipper, infusions and decoctions of herbs and roots, prepared possibly by their own hands or under their personal supervision, the use of the electric battery, the electric fan, etc., on a hysterical or neurasthenic female, that possibly the patient was suffering from a pelvic inflammation occasioned by a foul womb, a mucous membrane that had been absorbing and distributing constantly toxic elements that are coursing through the system of the fair female, poisoning her whole system, producing symptoms that might easily tally with those of neurasthenia?"

"Neurasthenia? Of course neurasthenia — *nerve prostration*—brought about by a continuous absorption of toxic elements, producing general prostration, headache, restlessness, insomnia, frequent sighing, cold and clammy feet, gloominess, muscular weakness, inability of thought concentration, loss of interest in business or the family, etc."

The above contains a real germ of thought. We have been accustomed, since we have known what *ptomaine* means, to account for the headache, depression of spirits, anorexia, dullness of intellect, sleepiness and a dozen other symptoms with which we are all familiar, as following either constipation or decomposition of fæces in the intestinal tract, by the fact that these poisonous ptomaines, produced in the intestines, were absorbed, and by circulation in the blood, act upon the nerve centres as to cause the symptoms just enumerated.

Then why not absorption from the endometrium, as suggested by Dr. Dorsett? The anatomical position and the function of the unimpregnated uterus, will allow of this absorption of deleterious material to continue over a long period of time, setting up the various neuroses suggested by the author. While of necessity, or at least from the action of purgatives, the bowels are occasionally cleared, thus freeing the system of such depressant substances, with the result as we all know of an almost immediate clearing up of the symptoms.

Curettage, then, in such cases acts upon the system through the uterus, just as pil. hydrarg., followed by a saline, acts upon the system through the intestinal mucosa, namely, by removing from

it and thus preventing their absorption of poisonous products of decomposition.

So also when a patient presents herself with foci of tenderness in the pelvis, with vague symptoms of a pelvic inflammation, the gynecologist is often able to remove the trouble by thoroughly cleansing out the uterus, rendering it aseptic, and thus stopping the supply of irritating material which is making its way through the lymphatics, to the cellular tissue. Then by attending to the excretions of the body and by stimulating the absorbents, he is often able to materially improve the patient's condition, and often indeed able to absolutely cure her.

If the above views be correct, the moral obviously, is to avoid delay in this simple operation, and not to wait for the pelvic inflammation to be lighted up; but curette the uterus whenever there is reason to suppose that its absorbents are carrying poisonous matter to the surrounding tissues, remembering the force of the adage, *bis dat qui cito dat*.

THE PAY SYSTEM AT HOSPITALS.

Is it not about time that the system in vogue at many hospitals, of the staff attending well-to-do patients in private wards *gratis*, should be discontinued? How often does it happen that wealthy patients elect to go into a private ward, and receive skilled attention from the physician or surgeon who has charge of such ward, with nursing, food, attendance, and medicine, all for from eight to twelve dollars a week. Capital operations may be done, and the surgeon who should receive a fee ranging from one to three or four hundred dollars, has all the work and anxiety of the case for nothing; or the physician goes daily for weeks to attend a case of typhoid, or myelitis, or other form of slow or chronic disease, and for all his time and trouble gets *nil*. And this in the case of patients who are well able to pay, but who, as is usual with humanity, take all they can get for nothing, and often indeed without a "thank you" for all the trouble they have caused, looking upon it as their *right*, because forsooth, they pay, in a hospital, less, for everything, than they would do in their own homes for the services of one trained nurse. It is no wonder so many are ready to seek relief under such circumstances. But it is a

positive injustice to the medical men who form the staff of the hospital. Surely the men who attend to the patients in the free wards of a large hospital do enough work for charity, and should not be expected to give their time and exercise their professional skill gratuitously for the benefit of those able to pay, and who would be willing to pay, but for the pauperizing tendency of the system we speak of. This is how, as our contemporary the *Medical Times*, of London, puts it, "Medicine is dragged in the mud and sixpenny dispensaries are manufactured."

It may be said that there are always scores of medical men, who would be willing to go on the staff of the hospital under the conditions now existing. This is true, but they are not the best men of the locality; but rather men who have their way yet to make, and who wish to use the hospital for practice, and in the hope that a hospital connection will improve their position as a medical man. So young men are quite willing to devote hours a day and for two or three days a week at dispensary work. Few men of established reputation find it worth while to remain on the active staff of a hospital, who are not engaged in medical education at some college which sends its students to that hospital. We have known good practitioners give up their hospital appointments as being burdensome and irksome, and as interfering with the practice upon which they had to depend for a livelihood. All things considered, it seems only reasonable then, that patients who can afford to pay for a private ward, should be made to pay for the medical attendance they receive while in the hospital, otherwise an injustice is done to the staff and to the profession in the neighborhood of the hospital. For they, the practitioners, not on the staff, often lose patients, by the great convenience and cheapness of treatment and attendance, offered by the hospital in the same block. To avoid expense, the worry and upsetting of the home, the necessary weary watching of the wife or mother or sister, the sick one says, "I'll go into a private ward. It will cost me much less than staying at home, and I shall be looked after better, having a trained nurse always at my command, as well as a doctor, and the advice of Dr. So-and so"—of the staff.

And so the outside doctor says good-bye to his patient for that illness at any rate. What with

specialists, pay wards in hospitals, isolation hospitals, *et al.*, the general practitioner, who in our humble opinion ranks above all specialists, except in the matter of fees, has rather a poor outlook. Let him look to it that he is not utterly put down and crowded out of his legitimate rights.

THE ONTARIO MEDICAL COUNCIL.

The *personnel* of the incoming Council will be considerably changed, not only by the election of the five new territorial representatives, but also by changes in the representatives from the old divisions. The Defence Association will be fairly well represented, Drs. Sangster, McLaughlin, Armour, Reddick, Hanly and Thornton being in evidence. So that the June meeting may be expected to be musical to a degree. The different constituencies are represented as follows:—

Territorial representatives.—No. 1, Dr. Bray, Chatham, and Dr. Samson, Windsor; No. 2, Dr. Williams, Ingersoll; No. 3, Dr. Roome, London; No. 4, Dr. Graham, Brussels; No. 5, Dr. Brock, Guelph; No. 6, Dr. Henry, Orangeville; No. 7, Dr. G. Shaw, Hamilton; No. 8, Dr. J. Armour, St. Catharines; No. 9, Dr. Hanly, Waubauskene; No. 10, Dr. Barrick, Toronto; No. 11, Dr. Machell, Toronto; No. 12, Dr. Sangster, Port Perry; No. 13, Dr. McLaughlin, Bowmanville; No. 14, Dr. Thornton, Consecun; No. 15, Dr. Spankie, Kingston; No. 16, Dr. Reddick, Winchester; No. 17, Dr. Rogers, Ottawa.

The Collegiate representatives on the Council are: Dr. W. Britton, Toronto University; Dr. J. W. Rosebrugh, Hamilton, Victoria University; Dr. V. H. Moore, Brockville, Queen's College; Dr. W. T. Harris, Brantford, Trinity; Dr. James Grant, Ottawa University; Dr. J. Thorburn, Toronto School of Medicine; Dr. F. Fowler, R.C.P.S., Kingston; Dr. W. B. Geikie, Trinity Medical College, Toronto; Dr. W. H. Moorehouse, Western University, London.

Homœopathic representatives.—Dr. George Logan, Ottawa; Dr. C. T. Campbell, London; Dr. G. Henderson, Strathroy; Dr. L. Luton, St. Thomas; Dr. J. H. Emory, Toronto.

PILOCARPINE IN RHEUMATISM.—Drappier, *Jour. des Sciences Méd.*, has employed the above remedy in $\frac{1}{2}$ gr. doses of the nitrate, given hypodermically. One dose per day was sufficient. Profuse sweating was brought about, and in five days the patient was entirely rid of his rheumatism, which, moreover, did not return.

SUBSIDIZED MEDICAL EDUCATION IN TORONTO.

To the Editor of the CANADA LANCET:

Extracts from a Report recently presented to the Members of the Senate of the University of Toronto:

SIR,—Will you allow me space in your valuable columns, sufficient to call the attention of the medical profession to some facts which have recently been brought out? The following extracts speak for themselves:—

“Your Committee find that during these years (1887 to 1892), the Medical Faculty fund received credit from the University for fees paid by medical students for instruction in chemistry, biology and physiology, to an amount exceeding \$25,000, and that it was the credit of this sum, earned by members of the Arts Faculty, which produced the accumulation of the Medical Faculty surplus fund of \$8,152. Had these fees gone, as under the re-organization the analogous fees now do, into the general funds of the University, not only would there have been no Medical Faculty surplus fund, but the medical members of the former Faculty would have received about \$17,000 less than they actually did during the five years of their service.

“It may be added that your Committee learn that during the negotiations with the Government, which culminated with the re-organization, it was suggested by members of the Government that this surplus should be credited back to the University. But on the representation that the financial success of the new scheme of re-organization would require the application of this sum as a reserve fund to meet the initial financial strain, and that it would be prudently used for that purpose, so as to give the new system a fair start and put it on a good footing, the retention for this purpose of this surplus was agreed to.

“In 1892, by the scheme of re-organization, the surplus fund of \$8,152 was appropriated for the use of the present Faculty, subject to the payment of \$3,375 as retiring allowances. Since then the Faculty has expended large sums, partly on equipment, and partly on account of debts left unpaid by the old Faculty; so that, including \$900 to be paid this year to Drs. Thorburn and

Wright, the account for such charges stands thus :—

"Retiring allowances and other charges connected with old Faculty....."	\$4,295 00
"Paid for equipment....."	4,256 00
	\$8,561 00

"(Signed) J. LOUDON,
"Chairman.

"September 28th, 1894."

The above extracts, from a recent official document, confirm the charges made two or more years ago in the papers, that the Toronto University Medical Faculty had for some years been largely subsidized by the Arts Department of the University. At that time this charge was loudly denied. Now, however, the University authorities themselves admit more than was alleged.

Why after the re-organization of 1892 was this subsidizing policy still maintained so as to permit the Toronto University Faculty to pay for equipment, in the years 1892 to 1894, the sum of \$4,266, as stated in this report? And this was done *after* the repeated pledges and promises of the Government that no money that the Medical Faculty did not earn would be spent for medical educational purposes!!! Queen's Medical College, Trinity Medical College, and the College in London, have received no such public aid.

BRITISH FAIR PLAY.

HYDRASTININ IN UTERINE HÆMORRHAGE.—Dr. Kallmorgen, *Jour. de Med. de Paris*, of the Woman's Polyclinic in Berlin, has just published a report of eighty-six cases of uterine hæmorrhage of diverse origin, treated with hydrastinin. This report affords much needed information in regard to the *permanent* effects of this remedy. Dr. Kallmorgen administered hydrastinin in pills made according to the following formula :

R—Hydrastinin gm. 1.
Make into thirty pills.

These pills were generally borne well, though in a few cases they excited slight gastric irritation, and in others painful uterine contraction. Their hæmostatic action varied according to the cause of hæmorrhage. In five cases of hæmorrhage due to retro-uterine hæmatocele, the flow was almost immediately arrested. In 25 cases of functional menorrhagia, the amount and duration of hæmor-

rhage were reduced to normal conditions, and the dysmenorrhœa, which complicated many of these cases, was partially or entirely relieved. Hydrastinin should be administered in functional menorrhagia a day or two before menstruation appears, and while it continues. Begin with two pills a day, and increase the number to three. Hydrastinin relieved fifteen out of eighteen cases of hæmorrhage following abortion, and three out of four cases due to lesions of the adnexa. Its effects were much less favorable in hæmorrhage produced by chronic endometritis, as it positively benefited only fifty-five per cent. of these cases. In beginning abortion, it was successful in thirty-seven per cent., and in uterine fibroids its hæmostatic action was apparent in only twenty-five per cent. of the cases treated. In hæmorrhage caused by cancer of the uterus, hydrastinin produced no effect whatever.

HYDROCYANATE OF IRON IN EPILEPSY.—Dr. F. C. Wiser, in a short article in the *Journal of Mat. Med.* gives the result of treatment of two cases of epilepsy with hydrocyanate of iron. Case number one had his arm amputated for traumatism, and for twenty-three years had had epileptic attacks increasing in frequency and severity till he averaged one a week and sometimes three or four seizures in one day. The old stump was removed, but the attacks continued. Bromides had been used for a long time with apparently no avail. He was put upon $\frac{1}{2}$ grain doses of the iron three times a day in May, 1893. From that time to the present, September, 1894, he has had but one attack, and that on the day following the first exhibition of the iron. In case number two, the patient was 32 years old, married, had children. Had suffered from epilepsy since childhood, attacks coming from two or three a week to one in two months. Bromides were used without any improvement in the patient's condition. In May, 1893, the same treatment as employed in case number one, was adopted, with the result that after the first month's treatment the attacks grew less frequent, so that only one seizure occurred in the four months following. Treatment was continued till December, 1893, the dose being gradually diminished. This patient has not had an attack since July, 1893. The Dr. reports several other cases now under his care, and all improving.

DR. ROBERT T. EDES, of Boston, suggests a form of palatable and digestive milk in a communication to the *Medical Record; Coll. and Clin. Rec.* He says:

I have never seen it mentioned in any text-book, and it did not come to me from a professional source, but from a lady who had been for a long time the patient of the late Dr. Pease, of Syracuse, Whether it originated with him I cannot say, but perhaps some of your readers in Central New York, by whom he is doubtless as pleasantly remembered as by myself, can tell me. It is as follows: A pint of milk is gently warmed. Into it is dropped, very slowly and with constant stirring, about twenty minims of the dilute hydrochloric acid of the United States Pharmacopœia. The milk should be stirred until it cools. In this way a very fine, flocculent coagulum is produced, floating in the whey, which is easily accessible to the digestive secretions, while the whole fluid has lost somewhat of the flat and cloying taste which makes it unacceptable to so many. It will be noticed that milk prepared in this way differs from the various "wheys" in the highly important particular that the casein is retained and used, while it avoids the bitterness of pancreatized milk. I have found it occasionally of great value when other preparations have been unacceptable either to the palate or the stomach.

RENAL CASTS.—In a very interesting and practical paper in the *Inter. Med. Mag.*, Dr. A. E. Austin gives the clinical significance of the three great groups of casts. The hyaline and blood casts merely indicate irritation and hyperæmia. Closely associated with hyaline casts is amyloid change of the kidney, due usually to suppuration, and with a good prognosis if the source of suppuration be removed. Epithelial, granular and fibrinous casts indicate acute inflammation of the renal tubules, the epithelial cast pointing to the mild stage; that is, one of mere desquamation with urine slightly under normal in amount, specific gravity 1,030, high color, albumen a trace, numerous hyaline casts, free blood and renal epithelium. This may go on to brown or pale granular casts with diminution of the solids of the urine. The fatty and waxy casts, when numerous and persistent, indicate long-continued chronic inflammation of the kidney with bad prognosis.

Blood and epithelial cells are absent. In this case the urine is diminished in amount with increased specific gravity. The pale, granular and small hyaline casts point to fibroid kidney. Aside from the microscopical appearance, the general condition of the patient, age, sex, and previous history must be taken into consideration. It should be remembered that the diagnosis of casts alone may mean little, but the kind of casts in abundance is the important point.

THE ANGEL OF DEATH IS FLEET.—The *Glasgow Medical Journal* has the following antique legend, the moral of which is that Azrael had every facility at his disposal for the harvest of souls whenever the dread message was pronounced. According to the legend the ingenuity of man is wasted in trying to circumvent the grim pursuivant. The story is of King Solomon, who figures largely in Oriental tradition outside of Hebraic lore. It is told of him that, walking one day in a great city, accompanied by a friend, an awesome figure was perceived by them at the head of the street.

"Who is that?" inquired the friend in terror.

Solomon looked and answered: "It is the Angel of Death."

Then the friend begged of Solomon, who had the power of instantaneous transportation, to send him at once to some far off spot, and Solomon despatched him in a moment to India, thousands of miles away.

The Angel of Death meanwhile approached Solomon and asked: "Who was that man with whom you were just talking?"

Solomon gave the name, and the Angel of Death said: "Strange that he should have been here, for I am ordered to call for him to-night in India!"

PERCHLORIDE OF MERCURY IN WHOOPING-COUGH.—Raubitschek, *Therap. Monatsch.*, knowing the want of success attending the usual treatment of whooping-cough, determined in the case of his own three children to resort to a novel procedure. He thoroughly saturated a cotton-wool tampon with a 0.1 per cent. solution of perchloride of mercury, introduced it into the mouth, pressed it against the base of the tongue, thus allowing the fluid to trickle downwards

over the epiglottis, and finally withdrew it, at the same time swabbing the tonsils, uvula, and soft palate. This procedure was carried out daily, or every other day, according to the severity of the case, and was attended with the best results, not only in the three cases referred to, but also in 14 other children since similarly treated. An improvement was noticeable on the second or third day, and all the patients were either cured or relieved within eight to fourteen days. One case appeared to be arrested during development by five applications of the solution. The author considers any poisonous effects to be impossible.

AN EARLY GRAVE COMPLICATION OF PHARYNGEAL DIPHTHERIA. — Aufrecht, *Therapeutische Monatshefte*, calls attention to a particular form of diphtheria of the pharynx, which, despite its limited local extension, rapidly kills the patient in two or three days. It has been held that these almost foudroyant cases were to be attributed to a grave infectious myocarditis. Recently, however, the author has observed three cases of this kind where the autopsy showed no trace of myocarditis, but a sub-acute nephritis. The author, therefore, insists upon the importance of systematic examination of the urine from the beginning of diphtheria, even when no symptom points to a renal lesion. The symptoms observed in these cases have been very great frequency of pulse, a semicomatose condition, delirium, high fever, and marked albuminuria. Guided by these cases the author has been able in a fourth case to combat this nephritis in the beginning by the administration of large quantities of alkaline and saline water (Wildungen) for the purpose of increasing diuresis and relieving the choked-up kidneys.

STRYCHNINE IN PULMONARY CONSUMPTION.—Dr. Thomas J. Mays, of Philadelphia, *Med. World*, in a paper read before the Pennsylvania State Medical Society, claims that, next to rest and food, strychnine in large doses is the most important agent in the treatment of pulmonary consumption. Begin with one thirty-second of a grain, and gradually increase to one-sixteenth, one-tenth or one-sixth of a grain, or even give it in larger doses, four times a day. According to the author, it does not produce albuminuria or diabetes, as is generally supposed. It alleviates

the loss of appetite, the vomiting, the constipation, the nervousness and sleeplessness, the pain in the chest, the cough and expectoration, the dyspnoea, the weakness of the heart, and acts as a blood-builder in an eminent degree. Its usefulness rests on its influence over the nervous system, and is another link, the speaker said, in the chain of evidence, which shows that, in the great majority of cases, pulmonary consumption is the direct result of primary disease of the pulmonary nerve supply.

FOR BLEPHARITIS.—Millendorf recommends, *Coll. and Clin. Rec.* :

R—Red oxide of mercury, gr. x.
Vaseline, f ̄ ss.

SIG.—Apply to the edge of the lid at bedtime.

Or,

R—Ammoniated mercury, gr. xx.
Powdered camphor, gr. x.
Vaseline, f ̄ ss.

SIG.—Apply at night.

Or,

R—Solution of subacetate of lead, gtt. x.
Ointment of rose-water, ʒ iij.

SIG.—To be used for the more chronic forms of marginal blepharitis.

TREATMENT OF ULCERS OF THE LEG.—Frank, *Jour. of Amer. Med. Assoc.*, treats these cases as follows:—The granulations are thoroughly cleansed at first. Then they are treated with silver nitrate if the granulations are hypertrophic, or with iodoform if the surface is putrid, torpid and lacking in vitality. The leg is then washed and shaved, and a moderately thick layer of warm gelatine is applied to the ulcer with a brush. The gelatine is thus prepared:—

R—Oxide of zinc 30 parts.
White gelatine 40 “
Glycerine 50 “
Water 90 “

A small patch of gauze is added as a covering and a gauze bandage from the toe upwards. If you want firm dressing, cover the bandage with another layer of gelatine, and continue the bandage from above downwards; let the gelatine cool and dry. If the discharge is abundant repeat the dressing every fourth day. If it is less, keep it on for eight days.

CAUTERIZING OVARIES INSTEAD OF REMOVING THEM.—Dr. Pozzi, of Hôpital Broca, *Therap. Gaz.*, has now practised cauterization of painful ovaries for over two years, and considers the plan very successful. In one case, in which he operated upon both ovaries, the woman has since given birth to a child. He performs his laparotomies in the ordinary recumbent position; draws the ovaries out of the abdominal opening. If the ovary is totally diseased, he removes it; but if a part is found to be healthy, he amputates the affected portion, cauterizes the stump, then sews the end with silk. If there are some small cysts, he opens them by touching with the Paquelin point. The ovary being returned to the abdomen, he examines and treats the other in a similar manner. Often as many as six small cysts are opened in this way in each ovary.

A NEW SYMPTOM OF CANCER.—G. Bogdan, *Br. Med. Jour.*, relates the case of a woman, aged forty-eight, who suffered from cancer of the stomach. The disease had gone through a long period of latency. The patient presented on each cheek a patch of wine-red discoloration formed by the dilatation of the superficial venules; the stain showed out sharply against the pale yellow of the surrounding skin. On the strength of this symptom alone Bogdan was able to make a diagnosis of probable cancer at a time when there was yet no other manifest sign of that affection. He looks upon such superficial varicosities on the cheeks as a valuable help to the early recognition of certain cancers; he has seen it in about two thirds of the cases of cancer which have come under his observation. He says it is particularly frequent in cases of epithelioma of the stomach and uterus, but less common in malignant disease of other organs.

MENTHOL IN DIPHThERIA.—F. Kastorsky, *Br. Med. Jour.*, reports thirty-seven cases of diphtheria (in three adults and thirty-four children) treated and cured by painting with a ten per cent. alcoholic solution of menthol. The paintings (by means of a piece of cotton wool) were usually carried out three times daily. In some cases, however, a single free application was followed by complete disappearance of false membranes within two days. A marked improvement in the patient's

general condition was invariably noticed from the beginning of the treatment. The same simple method was successfully practised by the author in numerous cases of anginas of various forms, and by Trütovsky in a group of cases of scarlatinal diphtheria.

SINGULTUS.—In a paper published in the *Physician and Surgeon*, Dr. D. L. Parker reports four cases of persistent singultus and the treatment employed. In each of the cases all the usual and known remedies had been tried without avail. In each case also, although the hiccoughing had gone on to the point of exhaustion of the patient, relief was at once obtained by dry cupping the abdomen, in two cases by ordinary drinking glasses, in the others by a cupping outfit. The author thinks, though we cannot see it as he does, that "the *modus operandi* of this remedy seems to be that by drawing forward a portion of the abdominal wall and thereby tending to enlarge the abdominal cavity, enough force is exerted upon the upper side of the diaphragm, by atmospheric pressure, to overcome its spasmodic action."

CHEST PAINS.—Chest pains usually cause great discomfort to a patient, and are not sufficiently appreciated by the physician. Dr. J. K. Crook relates a series of causes in the *American Medico-Surgical Bulletin*, as illustrating the diagnostic value of chest pains. In some cases these pains are reflected from an overloaded or disordered stomach, in some cases it is neuralgia, and in exceptional cases the lungs themselves are at fault. Most persons with pains in the chest think they have some lung or heart disease. Pneumonia causes pain, but the other symptoms make the diagnosis clear. Consumption is not a disease accompanied by pain, and when it does occur it is from continual coughing.

THE STANDARD DICTIONARY.—By actual count the Standard Dictionary contains, exclusive of the Appendix, 301,865 vocabulary words and phrases, and the Appendix of proper names, foreign phrases, etc., contains 47,468 entries, making the total vocabulary of the Dictionary 349,333—this after great care has been exercised to exclude all useless words. The immense increase of the vocabulary of the English Language appears from

the fact that the vocabulary of Webster's International Dictionary is 125,000 and the Century Dictionary is 225,000.

LACTATE OF STRONTIUM IN BRIGHT'S DISEASE.

—According to Dr. Ried, *Lancet*, the lactate of strontium, which is certainly an excellent diuretic, is beneficial in a large proportion of cases of Bright's disease, at all events when no sclerosis of the kidney has commenced. It should not be given in powder, as it is liable to provoke sickness; but when dissolved in the proportion of one to six parts of water, three or four table-spoonfuls can be taken per diem without unpleasant effects. Its diuretic action has induced Dr. Ried to believe that the lactate of strontium may be advantageously used instead of salicylates in the treatment of pleuritic effusions.

LATEST QUOTATIONS IN THE DIPLOMA MARKET.

—A London correspondent says the trade in bogus American academic degrees, which Labouchere broke up by his exposures in London *Truth*, is again booming. "England is a peculiarly rich field for this sort of swindle, for John Bull's pet weakness is his ambition to write a long string of letters after his name. The latest quotations for degrees from the bogus American University are M.D., or LL.D., \$150; any other degree, \$125."

FOR AMENORRŒA.—The following (*Pract.*) promises well:—

R.—Hydrargyri chloridi corrosivi, . . gr. $\frac{3}{4}$
 Sodii arseniatis, gr. j.
 Ferri sulphatis exsiccatae, . . . gr. xxx.
 Potassii carbonatis, gr. xv.
 Extracti nucis vomicæ, . . . gr. v.—M.
 Divid. in pil. xxx.

Sig.—One pill to be taken before each meal.

CHORDEE.—In a paper on "Local Anæsthesia," Dr. Wm. P. Carr, of Washington, D. C., writes, *Med. Bulletin*: "In this connection I may mention a fact well worth knowing, and I think not generally known, the chordee may be entirely and promptly relieved by putting on a condom containing two or three drachms of a two per cent. solution of carbolic acid, and that any pain in the penile portion of the urethra or pendulous penis may be controlled in this way."

Books and Pamphlets.

THE CARE AND FEEDING OF CHILDREN, a Catechism for the use of Mothers and Nurses. By Emmet Holt, M.D. New York: D. Appleton & Co. 1894. Pp. 66. 50c.

A useful little book containing much valuable information in a small compass. The name of the author is a sufficient guarantee as to the quality of the information found in it. We commend it to all nurses both in and out of training, and to mothers having charge of their own infants.

BREAD FROM STONES. A new and rational system of land fertilization and physical regeneration. Translated from the German writings of Julius Hensel. Philadelphia: A. J. Tafel. 1894.

The author's idea is that much that is now used as manure is useless, and goes back to the primeval rocks for the source of the supply of new material which is to regenerate the soil that has been exhausted by constant tillage. The work is interesting to all engaged in agriculture.

A MANUAL OF HUMAN PHYSIOLOGY. By Joseph H. Raymond, A.M.M.D., Professor of Physiology and Hygiene, Long Island Hospital, etc., with 102 illustrations and 4 full page colored plates. Philadelphia: W. B. Saunders. 1894.

The work is intended for students, and gives the main facts of the science; such as are necessary to be known if a sound method of treating disease is to be possible, leaving the more abstruse and recondite parts of the subject for future study by those whose inclination leads them in that direction. The idea is that of a practical teacher, and is, we think, well worked out in this book. He avoids what is "the impossible" during a student's life, and deals with the possible and practical.

ESSENTIALS OF DISEASES OF THE EAR; Arranged in the form of questions and answers. By E. B. Gleason, S.B.M.D., Clinical Professor of Otology Medico-Chirurgical College, Philadelphia, etc. Philadelphia: W. B. Saunders. 1894.

This is the latest of Saunders' Question Compend. It was written mainly for physicians who wish to take a post-graduate course in otology, to enable them, with the smallest amount of reading possible, to obtain a rudimentary knowledge of the essentials of the science, and thus to appreciate what is seen and heard in the actual work of an ear dispensary. It will supplement the lectures which undergraduates receive on the subject, and will be, we think, of great use to students for this purpose.