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CANADA MEDICAL RECORD

APRIL, 1900

Original Communications.

GYNECOLOGICAL NOTES.

By A. LAPHORN SMITH, B.A., M.D., M.R.C.S., England.

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Abdominal Tumors Complicating Pregnancy.—Several articles have lately appeared on this subject. The question being discussed is this: When an abdominal tumor is discovered during pregnancy, what course should we adopt towards it? This will depend very much upon whether the tumor is giving any trouble or whether it is likely to do so before labor shall have been ended; also, whether the tumor is an ovarian or a fibroid one; and again, whether, if a fibroid, it is interstitial or pedunculated. I have been called quite frequently to advise in each of these cases, and I have found the following procedure to be the best: In all cases of ovarian tumor an operation should be performed at once for two reasons: First, because it is no more dangerous to remove the tumor during pregnancy than at any other time; as a rule its removal has not been followed by a miscarriage, and the patients made excellent recoveries, none having died. And, secondly, because every day that an ovarian tumor remains in the abdomen the woman is running the risk of losing her life, not only by the mere growth of the tumor, but by what is far more serious, namely, from the complications, twisting of the pedicle, hemorrhage into the cyst and the formation of adhesions to the intestines. As a rule, ovarian cysts grow very rapidly during pregnancy on account of the

increased blood supply, and if the tumor, which is discovered early in pregnancy, is allowed to remain until labor is over, it will have increased enormously in size, in addition to the above mentioned dangers. Moreover, if the ovarian tumor is locked in the pelvis, it would be most serious to leave it there, as it would render natural delivery impossible.

With regard to fibroids, if they are causing no severe symptoms, I prefer to wait until a few months after delivery, and then, if the tumor is causing hemorrhage, to perform hysterectomy. Sometimes, however, they cause considerable pain. In one case to which I was called by Dr. McNamara, the tumor was a sub-peritoneal one, and had caused very little pain until the end of the third month, when it rose with the uterus out of the pelvis and took a rapid growth. It caused so much suffering that I decided to remove it, which was easily done by making a rather long abdominal incision and lifting the pregnant uterus and tumor out of the abdomen and laying them on a sterilized towel. The pedicle, about 3 inches wide, was clamped close to the uterus, and the tumor, the size of a small cocoanut, was removed. The stump was closed with interrupted silk stitches, and the clamps were removed. The bleeding was furious for an instant until they were put on again, and another row of medium silk stitches were applied. On removing the clamps the second time there was only a little oozing, which was completely controlled by a third row of fine sutures. The uterus was replaced, the incision closed, and the patient made an easy recovery, and went on to full time, and had a normal labor.

In another case of fibroid during pregnancy to which I was called by Dr. T. F. Wilson, it seemed almost impossible that the woman could be delivered by the natural channel on account of the size of the tumor and its location in the lower segment of the uterus. I was loth to operate, having been very much impressed by a similar case reported by Dr. Weeks, of Portland, at the Washington International Congress, in which a miscarriage was induced about the fifth month, and the patient died from uncontrollable hemorrhage. Sir William Hingston was also called in consultation, and, as he was strongly opposed to interfering, we decided to wait

until labor began, and then to operate if necessary. In due time labor came on, and little by little the tumor was drawn up out of the pelvis allowing the head to engage, and the woman was delivered without even the use of instruments.

The Treatment of Fibroid Tumors.—As a great change for the better has taken place in the results of operative treatment, a few words on the subject may be of interest. Twenty-five years ago the mortality in the hands of even the best operators was nearly seventy-five per cent., and fifteen years ago it was something like twenty-five per cent. No wonder, then, that at that time Apostoli's discovery was so heartily welcomed that nearly all of these patients could be cured of their symptoms by means of electricity and without any death rate at all. While the abdominal surgeons, rather than face such a risk, wisely advised their patients to do nothing, or only to take medicine as long as the tumor was not threatening their life, and even when it was threatening the woman's life by hemorrhage or pressure symptoms, the physician had no other resource to offer than the always doubtful one of ergot. The almost certain chance of being cured by electricity was a great boon, and I lost no time in going to Paris and learning Apostoli's method and in being the first to introduce it into Canada. Although I succeeded in curing of all their symptoms sixty-three women out of ninety-seven who were sent to me during thirteen years, I would have been glad during all that time to have completely removed the tumor by operation just as soon as the death rate could be reduced to its present low rate. During all those years, therefore, I urged electricity first, and, when it failed, I had recourse to Trenholme's operation of removing the tubes and ovaries, which, while it did not remove the tumor invariably in my hands, at least, sooner or later, cured the symptoms and caused the tumor to be considerably reduced in size. I say sooner or later, for in some few cases I had to wait a year, and in one case nearly two years before the hemorrhages entirely ceased. Another objection was that, while this operation did not remove the tumor any more than electricity did, it had a death rate of 7 or 8 per cent., which electricity did not have. When Lawson Tait, Kœbreli and Joseph Price

perfected the method of removing fibroids with the *serre noeud* and transfixion pins so that the death rate gradually came down to ten per cent., I began to adopt this operation in all cases in which electricity failed, or in which the patients could not spare the time required for electrical treatment. A few years later Baer and Kelly so improved the technique of abdominal hysterectomy that the mortality fell gradually to five per cent., and even in Kelly's hands to two per cent., he having recently completed one hundred consecutive cases with only two deaths. I am now employing this method in every case that will consent to an operation, and I have now done *ten consecutive cases without a death*, the tumors ranging from one to five pounds in weight, so that my attitude has completely changed, and I now deem it my duty to urge every woman with a fibroid tumor to have it removed immediately. The gynecological journals, during the last few months, record many instances in which fibroid tumors have sloughed, suppurated, become twisted and become malignant, so they are no longer considered the benign tumors they once were. Malignant degeneration has occurred three times in my experience (among those I was treating with electricity). And last, but by no means least, the earlier the tumor is removed the safer it will be to remove it, because there will be no adhesion to bowels, no enormous sinuses to bleed and smaller arteries to tie, and the woman's general health will be better able to bear the operation, while the operation itself will be ever so much easier to bear.

Selected Articles.

HEADACHES AND THEIR TREATMENT.

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Before commencing the discussion of the treatment of headaches it will be advisable to come to an understanding regarding the meaning which we attach to the word "headache." Although it is by the brain that we perceive pain, yet the brain itself, when subjected to direct irritation, give

rise to no feeling of pain. It is only when it is excited through the medium of peripheral nerves that the sensation of pain is felt. This is the case with pain in the head as well as pain in other parts of the body, and to the pains which are confined to the head the name of headache is often given, but not always. We find that if pain is localized in a particular organ in the head we do not, as a rule, apply the term "headache" to it. We speak of toothache, of earache, and perhaps of eyeache, but not of headache unless the pain is of a more diffuse character. When it is localized in a part of the head other than the eye or ear, but is of a shooting character and is limited to one particular spot, we often apply the term neuralgia to it. By headache we generally mean, then, a more or less diffused pain in some part of the head. There are two kinds of pain, however. There may be a sharp shooting pain in one particular part of the head or in one particular organ, and associated with this there may be a diffused pain, so that we may have at the same time a toothache and a headache. Not infrequently the headache depends upon irritation in the teeth, in the eye or in the ear, but often the cause of the headache is irritation of the nerve fibers either in fibrous structures in vessels.

The pain which is associated with tumor in the brain is probably due to pressure of the tumor upon some of the fibrous structures within the cranium; but the headache which is associated with various nerve conditions and is known as migraine is probably due almost entirely to the stretching of the nerve fibers within the blood vessels. Various opinions have been advanced with regard to its pathology. Some say it is due to cramp of the vessels and that the vessels during the paroxysm are firmly contracted. Others say that during the paroxysm the vessels are widely dilated. In my own case I have found that both statements are true and both are untrue, both being imperfect. The fact is that I get in migraine a dilatation of the proximal parts of the carotid artery with a contraction of the peripheral part, and that if I take off the strain from the vessels by pressing the carotid the pain is at once relieved.

Now, in regard to the pathology of headache, we have to consider two things, namely, (1) a general condition and (2) a local condition. The general condition renders the patient liable to pain, the local condition determines that the pain should affect his head rather than his intestines or his big toe or some other part of his body. The general conditions which lead to headache are those either of (a) imperfect nutrition or of (b) disordered nutrition. We find headache very commonly in imperfect nutrition, such as anæmia, and

perhaps still more commonly in disordered nutrition, such as occurs in rheumatism, in gout, and, above all, in albuminuria. In all those cases the tendency to headache is more or less constant, because the disorder of nutrition is more or less permanent. But in apparently perfectly healthy people we find that headaches come on now and again, and they are apt to come on with more or less regularity. Thus it would appear that in many such people there is a tendency to disordered nutrition occurring with more or less regularity, and such patients are accustomed to recognize this in themselves, and to say that they are apt to become bilious. We find this regularity occurring most markedly in women, because, just before, during or after the monthly period, women are very liable to suffer from headache. But in men, where there is no monthly period, we find also a tendency to regular recurring headache, and probably in them also there is a regular alteration in nutrition.

Now, the nature of this alteration is rather hard to determine, because our knowledge of nutrition generally is insufficient. Yet, a common observation may allow us to associate this altered nutrition, more especially with one organ, namely, the liver, because men and women are accustomed to say that they are liable to bilious headaches which recur every now and again. In order to understand this recurrence it is necessary to consider the functions of the liver.

The liver is a porter which stands at the gate of the organism and prevents all the deleterious substances which pass into the intestinal vessels from the intestine from reaching the general circulation. These substances are caught by the liver; they are either destroyed or transformed by the liver, or excreted by it unchanged into the intestine. From the intestine they may partially pass away with fecal matters, but many of them may be reabsorbed, and so they go on in a continual round from the intestine to the liver, from the liver to the intestine and back again to the liver until at last the amount of these substances becomes so great that the liver is no longer able to deal with it, and they pass through the liver and get on into the general circulation. Now it would appear as if there was a certain period required for this accumulation. The period will vary in different individuals, but it will also vary in the same individual under different circumstances, and more especially we know that it will occur in the same person in a less time when he is on a more highly nitrogenous diet. You know that it has been shown that during the decomposition of albuminous materials in the intestine various poisons are formed, and these poisons

probably accumulate in the liver until they get through it into the general circulation. By putting a man, then, upon a non-nitrogenous diet you lessen the proportion of these substances, and so you may increase the intervals between the headache more and more, until you may make the interval indefinite and prevent the headaches from recurring at all. Absorption from the liver is greatly altered by emotions. So much is this the fact that sometimes after emotions a person may become completely jaundiced, absorption having taken place so quickly from the liver that the bile actually colors the conjunctiva and the face. Therefore we should expect that anything which was circulating with the bile in the liver would be rapidly absorbed in consequence of emotion. We find that anxiety, grief, sorrow, especially any depressing emotion, is apt to bring on headache. We have, therefore, very good reasons for attributing many headaches to the presence of abnormal constituents circulating in the blood. If this idea be true, we ought to be able to relieve headaches by clearing out many of the morbid products from the liver. Experience has shown this to be the case, because one of the best methods of relieving a headache or preventing it is to give some mercurial cholagogue, following it up by some saline aperient. A blue pill over night and a black draught next morning will very often prevent the headache from occurring at the time when the person was perfectly sure it would otherwise come on.

So far, then, for the general condition of poisoning by toxins; but there are other injurious substances even less known. Many of them are classed, I believe, under the head of uric acid, and certain substances connected with gout and rheumatism are very apt to produce headache. The most powerful cholagogue that is known is salicylic acid or salicylate of soda, and one of the most powerful remedies in preventing and relieving headache is the latter. We may conclude, then, that a good deal of the misery caused by headaches is due to the absorption of toxic products, and that we may prevent headaches from coming on by the use of cholagogues and aperients.

But why do toxins fasten upon the head and cause headache instead of causing man to suffer from pain in his intestines or in his big toe? The reason is that in most cases we have some local lesion which determines the pain to the head, and the most common lesions are either decayed teeth or something wrong with the eyes. The abnormality in the eyes varies a good deal. In some people it is simply a little inequality in the visual length of the two eyes; in others it is astigmatism, in

others it is want of accommodation. In others it may be presbyopia, or it may be hypermetropia. In all cases of headache the first thing to do is to examine the teeth and see if any are decayed; next the eyes, and see if there be any abnormality in them. The most common cause of headache is certainly some abnormality in the eyes, but you will find that a great many patients show nothing wrong with the teeth, nothing wrong with the eyes, and then you must look for some other cause. You examine the ears, and see that there is no tenderness in them; you look at the back of the throat and see that there is no thickening of the mucous membrane of the posterior nares, tending to block the Eustachian tubes, and thus indirectly affecting the ears.

A still more frequent cause of headache, however, probably is irritation in the nose or in the cavities connected with it. A very common cause of headache in winter is irritation in the nasal mucous membrane spreading upwards into the frontal sinuses and giving rise to frontal headache. In some other cases, again, you will find that it spreads towards the antrum of Highmore in the malar bone, and you then get a one-sided headache. There is nothing to prevent the irritation from spreading to the ethmoidal and sphenoidal sinuses, and probably it does so spread, and in many cases headache, especially when felt right in the middle of the head, depends upon something wrong in the sphenoid or ethmoid, but we know less about this, and we cannot deal with them so easily. Yet it is necessary always to bear in mind the possibility of these cavities giving rise to headache in cases where you cannot find any other cause for it.

Headaches, and especially the headaches known as migraine, may be accompanied by various other symptoms. In ordinary cases migraine depends upon some spasm of the vessels outside the head, but not infrequently there may be spasm of the vessels inside the head, and then the functions of the brain may be effected. The functions of the cerebrum are, as you know, vision, sensation, hearing and motor-power, to say nothing of general sensation. If spasm of this vessel should so occur as to interfere with the free circulation of blood through the cerebrum, symptoms will ensue whose nature will depend upon the position of the spasm. Supposing that spasm occurs at such a point that the occipital lobe will be deprived of a good deal of its blood, visual hallucinations will probably ensue, and these are amongst the most common concomitants of sick headache. People suffering from sick headache are very apt to get a zigzag appearance in front of their eyes. They at the same time frequently experience a difficulty of seeing. They look

at a book, but they cannot read ; the lines waver like the air over a field on a hot summer's day. These zigzags are generally colored, and very often amongst other colors there is a green color.

We do not often hear of any hallucinations of smell or taste accompanying migraine, so that probably the contraction of the vessel stops nearly opposite to the ascending parietal branch. But sometimes patients may complain very distinctly of motor symptoms, and one of the most marked is aphasia, and in some cases of sick headache you will find your patient may become completely aphasic. How far this is due to the occurrence of atheroma within the arteries I do not know, but in one patient in whom the aphasia was well marked during an attack of sick headache I found after death, which resulted some years subsequently from hemorrhage into the pons, that the cerebral arteries were studded with atheromatous patches.

In tumor of the brain the headache is intensely severe, but it is almost always accompanied by severe vomiting, which is of a peculiar character, unassociated with nausea. It is sudden and violent, and immediately after the vomiting is over the patient feels well again and is able to eat. Associated with those two cardinal symptoms we find optic neuritis, and, when we find a headache without the other two symptoms, the probability is that it is functional and not due to any tumor whatever in the brain. Another cause of headache seems to be associated more with some of the fibrous tissues. There may be inflammation of the periosteum of the head, just as there may be inflammation of the periosteum of any other bone, and this inflammation may affect the periosteum either from gouty, rheumatic or syphilitic irritation.

Treatment.—The first method of treatment in headaches is of course to try to supply the brain with healthy blood ; to clear away any toxins that may be present in it ; and one method of doing this I have just mentioned—namely, the administration of a blue pill and a black draught. But more than this, we may try to give something which may have the power of counteracting these toxins or of producing elimination from the liver, and I have found by personal experience the easiest way of getting rid of the toxins or of counteracting their effect, I do not know which, is to keep up the action of salicylic acid or salicylate of soda. So that in persons who are liable to headache I generally prescribe salicylate of soda, 15, 20, or 30 grains at night, with 10, 20, or 30 grains of bromide of potassium. This mixture acts better than either salicylate of soda or bromide of potassium alone, and it will

usually prevent the occurrence of a headache in the morning.

If, however, the headache should still come on, I recommend that the dose should be repeated, and in the case of people who suffer from very violent and often recurring headaches I give them the salicylate soda not merely morning and night, but three times a day, in small doses, either immediately before or after meals. The salicylate of soda is apt to produce a certain feeling of depression and weakness, and in order to counteract these I generally give it along with half a dram of aromatic spirit of ammonia. Some of my patients have taken salicylate of soda for several years without any apparent harm, but we know theoretically that all these drugs allied to salicylate of soda have a tendency to produce anæmia; and it may be advisable in some patients if you are giving the salicylate of soda regularly to give also a little iron to counteract the effect of the salicylate in producing anæmia.

There is another large class of drugs that are used for relieving headache. These, I should mention, ought always to be given before the headache becomes too severe, because when it is severe absorption from the stomach appears to be arrested, and many patients will tell you that the first dose they had of antipyrin acted like magic, but the next time they took it it had no effect whatever, and you can tell them the reason why. The first time they took it was before the headache had got very bad. It was, therefore, absorbed from the stomach and acted upon their nerve centers. The second time they waited too long, until the headache had got so bad that absorption ceased, and so the antipyrin was no more use to them in their stomach than in a bottle outside. Where you have to deal with headache it is always advisable to give your drug before the headache gets too bad. All these belong to the class of drugs which act upon the conducting fibers or cells in the cord and tend to disperse pain. I dare say you know the old story of the dirty Scotch woman. A lady came in to see her one day and found the children walking and grubbing about; and she said to her: "Do you not often wash your house?" "No," said the woman. "But when the children come in with a lot of mud on their boots and they tramp all over the floor, what do you do?" "Oh, I make them knock it about until there is none." She distributed the mud equally all over the floor and then she thought it was all right. Now that is what these drugs do to the pain.

Painful impressions do not pass to the cerebrum straight up as a rule, because, as you know, pain is largely conducted

up the central column of the cord, and not up through the straight fibers which conduct tactile sensation. If you can distribute your sensation so much that it will get broken up in the cord and will not reach the center for pain in the brain, of course the patient will not feel pain, and so antipyrin, nux vomica, strychnine, phenacetin, antifebrin, and all that class of drugs relieve pain with one exception—namely, if the pain be not too severe. If the irritation of the sensory nerve is so great that it will fill up all the channels for pain, then phenacetin or antipyrin may sometimes make the pain worse than before. I did not believe this; I thought it was quite contrary to anything that could possibly be, but a patient of mine told me that the antipyrin which I had prescribed to relieve headache made him very much worse. I thought he was mistaken, but I have no doubt he was quite right, and that the reason was that the irritation was so intense, for it seemed to him that the pain had been increased tenfold by this drug.

But there is another drug that is very much used, and which has a somewhat similar action, but it acts apparently more upon the posterior columns than upon the central columns—at least so far as experiment goes—and that is caffeine. In cases where the pain is so intense that these substances, instead of relieving it seem to make it worse, there is perhaps no drug to which you can have recourse except the subcutaneous injection of morphine, and that relieves the pain and gives the patient quiet for the time being. But of course there is always the difficulty of the morphine habit arising, and so you put off the use of this drug as long as you possibly can. In some cases where there is continued pain in the head lasting for a length of time cannabis indica seems to help, and this may be given either in the form of the extract or tincture. It is easier to regulate the dose of the tincture, and you may begin with 10 minims three times a day, gradually increasing the dose. You must be careful about cannabis indica. There is no danger in it, I think, but you may greatly alarm the patient's friends if you run beyond 15 or 20 minims until the patient is accustomed to it. You may bring on a state of maniacal excitement which will greatly alarm the patient himself and everybody around him, but the long-continued use of this drug will sometimes relieve these headaches when other things seem to fail.

For the relief of headache occurring through inflammation of the periosteum from gouty rheumatic irritation, it is fortunate that one remedy is very useful—namely, iodide of potassium, which should be begun in small doses, and

gradually increased up to 10, 20, or 30 grains, three times a day. Where you think that the pain is not of a pure nature, not due simply to dilatation of the nerve fibriles in the fibrous tissue of the periosteum, but is associated also with some change in the vessels of a nature allied to them, which we find in sick headache, the iodide may be combined with bromide and salicylate, and in all those cases it is advisable to give some aromatic spirit of ammonia along with it in order to prevent any depressing effect of the drugs.

There is one thing more. Whenever you get a case of intense headache which your drugs fail to relieve, always look out for glaucoma. Even in ordinary headache you will be very apt to find the affected eye is rather tight, that the intra-ocular tension is higher than usual, but in glaucoma it is very much increased, and this will be permanent, and not temporary as in ordinary sick headache. In cases where this increased tension exists you must either treat the glaucoma yourself, or have the patient operated upon by some specialist so as to prevent the loss of an eye as well as to relieve the headache which is so intense, and which comes along with the disease.

MEGRIM.

By A. LOCKHART GILLESPIE, M.D., F.R.C.P. ED., F.R.S. ED.

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Among the various forms of disease to which our bodies are subject, a certain number there are which seem to be regarded by the victims in the light of ordinary everyday occurrences, annoying and disagreeable no doubt, but only what is to be expected by the majority of suffering mankind, and not of sufficient importance to call for treatment. Megrin may be classed among them. How often do we not hear it stated, "Oh, So and So could not come, she has one of her sick headaches;" or to our question as to the health of a friend get the reply: "I am quite well, only have had a sick headache." Possibly the term is often employed to cover many other conditions, notably by women; but the frequency of the excuse and the slight importance paid to the announcement of the cause, serve to illustrate popular conceptions as to the slight significance attaching to megrim attacks.

It is an interesting fact that in Edinburgh, at least, very few patients apply for hospital in-or-out treatment for migraine alone. Out of thirty-five thousand three hundred and forty-six patients treated in the medical wards of the

Edinburgh Royal Infirmary from October, 1891, to October, 1898, only nine are recorded as having suffered from this disease alone; that is, only one in three thousand eight hundred and seventeen sought or was given treatment, or 0.025 per cent. Among the medical out patients, averaging at least nine thousand, five hundred a year, or about sixty-six thousand, I can find very few diagnoses entered of megrim. There can be no doubt that many of those applying for treatment or advice for other troubles, also suffered from sick headaches, but attached little importance to them, imagining them to be migraine. Hemicrania, sick headache, vertigo, megrim, are synonymous terms applied to a train of symptoms as common as they are peculiar, as distressing as they are common. Obviously of nervous causation, often independent of digestive disturbances, the symptoms are so intimately connected with those procedures common to gastric and hepatic upheavals, that they have come to be associated with these organs. But the sufferer from the severest forms of gastric dyspepsia, the yellowest victim of catarrhal jaundice, the subject of hepatic congestion or of duodenal antiperistalsis, who vomits bilious matters, or the obstinately constipated, do not necessarily undergo the torments of a megrim. *Per contra*, the individual who experiences migranous attacks may have no dyspepsia, no liver fault, no excessive obstipation. The first class suffer from the effects of local digestive disorders; the second from a more or less general affection of their nervous mechanism.

All that is necessary to assume is that some conditions of the circulating fluids of the individual organs, or of the nervous system as a whole, able to produce the special state of irritability and local paranoia of the nervous tissues concerned in migranous attacks, must be present. Attacks of migraine can be separated into one or more classes:

1. The accidental paroxysm occurring at rare intervals, irregularly, perhaps only once in a lifetime; an accompaniment of some acute dyspeptic or hepatic condition. This is truly a digestive sick headache.
2. The similar variety occasionally met with after severe exertion, especially on insufficient food and in the untrained. The acute form of metabolic migraine.
3. The common, one might almost say the family variety of migraine, due to chronic auto-intoxication and deficient exercise. The chronic form of metabolic migraine.
4. The functional or neurotic form, akin to epilepsy rather than to hysteria, possibly in part and to a lesser degree due to conditions similar to those in number three, and aroused by slighter stimuli.

In men, I believe, attacks of hemicrania almost always indicate inefficient metabolic processes, primarily in excretion, secondarily in anabolic and assimilative actions and often appear when their manner of life alters ; for instance, when they pass from school to office stool, or from playground to student's class-room bench and midnight oil. I am, perhaps, inclined to attribute greater significance to the results of indoor employment as the casual agent in many cases of megrim, because my own attacks arose from this, and because I have seen complete recovery take place, after prolonged treatment by other methods had failed, when energetic non-medicinal measure were adopted *con amore*.

Latham, in his classical work upon megrim, christened a paroxysm a "nerve storm," a complete definition and a comprehensive description in itself.

Before the storm a calm, before the megrim attack comes a period of especially bright mental weather. As the mercury begins to dip, cirrus clouds, followed shortly by stratus, partially veils the sky in the eye of the rising wind, hinting at the coming stress ; so a cloud advances over a portion of the visual field, frequently obscuring in time a full half of it, foretelling, in more abrupt fashion than the meteorological omens can, the onset of a "nerve storm." Still later the phenomena, atmospheric and ocular, may further coincide ; the lightning of the thunder cloud, a prototype of the zig zag bright lines and flashes of light, albeit that these are more akin in color scheme to the rainbow than the electric spark, often disposed after the manner of the outlines of one of Vanban's medieval fortification plans. The nervous and atmospheric pressure still falls, the air feels oppressive, and so the brain, until the crisis approaches, the glass stops falling, begins to rise ; the atmosphere is freshened by discharge of rain, the nervous system by some critical evacuation or excretion, by vomiting, free perspiration, evacuation of the bowels, or copious discharge of urine.

The recovery of normal pressure is usually more rapid in nature than in the body, but profound sleep, as a rule, supervenes, and after a shorter or longer period the nervous isobars resume an anticyclonic type, and the condition is once more "set fair."

In those cases belonging to the first two classes the digestive sick headache and the acute metabolic megrim, the cyclonic disturbance in the nervous atmosphere is like unto the sudden cyclones of America, and tropical regions—short, sharp, occasional. Those belonging to the other two classes correspond more to the regular barometric depressions which are necessarily born over the oceans, owing to the variations.

in temperature of the ocean currents, the air above them, and the earth's revolutions.

That the involvement of the nervous system is by no means a mere reflex result of local irritation of the nerve endings in the mucous membrane of the stomach or small bowel, is shown by the frequent absence of any sign or symptom other than the megrim itself pointing to digestive disturbance in these organs, and by the not uncommon occurrences of symptoms of profounder nervous affections, either during the latter stages of a paroxysm, or, and this more often, post-paroxysmal, such symptoms as aphasia, slight mental confusion, temporary anesthesia over various areas of the body surface, even paresis and slight ataxia.

In dogmatizing as to the etiology of affections such as migraine, one must needs beware of narrowness of view. The nearest approach to truth in controversial subjects is best made by taking a middle course, nor is it well to assume that any one disease is always the result of one invariable cause. Migraine is a case in point. The combinations of symptoms undoubtedly vary, often widely, but the symptoms themselves denote nervous disturbances of a special type, affecting a larger or smaller region in a greater or lesser degree. The primary source of this disturbance in portions of the nervous system cannot, however, be particularly assigned to only one cause, or even to one class of lesions.

Now as to my personal experiences. I was first attacked with megrim after leaving school and beginning university work. Every three weeks or so one would occur, except when I was on holiday and led an open-air life. Was treated in the ordinarily approved style with cholagogues and cathartics, but though lighter in weight still suffered. But, having read Latham's treatise, I foreswore medicines, and began climbing a hill of eight hundred feet in the outskirts of Edinburgh and in a hurry, four or five times a week throughout each session, during an off hour between classes. No megrim has ever troubled me since then, save once when, after a fifteen miles' walk in the Highlands, the place at which I had expected to be able to get some food I found closed, and the second fifteen miles on a tightened belt proved sufficient to bring on what was but a slight attack. In this last case the true cause, very probably, is to be found in an excess of the products of muscular waste, in a somewhat starved blood stream. The physical exercise of surmounting the hill referred to, more than a mile and a quarter from the university, with an ascent of nearly six hundred feet from the lowest point touched, and in returning in forty-five minutes or under, was considerable.

Some time back I had occasion to treat a schoolmaster, newly come from another institution, who for two or three years had been a victim of hemicranial attacks about every fortnight, their first appearance coinciding with his introduction to the duties of his office. He was of bilious temperament, whatever that may imply, in so far that his skin was sallow, and that he had had several mild attacks of catarrhal jaundice ; since then he has suffered from several of the same, but the catarrhal affections of his liver did not appear to have any relationship whatsoever with his migrainous bouts. He had previously endured much physicking and stimulation of his liver, with no good result on his sick headaches.

As instructed, he desisted from all drug-taking ; put on as many layers of flannels, sweaters, old clothes, as he could place atop one another, an overcoat above these, and every afternoon during an hour's respite from duty, proceeded to cover two or three miles at a smart running pace, which, while well within his powers of endurance as to both distance and rate, produced in him a distinct feeling of having done some hard work, and of having caused a free secretion of sweat.

On return he disrobed, took a cold plunge, a rub-down with a rough towel, dressed and rested on a couch until his time for duty arrived. This patient only experienced one attack after commencing his daily run, and that occurred during the first fortnight and was very slight. He has had no further recurrence, although for a year past no special form of exercise has been taken. Nevertheless he has, since the megrim ceased, shown symptoms of liver disturbance, has been bilious, jaundiced, and cholemic, without any trace of a nerve storm initiated or brought to a point by it.

In him a sharp daily burst of active exercise, sufficient to cause fatigue, but not enough to over-tire him, stopped his attacks. Nor did they recur afterwards.

If this patient had been recommended to take daily constitutionals at his own pace, in the open air, it is almost certain that he still would be subject to megrim. Constitutionals, as a rule, are fraudulent proceedings. They savor so much of " needs must ; " they tend to remind the actor that he is unhealthy, and during their monotonous performances great opportunities are offered for introspective brooding, and they seldom are productive of any marked muscular exertion, for walking at the ordinary " constitutional-by-order " pace requires little expenditure of energy. Energetic exertion, short and sharp, is productive of greater benefit to migrainous patients, and also to dyspeptics, if carried out in

a natural manner in the open air, than any sedate constitutional or indoor employment of dumbbells, Indian clubs, and their allies.

The facts in the case illustrate very plainly some of the points I wish to refer to, and closely reproduce the salient features of various other cases which have come under my observation. No clear relationship between the occurrence of the attacks and any definite exciting factor could be traced; but every fortnight or thereabout, his indoor life and the mental strain imposed on him in the teaching of children, lend to accumulation of effete metabolic products in his blood and tissues, probably also to increased irritability of his cerebral centers, until what time the nervous mechanism, stimulated no doubt at first, and so causing the precedent feeling of well-being and vigor, became over-stimulated and was forced to find a vent for its unhealthy generated surplus energy along the lines of least resistance.

The following case belongs to another category. The history, briefly put, runs thus: A lady, twenty-five years of age, unmarried, well dowered with means and living an idle, empty life, had, since the establishment of her menstrual functions, suffered from severe sick headache every month in connection with her periods. Between times her health was as good as too little to do, sluggish bowels, and too rich foods, would permit. Of a neurotic stock, the continued appearances of these attacks from the two causes, inefficient use of over-rich foods and of the products of wear and tear of her tissues, along with monthly recurrence of a sufficiently disturbing factor to reflexly initiate an overflow of misdirected nerve energy, her case was more serious. But here again, sharp muscular exercise out-of-doors up to but not beyond the limit of honest fatigue served to raise the tone of her nervous system above the level, at which they responded too energetically to the monthly stimuli, while they also lacked an over-store of abnormal potential energy.

Treatment.—No active measures designed to relieve the actual paroxysms are of any avail in warding off future attacks. But given a paroxysm to treat, how best can this be done? By absolute rest and quiet, by allowing no food (if food be desired, as is seldom the case) but a little milk, or tea and toast; by giving a dose of caffeine (the citrate is not so good), dissolved in strong black coffee, and ordering a purgative enema. In the early stages aperients by the mouth are seldom indicated, for when taken they rarely pass through the stomach, more often returning by the way they are introduced. The peristalsis of the stomach is in abeyance unless it be to excess in the wrong direction. Various drugs

have been from time to time vaunted as specifics, antipyrin, antipyrin with caffeine, phenacetin, cannabis indica, etc., among them, and frequently do good at first, generally to lose their influence over later attacks. Where arterial spasm is present the various nitrite compounds may give relief.

It is during the intervals that real benefit must be sought for, and here the main factor to be considered is the nature of the exciting cause, if it be local and general, or general alone. Treatment must proceed along rational lines for removal of any irritating lesion as well as towards improvement of the metabolic processes of the organism. Benefit to one of these conditions may suffice to render the effect of the other insufficiently marked to cause attacks.

Each case has to be considered on its own merits. The physician must endeavor to arrest the manufacture of surplus nerve force, generated by constant, even if slight, irritation, or conversely to get rid of the surplus by some means or other, thus preventing its accumulation and consequent eruption, by measures which appear best adapted for the case. Local and remote affections must be sought for, and when detected relieved. To advocate any one strict and invariable mode of treatment for any simple disease on every occasion is the essence of folly. The same effect may be gained by different methods ; the same symptoms proceed from dissimilar combinations of causes, and amenable, therefore, to different lines of treatment.

As in epileptics who are generally benefited by hard manual and physical labor, so those victims of migraine who exhibit post-hemicranial mental symptoms of increasing severity as time progresses, are usually much improved by hard out-of-door work. Often one will be told by a patient who has been advised to exert his muscles more, that he is never off his feet, and gets more exercise than he likes. The truth being that exercise of this character, indoor chiefly, or in towns in the course of non-manual business, does little good, and often harm. It fatigues, rather than healthily tires.

Many sufferers from migraine will be found to avoid butter and fats, or to partake of them sparingly, either from personal dislike or because they disagree ; or, again, if fond of fatty foods, they may not be able to make use of them.

Constitutional conditions may require attention ; the gouty, syphilitic, rheumatic, and the malarial, often benefit greatly from corresponding specific remedies, alone or along with drugs specially indicated for the disease itself.—*Med. Brief.*

Progress of Medical Science.

MEDICINE AND NEUROLOGY.

IN CHARGE OF

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ABNORMAL SELF-CONSCIOUSNESS IN CHILDREN.

When the child's appetite is good and his temperature normal, most physicians are apt to think him safe in his mother's care and no longer dependent upon medical advice. Yet, if we counsel correct habits of diet, exercise and sleep, we ought not to be considered as transgressing very far the legitimate bounds of medical practice if we essay occasionally a warning word about so bad a mental habit as self-consciousness. Such advice when given to a reasonable mother, may be in the best sense prophylactic. Few parents can be gotten to believe, for example, that "forwardness," disobedience and rude conduct in a young child are sometimes a grave sign of mental deficiency. Gowers has noted them as one of the earliest indications of abnormal cerebral function. Instead of the youngsters being prompted to rudeness and impertinence, and laughed at for his supposed precocity, such performances should be viewed with anxiety, and should be gently but promptly suppressed. That small children should be "seen and not heard" is a maxim based on an enlightened psychology. The abnormal self-consciousness that prompts such outbreaks can easily develop into an incurable egomania; the growing brain tissue is, as Horace so well said long ago, *cereus in vitium flecti*. Even where it is not congenital, a morbid feeling of self can be awakened and nourished with alarming ease and speed. No child should be encouraged to repeat poetry before his mother's guests, or praised for his "pretty curls," or even have his first trousers made too much of. The less he thinks of himself the better. He may be judiciously commended for good conduct or for diligence in study, but never flattered for his cleverness and good looks, or anything which he has not come by through self-forgetting endeavor. Both boys and girls should be taught to *endure*; to neglect trifling aches and pain, and seek for a remedy rather than cry over the trouble. Self-command and self-control are the noblest things a man can strive for.

and he will never gain them unless he began learning in infancy to fix his thought and will upon objects outside himself. If such principles of education were more closely followed, hysteria and the "artistic temperament" might gradually disappear, and the hosts of insane people now walking at large, because their disorders of consciousness are not directly menacing to society, might be much diminished. Improper marriages are, of course, at the root of the evil. Bad training is, however, almost as frequent a cause, and is one which in the present state of society is much more readily remediable. To MacBeth's famous question, "Canst thou not minister to a mind diseased?" the modern physician should find a better and braver answer than that of the doctor in the play, "Therein the patient must minister unto himself."—*Pediatrics*.

ANTIDOTE FOR CARBOLIC ACID.

Dr. Seneca D. Powell, of New York, has for a long time used in his clinics at the Post-Graduate Hospital an antidote, alcohol, that we have all come to recognize as a specific. It is not an unusual occurrence to see Dr. Powell catch in his open hands a quantity of pure carbolic acid, poured into them by a nurse from a bottle. In a few moments the doctor puts his hands into a basin of pure alcohol, and no escharotic effect is observed whatever from the action of the carbolic acid upon the skin. At present time we are flushing out abscess cavities with pure carbolic acid and washing them out a few moments later with pure alcohol. In empyema Dr. Powell, after making a large opening in the chest wall, washes out the cavity with a ten per cent. solution of carbolic acid, after which pure alcohol is used, and no bad effect has thus far been observed from this treatment. The cavity of the pleura is rendered aseptic. From personal observations and demonstrations in the use of pure carbolic acid, followed by the use of alcohol, Dr. Phelps states positively that we have in alcohol an absolutely safe and sure specific against the escharotic action of pure carbolic acid. This fact should be given wide publication, because in cases of carbolic acid poisoning with homicidal intent, if, immediately after the administration of the poison, alcohol was thrown into the stomach of the individual, the poisonous effect of carbolic acid would be at once neutralized. However, as to the subsequent constitutional effect from the absorption of the new compound formed Dr. Phelps cannot speak, but certainly in all cases of local carbolic acid poison-

ing, particularly in such a case as that mentioned by Dr. Weiss, alcohol is an absolute, powerful and immediate specific. — *Va. Med. Semi-Monthly*.

EFFECTIVENESS OF ANTI-TOXIN IN THE TREATMENT OF DIPHTHERIA.

Dr. J. J. Kinyoun, United States Marine Hospital Service, in charge of the Bacteriological Laboratory at Washington, in an article published in the *Forum* for August, gives a lucid historical sketch of the progress and efficacy of the anti-toxin treatment of diphtheria. The treatment began to be used in the Berlin hospitals in 1894, and the first full year of the anti-toxin period was 1895. The following is the hospital record at Berlin for the years specified in cases of diphtheria and membranous croup, which latter disease has been found to be generally due to the diphtheria bacillus, and which consequently yields as readily to the anti-toxic treatment as diphtheria: 1892, 3,683 cases with 1,342 deaths; 1893, 4,315 cases with 1,637 deaths; 1894, 5,220 cases with 1,416 deaths; 1895, 6,105 cases with 987 deaths; 1896, 4,345 cases with 559 deaths; 1897, 3,723 cases with 546 deaths. The anti-toxin was used for three months only in two of the hospitals in 1894, and the death rate fell from 37.7 per cent. in 1893 to 27.1 per cent. In 1897 the death rate had fallen to 14.6 per cent.

In the Kaiserin Friedrich hospital, in 1894, the new treatment was used from March to September, and the mortality in all cases of diphtheria and croup was 15.6 per cent. From September to November no further supply of the serum could be obtained, and in that period the mortality rose to 48.8 per cent. Then a supply of serum came to hand, and on a resumption of the new treatment the mortality rate at once fell to the former percentage. This was a demonstration of its effectiveness which could not be explained away.

The Paris statistics do not give the whole number of cases treated, and we must judge from the number of reported deaths from the two diseases in question. From 1886 to 1893 the number of deaths averaged about 1,500 a year. In 1895, the first year in which anti-toxin was generally used, the number fell to 993; in the next year to 411; in 1897 to 444, and in 1898 to 274. The record of the London hospitals is not equal to that of Berlin and Paris, but there, too, the death rate has been greatly reduced. In New York during 1894 some 2,900 deaths from the two dis-

eases were reported; in 1898, under the new treatment, the number was only 900. In Boston the death rate from these causes averaged nearly 31 per cent. from 1880 to 1894; from 1894 to 1897 it was only 12.6 per cent. In Chicago the rate prior to 1895 had been over 30 per cent.; since then it has fallen below 10 per cent.

Prior to the introduction of the anti-toxin treatment recovery from croup was rare, unless effected by tracheotomy or intubation. Reports upon 5,546 cases before 1892 showed a death rate of nearly 70 per cent. Another investigator collected reports of 12,736 cases occurring prior to 1887, where the death rate was 73. Now all this is changed, and out of 1,074 cases reported to the American Society of Pediatrics only 668 required surgical treatment, and the percentage of recovery for all was nearly 79 per cent., as contrasted with a former death rate of 70 per cent. Tracheotomy is now giving way to the milder operation of intubation, and even this is becoming less and less necessary, owing to the prompt application of the new remedy. It has been stated by Dr. Behring that if this remedy could be applied on the first day of the disease there would be practically no mortality from diphtheria, and Dr. Kinyoun fully concurs in this.

The question at once arises here why anti-toxin may not be administered to persons exposed to a diphtheria or croup epidemic as an immunizing agent, as vaccine virus is used against possible exposure to smallpox. While the two diseases differ materially in the nature of their origin, there is good reason for believing that preventive treatment may be as successfully pursued in the one case as the other. So far as tried, it has met the most sanguine expectations. It is mentioned in the *Forum* article that a Dr. Briggs has collected reports of 20 000 cases of exposure to diphtheria which have been treated with immunizing doses of anti-toxin, and only one fatal case was known to occur, while only 109 cases of the disease in a very mild form developed. It may soon be that "anti-toxication" will be made as prevalent among children and others as vaccination.—*The Sanitarian*.

COLD WATER vs. MEDICINAL TONICS.

The numerous medicinal tonics, so called, are universally toxic in character. Whatever tonic effects they may seem to produce are due to the fact that the system is aroused to resist their influence and to expel them from the body; and

while a certain amount of benefit is perhaps derived from the use of such agents, there is always a possibility of serious damage ; and doubtless in all cases a considerable amount of harm is done through the toxic influence of the drug, which falls with especial weight upon those organs which are most concerned in its elimination—the liver and the kidneys.

A medicinal stimulant is a mortgage placed upon the vital capital of the body, which must be paid sooner or later. It is a draft upon the constitution. A stimulant is simply a means by which the nerve centers are made to give up a little more of the energy which they have stored up, and unless the stimulus is of such a character that the storing power as well as the expending power of the nerve centers is increased, there must be a loss from its employment.

A toxic agent, like strychnia, may provoke the expenditure of nervous energy, but it does not replenish energy ; while it does lessen the activity of the kidneys in eliminating tissue poisons, and the efficiency of the liver in the destruction of toxins and leucomains, thus encouraging the development and maintenance of a condition which is, in itself, an indication for the necessity of employing tonic measures ; in other words a medicinal tonic or stimulant aggravates the very condition it is intended to cure.

Nervous Energy.—The establishment in modern times of laboratories for psychological and neurological research has been the means of throwing much light upon the nature of mental and nervous activity. Nervous energy no longer means, as formerly, an intangible, mysterious something, but, as has now been clearly demonstrated, is immediately and definitely connected with material elements found in the interior of the nerve cell. For example, a nerve cell, when in a state of rest, shows a large number of grayish granules, which have been shown to be intimately connected with the storage of energy ; so that when the granules are abundant, the cell is like a fully charged battery, ready to discharge under the influence of the right sort of stimulus the maximum of energy which it is capable of exhibiting. On the other hand, when the cell is fatigued, as after prolonged, energetic work, the granules are found to be very few and small, and the cells shrunken and pale.

With these facts in mind, it is easy to understand why such disappointing results have followed the use of strychnia and a very large number of medicinal agents, so-called “ nerve tonics,” since it is evidently impossible that these drugs should in any way increase the store of energy in the cell ; and the most that can be expected from them is the excite-

ment of the cell to activity when it has become exhausted to such a degree that a sense of fatigue supervenes as a warning that the store of nervous energy is reduced to a point where any further demand upon it is dangerous, and the rest is imperatively demanded.

The only way that the energy granules of a cell can be augmented is by the assimilation of food from the blood, and the development of energy-containing particles. Cold water surpasses all other agents in its power to promote the normal energy-storing processes. Cold applications also facilitate to a very remarkable degree the discharge of nervous energy when a sufficient store exists, though sometimes it may not be available because its useful application is hindered by the influence of retained excretions of nerve-numbing toxins generated within the tissues or absorbed from the alimentary canal. This effect of water is readily apparent in the influence of the cold bath upon muscular energy, to which attention is called elsewhere, and also in the sensation of well-being, buoyancy and readiness for exertion which results from the application of cold water.

The tonic effects of cold water are unquestionably to a large degree due to the influence of cold impressions acting through the nerves of the skin upon the sympathetic nerve centres. The great sympathetic nerve controls the blood vessels, glands, heart, the functions of secretion and excretion, and, in fact, all the vital functions of the body. The awakening of the sympathetic to renewed activity, or a balancing of its action, is what is specially needed by the great majority of chronic invalids. The functions of the brain and spinal cord, and through them all forms of nervous activity, are to a remarkable extent influenced by the sympathetic. The sensation of well-being which accompanies the reaction following a general cold application is largely due to the increased activity of the cerebral circulation, brought about through the stimulation of the sympathetic. By its powers to influence the sympathetic, hydrotherapy is capable of controlling, restraining, reorganizing, balancing, all the processes of organic life, and through them modifying the functions of animal life to a marvelous degree.

Cold Water a Physiological Tonic.—Cold water is a physiological tonic, and has the advantage over medicinal tonics of all sorts, in that it awakens nervous activity without the imposition of any extra burdens upon any vital organs, and without hampering the activity of any function. The cold bath employed in such a manner as to produce tonic effects accomplishes its results by increasing vital resistance

to the causes of pathological processes, by making the wheels of life run more smoothly, by lifting the whole vital economy to a higher level. The impression made upon that harp of a million strings, the skin, with its vast network of sensory, motor, sympathetic, vasomotor and thermic nerves, arouses every nerve center, every sympathetic ganglion, every sensory and motor filament in the entire body to heightened life and activity. Every blood-vessel throbs and every cell quivers with a new life; the whole body thrills with quickened impulses; the whole being is translated into a new state of existence.

A person who has never experienced the glow of exhilaration, the invigoration and buoyancy of body and mind, which accompany the state of reaction from a short, general cold application, can not well appreciate the value or significance of the cold bath as a physiological stimulant. It is not too much to say that it is of all measures known to man the most valuable as a means of arousing to activity the flagging energies of the body, and lifting the enervated invalid out of the morasses and quagmires of chronic disease.—*Modern Medicine.*

NAUSEA OF ANESTHESIA.

Nausea and vomiting following anesthetics is sometimes a distressing as well as dangerous condition, and it behooves us to avoid it as far as possible, not only for the comfort of the patient, but for the reason that in serious surgical interferences it may place life in peril.

Says the *Therapeutic Gazette*: "Blumfield, in the London *Lancet* of September 23, 1899, observes that some of the chief points to be attended to in the avoidance of after-sickness are: 1. Use as little of the anesthetic as possible consistent with perfect anesthesia. 2. Wash out the stomach at the close of the operation when much mucus has been swallowed. 3. In long operations, substitute chloroform for ether after three-quarters of an hour. 4. Move the patient about as little as possible during and after operation. 5. Place him on his right side in bed, with the head only slightly raised. 6. Give nothing but hot, thin liquids in small quantity for at least eight hours after. 7. Do not alter the temperature of the room for some hours. With proper attention to these points one-third of the patients operated on will be free from after-sickness, and for short operations the proportions will be much higher still. In fact, after all administrations up to twenty minutes, or not much longer, sickness will be found to be the exception."

I have for some time given Ingluvin in liberal doses (10 to 20 grains) just prior to the anesthetic, and have been favorably impressed with its use, and would suggest its thorough trial by the profession.

Two cases are reported from the Hospital College of Medicine as follows:

Case No. 1.—Mrs. B., age 30, operated on for complete laceration of the perineum. She had twice before taken chloroform, and after each administration suffered from severe vomiting. She took 3 10-grain doses of Ingluvin six, four and two hours before the operation, and experienced almost no sickness after coming from under the anesthetic.

Case No. 2.—J. H., age 34, amputation at the hip joint. This man said he dreaded nothing but the chloroform, as at a previous operation he had suffered in a most distressing manner from that anesthetic. I directed the nurse to give him 10 grains of Ingluvin six and two hours before the operation. He vomited only once after coming from the table, and, though he suffered some considerable shock and much pain, had no complaint of nausea.

Dr. E. H. Gingrich, 511 Cumberland street, Lebanon, Pa., especially recommends Ingluvin for the vomiting so frequently experienced by patients coming out of anesthesia.

Prof. Hobart Amory Hare, in "Practical Therapeutics," writes:

1. "That chloroform or ether vomiting is probably centric."

2. "Upon the mucous membranes, ether as a liquid or in a vapor acts as an irritant, and causes, when its vapor is first inhaled, great irritation of the fauces and respiratory tract"

Ingluvin is valuable on account of its mildly depressing the sensitive nerves of the stomach, thus lessening the irritation of that organ. The vomiting centres are subdued, with the result that vomiting is controlled.

For vomiting succeeding anesthesia, Ingluvin should be given 20 grains one hour before the administration of ether or chloroform, and immediately after coming out of the anesthesia, one 20 grain powder; to be followed every hour by 5-grain powders, until vomiting ceases. Usually the 20-grain powder will be found effective. Ingluvin is a bland powder prepared from the gizzard of the chicken, and contains nothing which might contra-indicate its use in surgical operations as specified above.

It has long been used as a remedy to allay persistent vomiting of gestation with eminent success by many practitioners throughout the world. It therefore is not a new pre

paration, but simply an old remedy in a new capacity. Some months ago a professional suggestion was made to use it for the nausea of ether. Subsequent tests and their results have warranted its recommendation to the medical profession. Samples will be sent to any physician who wishes to test it in vomiting of anesthesia. Write W. R. Warner & Co., Philadelphia, for a sample.—*From Monthly Retrospect of Medicine and Pharmacy.*

HABITUAL CONSTIPATION.

The treatment detailed is intended for habitual constipation. For the immediate unloading of the bowel one of the simplest and least harmful methods is the giving of one or more enemata of warm water, containing salt in the proportion of a teaspoonful to a pint. Soapy water may be used instead, if something stronger is needed. The amount to be injected varies with the age. For young babies one or two ounces is sufficient, and for those of two years, two or three times this amount. Either the hard-rubber syringe or the infant's syringe may be used. A useful injection consists of half a teaspoonful of glycerin in full strength. This is best given from a small hard-rubber syringe holding not more than half an ounce. The opening in the nozzle should be larger than ordinary, as the glycerin does not flow readily. If the mass in the bowel is large and hard, an injection of warm sweet-oil, retained some hours if possible, is better than anything else. It should be followed by an enema of soapy water. In some cases it is necessary to insert the finger or a small spoon-handle into the bowel and break up the masses carefully.

Glycerin suppositories—glycerin and soap—of a size for children are often excellent for opening the bowel. Gluten suppositories are also serviceable in many instances. A more economical plan is to employ little home-made suppositories of castile soap, or, in place of these, a soap stick, which can also be made at home, and which has the value of lasting for repeated usings. It consists of a smooth conical stick of firm castile soap two or more inches long, half an inch thick at the base, and tapering toward the other end to the thinness of about one-quarter of an inch. It should be greased with vaselin before using, inserted part way into the bowel and held there until a tendency to an evacuation shows itself.

If none of the methods described is effectual, laxative drugs must be employed. Their use, however, ought to be

deferred as long as possible, and is much better left to a physician. Probably the best and least harmful of drugs is cascara in some form. There is made a cascara cordial which has a pleasant taste and is very effectual. Another very useful preparation is the syrup of senna, which is easily taken by children, as its taste is agreeable. Little sugar-coated pills, each containing one-tenth grain or less of aloin, are sometimes of service, one being given daily to a child of two years. A small quantity of manna, about five grains, can be given to a baby of six months once a day or oftener, dissolved in the milk, as its taste is sweet, or ten grains of phosphate of soda may be used in a similar manner. Magnesia or spiced syrup of rhubarb answers very well, but only for occasional use.—*Your A. M. A.*

CARE OF THE MOUTH.

Perhaps no part of the body is so often neglected as the mouth ; especially is this noticeable in the case of children. A mother who will religiously bathe her child and keep its body sweet and clean will often fail to cleanse its mouth. A new-born infant should have its mouth washed after each feeding ; a soft cloth wet in a weak solution of boracic acid should be used for this purpose. If this were always done we would rarely find a cause of infantile sore mouth.

After the teeth come and the mouth is large enough, a small, soft brush should be used ; the teeth and mouth should be thoroughly cleaned at least twice daily.

In illness where sordes and mucus accumulate rapidly, and where the tongue and lips are parched and stiff, attention is needed every hour ; the mouth should be kept moist, and the same treatment carried out through the night as during the day. Boracic acid solution, listerine, lemon juice, glycerine and distilled water are all refreshing, and soften the tissues ; where the lips are chapped or fissures appear, a lubricant of cold cream or sterilized vaseline should be applied. Where the gums are spongy or soft, and bleed readily, a few drops of tincture of myrrh added to pure water will help to harden them. Small squares of old linen or soft gauze should be used instead of a brush where one is ill or weak. These should be immediately burned after use.

Every part of the mouth should be cleansed ; behind the wisdom teeth, the roof of the mouth and under the tongue ; lemon juice and water will remove the fur from a thickly coated tongue. Where the teeth are sensitive the water used should be slightly warm.—*South Cal. Practitioner.*

BLACKHEADS.

Blackheads are not, as is generally thought, dust or dirt accumulated in the pores, but consist of fatty secretions of the skin and a coloring matter. The following mixture may be recommended for their removal :

R. Kaolin, parts iv.
Glycerin, parts iij.
Acid acetic, parts ij.
Ol. odorat., ad lib.

M. Sig. Apply this mixture to the parts at night, and, if possible, also several times during the day. The blackheads will disappear when washed with this mixture and rubbed freely with a towel moistened with it, or can easily be removed after a few days.—*Tri-State Medical Journal*.

ALCOHOL AND CYCLISM.

MM. L. Jacquet and Regnault (*Le Progrès Médical*, 29th July) believe that the prevailing popular belief that alcohol gives strength to the system is one of the causes of the prevalence of the increasing use of alcohol throughout the country. It is therefore the duty of physicians to combat this error, which they have heretofore contributed largely to spread among the people. We have had, they say, occasion to enquire of some well-known cyclists their opinion of the effects of alcohol from a professional point of view. Those consulted: Mr. Miller, of Chicago; Calmettes and Goring, of Paris; Monachon, of Geneva; Fischer, of Mulhouse. Their reply was invariably the same; they are all absolutely temperate, even when not engaged in active exercise they avoid aperitives and absinthe. As to their opinion of it during the race proper, it may be resumed in a single curt and emphatic formula: Alcohol weakens the limbs: "*L'alcool coupe les jambes.*"

In the spring of 1888, during the severe snowstorm popularly known as the blizzard, the trains on the Long Island railroads were stopped, and the passengers to New York were obliged to endure cold and hunger, or walk several miles through the snow drifts. A young man, tall, slender, rather delicate, made one of the party who sought relief. When refreshment was found he absolutely refused alcoholic drinks in any form, and took a full cup of moderately strong coffee instead. Having found a place in which rest could be obtained, the most delicate of the party was the least exhausted after the prolonged and severe journey.

Relying on his own experience he has since, much to his advantage, avoided alcohol and tobacco.

How many of the numerous accidents that are occurring daily are due to overstimulation? Investigation is due to the public.—*The Sanitarian*.

THE X-RAYS IN DISEASES OF THE CHEST.

In the *Boston Medical and Surgical Journal* for January 18, Williams writes of the value of the X-ray examinations in the less frequent diseases of the chest illustrated by their use is those cases where aneurism is present or suspected.

He stated that aneurisms of the thoracic aorta may be seen by the X-rays before there are physical signs. This method of examination may give us greater assurance of the absence of an aneurism of the aorta in suspected cases than any other evidence that we can have.

He reports the examination of 34 cases, 15 having typical aneurisms, 6 had more or less dilatation of some portion of the arch, 1 showed an outline suggestive of aneurism, but there was no pulsation, and on autopsy a mass of glands was found. The remainder gave normal outlines in the region where an aneurism had been suspected.

In 13 of the 15 cases the aortic arch was the seat of the aneurism; in one of these there was a second aneurism in the innominate artery also; in the fourteenth case there were two aneurisms, one in the innominate and another in the subclavian artery; in the fifteenth case the aneurism was in the subclavian artery. Eleven of these cases were males and four females; 11 were between thirty-eight and forty-five years of age; two were thirty-three; one was forty-nine and one fifty-nine, and one twenty-nine. A syphilitic history was obtained in four cases. Pain was present in 12 cases and alteration of voice in 11. Laryngoscopical examination was made in 7 of these last cases, which showed paralysis of the vocal cord. The physical examination of 12 out of 14 of the cases of aortic aneurism was given in the hospital records; in five cases there were no physical signs of aneurism; in eight cases the heart was enlarged, and in five of these there were murmurs indicative of valvular defects, four of which were aortic and one mitral. Arteriosclerosis was found in the three cases in which an autopsy was made. No nephritis was found in any case.—*The Charlotte Medical Journal*.

SURGERY.

IN CHARGE OF

ROLLO CAMPBELL, M.D.,

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AND

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Instructor in Surgery, University of Bishop's College; Assistant-Surgeon, Western Hospital

PRESERVATION OF SURGICAL NEEDLES.

At a recent meeting of the New York Surgical Society. Dr. Dawbarn recommended the use of a saturated solution of sodium carbonate (washing soda) in water, for the purpose of preserving surgical needles. He stated that in his opinion this method of keeping the needles and cutting instruments untarnished was superior to any other which had thus far come within his experience. He showed needles kept bright in this way for a year and more. Most of the other methods are open to some objection. Perhaps the most common method is to sew the needles into an oiled cloth, but this does not always prevent flecks of rust. As to keeping them in carbolized oil, this to some extent dulls the edge of the needles just as carbolic acid in watery solution does that of scalpels; lysol being a dark solution, the needles are not very easily seen in it; calcium chloride in a closed place to keep the air dry, with the needles lying on a dish near it, produces a curious tarnish, almost like rust; in Fuller's earth or other powders it is difficult to find the smaller needles; in alcohol, unless it is absolute (and absolute alcohol ceases to be absolute very soon), the needles will finally rust. A solution of borax in water, as recommended by M. Maréchal, will also rust the needles as soon as the thin plating, which all needles have at first, becomes worn away from usage, exposing the steel beneath. Perhaps keeping needles in liquid petrolatum is almost as good a way as that under discussion; its only objection being the unpleasant oiliness. Calcium chloride in absolute alcohol—thus keeping it absolute—is effective, but comparatively expensive. The same is true of placing a sheet of gelatin in the absolute alcohol, the gelatin by its affinity for water keeping the alcohol absolute. The method now advocated—washing soda dissolved in water to saturation—is inexpensive and satisfactory to the author.—*Gaillard's Medical Journal.*

DIRECTIONS FOR THE STERILIZATION OF CATHETERS AND BOUGIES.

Nicoll gives the following directions for the sterilization of catheters and bougies :

Bougies.—Gum-elastic bougies will not bear heating to a temperature sufficient for sterilization. Soaking for fifteen minutes in carbolic acid solution 1 in 20, for half an hour in 1 in 40, or for an hour in perchloride of mercury 1 in 1,000, renders the surface so sticky that the towel adheres in the process of drying, and the bougie becomes covered with fluff. After several soakings the surface becomes permanently dull and sticky, and unfit for use. Dr. Schimmelbusch says that "a smooth bougie or catheter can mechanically be made externally free from germs by rubbing it with a piece of sterilized gauze and warm water." To test this a series of six gum-elastic bougies in use from six to eighteen months, after being employed in cases of stricture, were washed with tepid water and soap, rinsed in cold running water, and dried with thorough light friction with sterilized gauze. They were then rubbed on the surface of acid and alkaline agar tubes. In one case colonies of an unidentified coccus appeared, in another a patch of penicillium. The other ten tubes remained sterile. Six bougies soiled with pus were similarly treated; all the tubes remained sterile. In other experiments, instead of the gauze, an ordinary towel fresh from the laundry was used, and similar results were obtained. It appears, therefore, that antiseptic solutions which rapidly destroy instruments are unnecessary for sterilization.

Catheters.—Red rubber catheters (Jacques) may be sterilized by boiling or steaming, or may be soaked for months in carbolic solution (1 in 20) or perchloride of mercury (1 in 1,000) without damage. A rubber catheter may be used daily for six months without becoming unfit for use, if washed every day with hot water and soap, and put to soak in carbolic lotion for the remainder of the twenty-four hours. But there are certain red rubber catheters which rapidly deteriorate under repeated boiling, and all rubber catheters ultimately do so. Prolonged and repeated soakings in antiseptics have little effect. By experiments the writer has proved that rubber catheters, boiled, steamed, or soaked for four hours in the lotions mentioned are rendered sterile internally and externally. But gum-elastic catheters, like bougies, will not stand the lengthened and repeated soaking necessary for sterilization. There is no entirely reliable method. For practice the writer has formulated the following rules :

(1) Avoid as far as possible the employment of catheters. In cases of stricture it can only be very exceptionally that a catheter is called for. Bougies, which are readily sterilized, will do all that is necessary. (2) Where a catheter must be employed, use where possible a red rubber Jacques' catheter in preference to a gum-elastic. In retention from atony spinal paralysis, reflex nervous effects, and other causes, and in many cases of prostatic retention, the former answers as well, and is as readily sterilized by boiling or immersion in an antiseptic solution as is a metal catheter. (3) Where the red rubber fails to pass, the use of metal catheters, especially by the patient, does not commend itself as free from risk of injury. Gum-elastic catheters must therefore be used. If the urine is very septic the writer destroys the catheters used. If the urine is not very purulent or offensive, he washes the catheters externally with soap and water, and then with antiseptic solutions, which is followed by internal steaming. Those that survive he retains. When the regular use of a gum-elastic catheter is necessary, the patient is supplied with a catheter with a well-finished interior. After use he thoroughly washes it, holds it under the tap for a few minutes, and lays it aside in boric acid, weak perchloride, or other weak antiseptic. This only offers a reasonable chance of asepsis, but it is useless to expect an average patient to carry out more elaborate plans. The writer has had glass tubes constructed, which are filled with the antiseptic solution, in which the catheter is placed after use. The solution varies in strength according to the kind of catheter; for gum-elastic catheters it must be weak; red rubber catheters will stand anything.—*Gaillard's Medical Journal*.

A NEW " T " BANDAGE.

W. O. GREEN, Louisville, Ky., employs a simple device for holding dressings in place about the anal region. This bandage is always the proper length, because it is not made until applied. It is necessary to employ heavy, thick material, the heaviest unbleached cotton being the best adapted. This is cut into strips not less than four inches wide; the average length for each bandage is two yards. About six inches of the bandage is unrolled, and folded upon itself three inches from the end. In the centre of the fold a cut is made with a pair of scissors. In consequence of the fold, the cut should be made only one-half the desired length when unfolded, and the limit of the cut at the centre point should be at least an inch from the free end of the bandage. This

will be about half an inch or more than the diameter of the roller. The bandage is passed around the waist, the one end brought through the cut, which is placed in the centre of the back. This obviates the use of pins, buttons or knots, and at the same time the waist and perineal bands can be made to conform to the parts. The perineal band is passed up and under the waist band in front, where it is tied in the form of a reinforced bow-knot, and the roller cut off after the knot is tied. For the first dressing subsequent to rectal operations this bandage is not employed, because sufficient pressure cannot be brought to bear to give firm support to the anal region, but it has been employed almost exclusively for holding in place rectal dressings, and can be used with equal efficiency for genito-urinary and other perineal dressings.—*N. Y. Med. Record, Medical Review.*

A TREATMENT FOR ACUTE SEROUS SYNOVITIS PERMITTING OF JOINT FUNCTIONS.

The method might be called the compression treatment. It has proved far more satisfactory than the old ones of rest and immobilization, hot or cold packs, evaporating lotion, etc. Its application is quite simple, though considerable care and judgment should be exercised. The principle is to fill all depressions about the joint with cotton, and then to apply strips of rubber adhesive plaster in such a way as to entirely encircle the joint and several inches of the limb above and below it, so as to make firm and equable compression. The joint in which it has been found to be of the greatest value, and in which the results, both immediate and permanent, are truly remarkable, is the knee. One of these cases treated by this method is detailed, showing exactly the mode of procedure. The chief advantages of this dressing are its small weight, the immediate relief from pain that it affords, and that it permits the joint functions—motion and weight-bearing—without injury. A number of patients were doing hard labor a day or two after the dressing was adjusted to an acutely inflamed knee-joint. As a rule, the patients are permitted to use the limb in any way that does not cause pain or discomfort. We are indebted to the sprain treatment for the suggestion of adhesive plaster as a joint support; but it had not been employed in the treatment of acute serous synovitis previous to the first publication on this method by Hoffmann in 1895.—*Dr. P. Hoffmann, N. Y. Med. Jour., Med. Review.*

CELLULOID YARN; A NEW MATERIAL FOR SUTURES AND LIGATURES.

J. PAGENSTECHEK reports, in the *Philadelphia Medical Journal*, the brilliant results from the use of linen thread which has been impregnated with a solution of celluloid. For a few years he has used this new material exclusively for all purposes, and has found it superior to all others, whether used only for skin sutures, internal sutures on the bowels or the bladder, for uniting the capsule of joints, or even to sew up the torn ligamenta cruciata. In all these cases this material has proven to be the best that has been used. The sterilized yarn shows its good properties when dry, but any remnants may be kept in good condition in alcoholic sublimatè. It can be sterilized with the bandages in steaming vapor. By impregnation with celluloid the yarn acquires great firmness and resistance: the surface is smooth and brilliant, and its tendency to absorb pus and other secretions from wounds has comparatively ceased. Therefore the thread does not expand or unravel; knots hold with absolute security. As the strength of the thread is increased by the addition of the celluloid, and is much greater than that of silk, finer threads can be used, which will not break while being knotted. Another advantage lies in the fact that it is more readily handled, especially while threading the needle, as the new thread is rigid and easy to control.—*Medical Review*.

THE USE AND ABUSE OF POULTICES.

S. E. EARP, Indianapolis, believes that much harm results from the use of a poultice because proper instructions are not given to patients, and they remain in ignorance as to what is to be expected from its use. As a rule, the poultice should be non-irritating, it should be used hot and renewed often. Its virtue depends on the heat and moisture, and hence it is of little importance whether it consists of flaxseed meal, cornmeal, etc., except so far as these are capable of retaining the heat, and the selection is a matter of convenience. The statement of many that the antiseptic solution has superseded the poultice in the treatment of open wounds is somewhat misleading, and should not be a reflection on the latter from the fact that poultices were frequently used when they should not have been. The benefits of the poultice as such, or as a medium, are thus summarized: 1. To relieve congestion. 2. To reduce inflammation. 3. To promote absorption, favor resolution, or hasten suppuration. 4. To diminish

tension. 5. To soften incrustations. 6. To encourage tissue relaxation. 7. To stimulate healthy granulations. 8. To perform the office of a deodorant and, in a sense, of an antiseptic.—*N. Y. Med. Jour., Med. Rev.*

GERMICIDE FOR THE GONOCOCCUS.

The latest thing which is vouched for as a sure destroyer of the gonococcus is picric acid. It is claimed by those who have used this method that it exerts almost a specific action in chronic urethritis. In using the remedy, a solution of from 1 to 2 per cent. is employed, and it is always used by instillation. The soft or hard catheter is introduced into the urethra as far as the cut-off muscle, and the injection is slowly made until the fluid flows from the anterior urethra. It is claimed that many cases have yielded to this treatment that have resisted protargol, nitrate of silver, and permanganate of potassium.—*Medical Review.*

LUBRICATION OF THE CATHETER.

A wholly satisfactory lubricant for catheters has not been devised. These instruments, which should be aseptic, are with difficulty rendered so, and it is still more difficult to keep them so. The problem of lubricating them, and at the same time avoiding infection, is difficult to solve. One of the latest recommendations for this purpose is that of Kraus, who uses a paste composed of tragacanth, 2.5 parts, glycerin, 10 parts, and a 3-per-cent. solution of phenol (carbolic acid), 90 parts. This, he claims, is an admirable lubricant, is easily removed by warm water, and is aseptic.—*Medical Review.*

SPRAINS.

The Gibney treatment of sprained ankle is described as follows: Ordinary adhesive plaster is cut into strips one-half-inch wide and in two lengths—twelve and eighteen inches. As soon as the patient is seen, one of the longer strips is placed around the ankle parallel to the sole of the foot. Beginning in front of the big toe, the strip is carried around the ankle just above the contour of the sole, and the end is brought back across the top of the foot to about the point where the strip began. It is well to place, overlapping this initial strip, a parallel piece. These strips should be drawn as tightly as possible. Next, another strip should be placed at right angles to them, which makes it run parallel

to the back of the leg. One of the shorter strips should be selected for this purpose. Beginning well behind and above the ankle, this strip should be carried down around the sole of the foot and brought up on the other side of the leg, making, as it were, a stirrup for the foot. This strip is closely applied. Now the strips should be applied alternately, first one around the ankle parallel to the sole, and then one parallel to the back of the leg, each one overlapping the one previously applied, running in the same direction to some extent, until the entire foot is enclosed in a boot of adhesive plaster, having the appearance of a shoe in which part of the heel has been cut away. Over this dressing is now placed an ordinary roller bandage. The patient should be careful for a day or two, when he can begin to move around rather freely. This dressing should be kept on until the pain and swelling have subsided. If the dressing becomes loose it can be reinforced by additional strips placed over the loose ones.—*J. H. Adams, in Railway Surgeon.*

REMOVAL OF EAR WAX.

Hardened wax in the external ear can often be removed readily by injections of warm water and soap, soda or ammonia. Many cases resist this, and require the softening effects of glycerin or sweet-oil for a day or two before syringing. Do not bother with these long processes, but use a half-strength solution of hydrogen dioxid in the ear for about five or ten minutes. This will disintegrate the hardest plugs, and they can be removed with very little syringing. I have yet to see the case in which this process has caused irritation or inflammation. Do not use too much force with the syringe. Wipe the ear perfectly dry with absorbent cotton and apply petrolatum. Wear a small plug of cotton in the ear for one day after removal.—*Phila. Med. Jour.*

EPISTAXIS.

Treatment.—All that is necessary in epistaxis is to fashion with a pair of scissors a dry plug of prepared sponge, in size and length comparable with the little finger of a twelve-year-old boy. This should be carefully soaked in boiled water, to free it from grit, squeezed dry to free it from unnecessary fluid, and inserted its full length, gently, along the floor of the bleeding nostril. No

styptic is necessary. The expansive pressure of the soft sponge against the bleeding side, increased by the coagulation of a few drops of blood in its interstices, will check the bleeding at once. It should be removed in twelve hours; under no circumstances should it remain longer than twenty-four.—*Sajou's Cyclo.*

BURNS AND SCALDS.

Treatment.—According to E. T. Milligan, burns, when under treatment, should be exposed as little as possible by changing dressings. Morphine should be used hypodermically for pain, and tincture of musk by the mouth as a cardiac stimulant. The latter seems to control shock, due to injury. In burns of the first degree an ointment containing a sedative or carron-oil can be applied with advantage. In burns of the second or third degree picric acid in solution (5 to 1,000) is an excellent application, but a dry dressing is personally favored. A powder containing $2\frac{1}{2}$ drachms of pulverized camphor and 1 ounce each of prepared chalk and magnesium sulphate is one of the best. When powders are used the injured parts should be covered with oiled silk to keep the dressing from becoming entangled in the injured parts. When prostration is great, a saline infusion is of marked value.

Ellice M. Alger has found that the combination of picric and citric acids, which Esbach long ago devised for the detection of albumin, is more effective than the picric acid alone, in burns of the second degree.

Esbach's solution consists of 10 parts of picric acid, 20 of citric acid and 1,000 of water. Without any elaborate attempts at antisepsis the bullæ and vesicles should be opened with a clean blade and the fluid applied freely, care being taken that the solution reaches the interior of each one. The combination after the first smart has passed removes the pain very quickly. After the excess of fluid has drained off the part may be covered with rubber tissue or soft gauze, and left undisturbed for several days. After two or three days the fluid should be reapplied to such areas as are moist, and the part carefully recovered.

R. H. Gay has obtained good results from using the following in burns and scalds: 1 pound of mutton-tallow, 1 drachm of English resin and 1 drachm of bees-wax should be put into a vessel, perfectly free from grease or other substance, over a slow fire. After the ingredients are melted and thoroughly mixed, they are to be removed from the fire

and $\frac{1}{2}$ pint of linseed-oil (*linum usitatissimum*) is to be added, stirring until cool to prevent separation. A few minims may be dropped on a smooth surface to cool, to see whether it is of the right consistency or not. If too soft, tallow should be added; if too hard, oil. It is now ready to pour off into boxes for use. The directions for using are to spread it on old linen or cotton cloth, to a sufficient thickness, large enough to cover the burn or scald, and to renew daily. This preparation is cooling, detergent and healing, and if instantly applied to burns and scalds will almost immediately stop the pain and prevent blistering.

In the treatment of scalds and burns Edward Roelig finds aristol of great service. After a thorough disinfection and cleansing of the burned area, and the opening of the vesicles, a dressing of aristol salve smeared upon sterilized gauze in a layer of about the thickness of a knife-blade is applied, and this dressing changed daily. The dressing is covered with cotton and held in place with gauze bandages. Granulation and cicatrization occur promptly. In personal cases, at first an aristol salve, consisting of $1\frac{1}{4}$ drachms; ol. olivar., $2\frac{1}{2}$ drachms; lanolin, 10 drachms, was applied, and, when the wound surface had become smaller and granulations had formed, aristol powder was dusted on, and covered with gauze and cotton.

Vehmeyer has used with good results an ointment containing fluorin, and sold under the name of "Epidermin," in the treatment of severe burns and scalds. It should be renewed twice a day. Relief of pain, prevention of profuse suppuration and rapid growth of any islets of undestroyed epidermis are its great advantages.

Naftalan has been found by Richard Bloch to so fully meet the therapeutic indications demanded in burns, whether caused by hot fluids, steam or heated solids, etc., as to be almost a specific.

The use of saline transfusion for burns and shock is recommended in an editorial, which states that, even if the toxæmic condition is not directly improved by the saline injections into the subcutaneous tissues of veins, there is still another one in which this method of treatment may be of great good, in that surgical shock is nearly always present as a result of severe burns and scalds. In shock a condition of profound relaxation of the blood-vessels exists, so that arterial pressure is very low and the vital centres are not properly supplied with blood.

While intravenous injection does not necessarily raise blood-pressure, this method of treatment is capable of read-

justing the circulation to such an extent that the evil manifestations of vasomotor paralysis are set aside. It seems, therefore, that, in treating cases of severe burns or scalds, this method of procedure should not be ignored, but should be actively employed.

Patel notes the case of a child, aged $2\frac{1}{2}$ years, who had a burn of the second degree, involving, more or less, both arms and legs, face and trunk. The general condition was bad, the pulse imperceptible and the child unconscious. Caffeine, alcohol, bouillon and milk were given. On the third day 250 cubic centimetres of saline solution were injected, and on the fourth day the child became for the first time conscious. Between the fourth and twenty-second days six similar injections were given. Until the twentieth day he improved in every respect, but on the twenty-second his general condition was not so favorable, and on the twenty-fourth day he died. At the necropsy the lungs alone presented appreciable lesion; diffuse catarrhal pneumonia. The great improvement after the first four injections and the survival of the child for nearly a month seemed to be due to the serum. The cause of death in extensive burns is thought to be due to an autointoxication. Consequently, once the period of shock is passed, the treatment should be directed to freeing the system of the circulating toxin, and for this saline injections answer well. Due attention should also be paid to the emunctories, so as to still further favor the elimination of toxins.

Azzarello divides the theories of the cause of death from burns into four classes: (1) death from shock or extreme pain; (2) embolism, thrombosis and destruction of the blood-elements; (3) pyæmic infection through the burnt surface; (4) poisons formed by the action of heat on the tissues or autointoxication from deficient excretion by the skin. By experimenting upon dogs and rabbits, it is personally claimed that the intoxication theory is the correct one. Injection of large quantities of artificial blood-serum subcutaneously appeared to save life in several cases.—*Monthly Cyclopædia of Practical Medicine.*

Jottings.

THE TRUE VALUE OF GARGLING.—By gargling in the usual way only the upper anterior surface of the uvula and soft palate and base of the tongue are reached. The method of holding the nose and throwing the head well back when gargling enables the fluid to reach every surface of the pharynx. The value of the two methods can readily be tested by painting the posterior wall of the pharynx with a strong solution of methylene blue. After gargling with water in the usual way, the latter will be perfectly clear and unstained; then let the patient gargle again by the method suggested, and the ejected fluid will be found stained.—*Editorial, Charlotte Medical Journal.*

HOW TO USE EYE DROPS.—A suggestion as to how to put drops in an eye may be of service. Have the patient lie down or sit in a reclining chair, with head thrown back and eyes closed. Drop the medicine on the closed lids, allow it to remain until it becomes heated from contact with the skin, then open the lids gently and allow it to flood the eyes. In the case of children particularly will this be found to make the work easy.—*Alkaloidal Clinic.*

REMOVING EAR WAX.—The *Western Clinical Recorder* says that cerumen may be quickly and effectually softened by filling the meatus with peroxide of hydrogen and allowing it to soak for a few moments, after which it may be easily removed by syringing with warm water.

POULTICES IN BRONCHITIS AND BRONCHO-PNEUMONIA IN CHILDREN.—A. W. Senior states that poulticing of the chest in bronchitis and bronchopneumonia is unscientific and prejudicial to the welfare of the patient. The difference in the temperature of the poultice when applied and when removed is such that one might as well be continually removing the child from a warm room out into the cold every few hours. The weight of the poultice must also be taken into consideration. The disadvantages of poultices more than counteract any beneficial influences they may have.—*British Med. Journal.*

The diagnosis of scarlet fever is not always easy, and Lindsay (*British Med. Journal*) has very well summarized the main points to be borne in mind. These are:

1. Initial vomiting, very constant in children under ten, less so above that age, and rare in measles, German measles and diphtheria.

2. Undue frequency of pulse—say 140 to 150—out of proportion to the other symptoms.

3. The rash, beginning on the upper part of the chest, over the clavicles and about the flexures of the neck; often well marked on the back of the waist.

To discriminate between scarlatina and German measles, Lindsay is in the habit of relying upon the following points: In scarlatina there is initial vomiting; a brief but well marked prodromal stage, with vomiting, chills, headache and sore throat, sometimes going on to ulceration; no early enlargement of post-cervical glands. In German measles there is no vomiting, no prodromal stage, the rash being often the first symptom, and always appearing on the face; little or no constitutional symptoms; no ulceration of the throat; a very characteristic early enlargement of the post-cervical glands.

FOREIGN BODIES IN THE EAR.—Hummel (*Munch. Med. Woch.*; *Am. Jour. Med. Sci.*) makes the following deductions:

1. The relation of the normal ear canal to inanimate foreign bodies is entirely without reaction; that is, the foreign body in the ear does not, *per se*, endanger the integrity of the ear.

2. Every hasty endeavor at removal is, therefore, not only unnecessary, but can become very injurious.

3. In all cases not previously interfered with (with few exceptions), the foreign substance can be removed from the ear by means of syringing.

4. The general practitioner should never employ anything but the syringe in his endeavors at removal of foreign bodies from the external auditory canal.

5. An instrumental removal of a foreign body from the ear should be effected only by one fully able to examine the ear with an otoscope and acquainted with every operative manipulation in this region.

PRACTICAL HINTS REGARDING CHILDREN.—Always teach a nurse that a child cannot swallow as long as the spoon is between the teeth; that it is advisable to de-

press the tongue a brief moment and withdraw the spoon at once, and that now and then a momentary depression of the nose is a good adjuvant.

The taste of quinine is disguised by coffee, chocolate and "elixir simplex."

Powders must be thoroughly moistened; unless they be so the powder adhering to the fauces is apt to produce vomiting.

Inunctions require a clean surface, and are best made where the epidermis is thin, and the net of lymph-ducts very extensive, as on the inner aspect of the forearm and the thigh.

Babies, after having taken opiates for some time, demand larger, and sometimes quite large, doses to yield a sufficient effect.

Febrifuges and cardiac tonics, such as quinine, antipyrine, digitalis, strophanthus, sparteine, convallaria, etc., are tolerated and demanded by infants and children in larger doses than the ages of the patients would appear to justify.

Mercurials affect the gums very much less in young than in advanced age.

The rectum of the young is straight, the sacrum but little concave, the sphincter ani feeble, and self-control is developed but gradually; for these reasons rectal injection is allowed to flow out or is vehemently expelled. Therefore, one which is expected to be retained must not irritate. The blandest and mildest is a solution of six or seven parts of chloride of sodium in a thousand parts of water, which serves as a good vehicle for medicine unless incompatible with the latter. The injection must be made while the child is lying on its side (preferably the left side), not on the belly over the lap of the nurse, for in this position the space inside the narrow infantile pelvis is reduced to nothing.

In many cases of intense intestinal catarrh, large and hot (100° to 108° F.) enemata will relieve the irritability of the bowels and contribute to recovery. They must be repeated several times daily. When there are many stools, and these complicated with tenesmus, an injection, tepid or hot, must or may be made after every defecation, and will speedily relieve tenesmus.—PROF. JACOBI, in *Pacific Med. Jour.*

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Editorial.

SURGEON-CAPTAIN FISET.

The many friends of the Hon. Dr. Fiset will read with great pleasure the following extract from the report of Lieut.-Col. Otter, Commanding the 2nd Battalion Royal Canadian Infantry, on the Battle, which is now nominated "Paardeberg":

"The company stretcher-bearers exhibited great pluck, and five of them were among the wounded. Three of them were wounded in conveying Captain Arnold from the firing line, the stretcher upon which he was being made a special object of attention by the Boer marksmen. In connection with this incident I must note the courage displayed by Surgeon-Captain Fiset, who, when the stretcher upon which Captain Arnold was being brought to the rear, was stopped a short distance from the firing line by the wounding of one of the bearers, went forward and attended to Captain Arnold, and subsequently assisted as a bearer in bringing him to the rear. Captain Fiset also attended to many others wounded, under fire during the day."

THE ROYAL ARMY MEDICAL CORPS.

In connection with our article in the March number of

the RECORD on "Medical Officers of the Canadian Militia," we direct the attention of our readers to the following extract from the *British Medical Journal* of 17th March, headed, "The Undermanning of the Army Medical Service":

Compared with the February list, the total has decreased by 4, accounted for as follows in the obituary: 1 murdered on Burmah-Chinese frontier, 1 died of wounds and 2 from disease in South Africa.

The number at home has sunk from 117 to 75, no doubt through the mobilization of the Eighth Division, while the number in South Africa has correspondingly increased from 350 to 389. The number at other foreign stations is 386, against 385, while the unposted have declined from 6 to 4.

It must be noted that if the administrative and the executive officers holding staff appointments, and therefore not available for general duty, be deducted from the 75 at home, only about 50 full-pay executive medical officers are left for general duty. These are reinforced by about 84 retired-pay officers, called "acting" in the Estimates, and by 33 on the retired list "temporarily employed" (of whom 2 are in South Africa), and by a large contingent of civilian surgeons, of which there is no complete return.

The effective total strength of full-pay army medical officers is nominally at present 854, not including the Director-General, but if 16 seconded officers be deducted the real strength is 838. This number is insufficient for ordinary peace duties, and, of course, quite unequal for the present strain. It provides no margin whatever for current casualties and periodical reliefs; it will be still more insufficient when the proposed addition of 27,600 men to permanent army establishments is effected. The present number of 838 officers must indeed be reinforced by at least 200 if the service is to be placed on an efficient footing.

DAMAGES CLAIMED FOR ANTENATAL INJURIES.

According to the *New York Medical Record*, the Supreme Court of Illinois has recently adjudicated in a remarkable case. An infant claimed damages for a deformity alleged to have resulted from injury to the mother before its birth. The mother, while pregnant, was injured in an

elevator accident at St. Luke's Hospital, Chicago, her left leg being caught and crushed. When the child was born his left leg was deformed. The hospital authorities settled with the woman for her injuries, and then she brought suit in the child's name for 50,000 dollars damages for the deformity, which it was claimed was due to the same accident. The Court dismissed the suit on the ground that at the time of the accident the child could not be credited as a separate being capable of sustaining an action independent of the mother.

The British *Medical Journal* of March 17 states that Dr. William Osler, now Professor of Medicine in Johns Hopkins University, Baltimore, has sent in an application for vacant chair of the Practice of Physic in the University of Edinburgh. Dr. Osler's many friends not only in Montreal, but throughout Canada, will wish him success. There are three other candidates, all of whom are graduates of the University of Edinburgh.

At a largely attended meeting of the profession in Ottawa a short time ago, it was decided to hold the meeting of the Canadian Medical Association on the 12th, 13th and 14th of September 1900. The meeting was unanimous in the desire to make the Century gathering of the Association the best meeting ever held. A large sum of money was subscribed by those present for the entertainment of visiting members, making it a certainty that those in attendance will have, if possible, even a better time than they have ever before had in the Capital City.

The President, Dr. R. W. Powell of Ottawa, has recently heard from Mr. Edmund Owen of London, England, the gratifying information that he will deliver the Address in Surgery. This in itself should assure a large attendance.

Book Reviews.

A Pocket Medical Dictionary, giving the pronunciation and definition of the principal words used in medicine and the collateral sciences. By George M. Gould, A.M., M.D. Fourth edition revised and enlarged, 30,000 words. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut street, 1900. Price, \$1.

This little book can justly claim to be a "Multum in Parvo," for within its very limited size is contained a vast amount of practical information briefly put. An author who can say, as Dr. Gould does, that the total circulation of his dictionaries has passed the one hundred thousand mark, must feel that his efforts have filled a long-felt want in the medical profession, and such popularity should be very encouraging to him. Since the publication of the last edition of this little work the author has been able to find an unexpectedly large number of eponymic clinical terms not previously included, and in order to insert them the table itself has been rewritten and greatly increased in size. The Dose Table has also been enlarged by the inclusion of the names and doses of drugs recently introduced. To medical students this little book will be invaluable, as it may be carried in the pocket and be available for hurried reference, and to serve as a passing reminder of the essential meanings of the more commonly used terms. The binding and general "get up" of the book is excellent, and the price (\$1) brings it within the reach of all. R. C.

International Clinics. A quarterly of clinical lectures on Medicine, Neurology, Surgery, Gynæcology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on treatment and drugs by professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M.D. (University of Pennsylvania), Philadelphia, Instructor in Clinical Medicine in the University of Pennsylvania; Professor of Clinical Medicine in the Philadelphia Polyclinic, etc. Volume IV., Ninth Series, 1900. J. B. Lippincott Co., Philadelphia.

The present volume contains thirty-seven articles on different subjects, and many of great interest. Among remedial agents discussed are papers on Rest, a Rational Therapeutic Agent in the Treatment of Dilatation and Dislocation of the Stomach, by C. D. Spivak, M.D., and Hydrotherapy in the Homes of the Poor, by Alfred C. Haven, M.D. The latter discusses the advantages of water treatment at the homes of patients, and describes a very convenient form of portable bath, the use of which obviates some of the difficulties of carrying out this treatment where a trained nurse is

not available, and other facilities limited. Among articles on treatment are: The Treatment of Pneumonia by Hypodermoclysis, by Frederick P. Henry, M.D.; Albuminuria in High Altitudes and its Treatment, by Edward C. Hill, M.S., M.D.; Treatment of the heart in Chronic Interstitial Nephritis, by Arthur R. Elliott, M.D. In medicine, Morbid Predispositions or Diathesis, by Sir Dyce Duckworth, M.D., LL.D.; Bronchial Asthma, by Frederick Müller, M.D.; Specific Disease of Liver, by George T. Cole, M.D.; The Necessity of Medical Attention to Abdominal Cases requiring Surgery, by A. L. Benedict, M.D.; The Time of Heart Murmurs and the Significance of the Apex Beat, by Prof. Martius; Cerebral Apoplexy, by Prof. Emanuel Mundel, M.D. Other interesting papers are those by Carl Beck, M.D., H. P. Newman, A.M., M.D., E. Fletcher Ingals, M.D., and Prof. H. Hallopean.

J. B. McC.

PUBLISHERS DEPARTMENT.

SANMETTO IN CHRONIC ORCHITIS.

J. A. Stothart, M. D., Savannah, Ga., reports the following case: "During November, 1898, a Greek fruit vender called at my office, suffering with chronic orchitis. The patient stated that the first attack occurred four years prior to this time. During the four years there had never been more than two and a half months between the attacks. He had been under treatment most of this time, and several times in the hospitals, and had been discharged as cured by several physicians. The testicle had almost arrived at the condition of ossification, but at no time had there been any pus formation. I prescribed Sanmetto, and directed that the treatment be continued for two or three months. My treatment was carried out to the letter, and there has never been any return of the trouble since beginning the use of Sanmetto. I have used Sanmetto in other urethral troubles with very satisfactory results."

LITERARY NOTES.

People who want to read Augustine Birrell's delightful address on the question, "Is it Possible to Tell a Good Book from a Bad One?" will find it in full in *The Living Age* for April 14. It is full of humorous and chastening reflections.

"John England's Outgoing," the short serial now running in *The Living Age*, is a story of Georgian days, told with singular delicacy and quaintness.

Lady Broome's "Bird Notes" in *The Living Age* for April 21, and the *Quarterly Review's* paper on The Wild Garden, which forms the leading article of the same number, are charming and seasonable.

Peter Rosegger's story, "The Seal of Confession," published in *The Living Age* for April 21, in a translation by Dr. Hasket Derby, is a striking study of the workings of conscience, and a conflict of moral duties.

The facts in that present day tragedy, the political obliteration of Finland, are compactly but forcibly presented by Mr. J. Westlake, in an article which *The Living Age* of April 21 reprints from *The National Review*.

The Living Age for April 28 will print the hitherto unpublished letters between Thomas Carlyle and Robert Chambers, which first saw the light in a recent number of *Chambers's Journal*. In the same number of the magazine, A. T. Quiller-Couch discourses feelingly upon The Tragedy of the Minor Poet.