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EPILEPTIC INSANITY.*

BY DR. MILLMAN, OF TORONTO.

Epileptic insanity, as the name implies, is the disease known as epilepsy combined with mental derangement. Epileptic fits may continue for years with very slight, or, indeed, with no appreciable mental disturbance, especially if the fits are few and far between. In fact, such rare fits are compatible with great mental power. Julius Cæsar, Mahomet, Napoleon I., are said to have had such occasional attacks. But it is true, as Clouston in his work on mental diseases sets forth, "Frequent recurrence of epileptic fits for many years tends in some degree to impair the mental faculties, to dim the reasoning power, to twist or take the fine edge off the feelings, emotions, and sensibilities, to affect the memory, and to change the 'character,' even where there is no actual insanity."

It is usual for the insanity not to follow at once the first appearance of the fits. Most commonly years elapse before it comes on. Violent mania has, however, succeeded the very first fit, or at least the first fit the patient was known to have had.

The mental derangement of the epileptic may assume the form of maniacal excitement, of melancholic depression, of mental enfeeblement or dementia, or of delusional perversion,

or perversions of the moral being: any one or more of these states may be revealed by the patient.

I might here add that, although I have had large experience in observing cases of epileptical insanity, still in preparing this paper I am indebted to the writings of Gower, Clouston, Maudsley, Bennett, Seguin, W. Bevan-Lewis; in fact, from the latter I have quoted quite freely.

To witness a typical epileptic fit, one is surprised that the patient ever again returns to a normal mental condition, and particularly so soon after the fit. There is such a brutal expenditure of force wholly out of proportion to the normal physiological outlay. The explosive violence is so severe that the nervous tracts traversed by the storm are so damaged that transiently they are incapacitated for the further conduction of the nerve current, and the centre itself is paralyzed for the time by its enormous expenditure of energy. The mind, however, is prone to suffer only when the functional disturbance occurs in the highest nervous arrangements of the cerebral cortex—"the substrata of consciousness." It is thus important to remember that any one part of the cerebral cortex may be the site of an epileptic discharge. Discharges in motor realms will afford endlessly diversified combinations and sequences of spasms, while discharges from sensory realms will likewise implicate correspondingly complex centres. Discharges beginning in motor centres may spread to others and finally involve the

*Read before the Ontario Medical Association.

sensory and most complex centres, ending in loss of consciousness, or they may begin in the sensory and spread to the motor. In many cases, especially unilateral convulsions, we can trace the spread of the discharge without much trouble, but this is not the rule with the epileptic seizures associated with insanity. Here we most frequently observe attacks of *petit mal*, or else that form of *grand mal* in which the loss of consciousness is early and complete, and the spread of the discharge is so rapid and complete that the whole body is almost simultaneously affected by the convulsion. Consciousness is lost so early that the patient falls instantly, as though struck senseless by a blow.

The course of the discharge from sensory areas cannot, from the very nature of the case, be followed. We can only learn the existence of an aura from the subsequent statements of the patient. We must not, therefore, be too much impressed by the results of the motor discharges and lose sight of the fact that equally powerful discharges, of which we see no result, may pass along sensory areas at the period when consciousness is abolished. The student is too apt to pay undue attention to the muscular spasms and forget that more noxious effects are being produced in the areas of mental and sensorial activity, silently, and concealed from his view. It is, therefore, important to bear in mind the results that may arise from the implication of the sensory portions.

From the above it is very apparent that the large number of epileptics in our asylums present great divergence in the history and progress of their affection. Some remain inmates for many years with the intellect but little impaired, and then only at those periods when subject to epileptic seizures; others, with few, if any, convulsive attacks, betray at long intervals periods of depression, of moroseness, or of excitement; yet in the interim they are perfectly rational, cheerful, pleasant, and very obliging. In others, again, the mind becomes rapidly enfeebled and these soon sink into dementia, this being more profound at the time of having fits; then, in others, wild, ungovernable fury prevails. Yet again, in two cases where the motor disturbance is similar, one is struck with the wreck of mind in one and the clearness of intellect in the other. The resulting dementia,

therefore, varies very considerably in degree, so that each individual case may be unlike the other in this respect; and this is undoubtedly dependent upon the varying seat of the primary discharge from the cortex. It is evident, therefore, that we must not rest satisfied with a mere observation of the motor discharge as shown by the convulsive seizure; but we must likewise question our patient closely upon his sensations and mental disturbance immediately preceding the loss of consciousness, and observe closely his condition as presented after the paroxysm and up to the full re-establishment of conscious activity. The patient may be blind, may have anæsthesia on one side of the body, may be using his jaws as if eating something, with corresponding movements of the tongue, as if the discharge had been from the centre of taste.

All cases of epileptic insanity should be studied before, during, and after the paroxysm. In many cases a marked mental change may be observed before the fit. For some days the patient is not like himself, and the educated attendant is quick to perceive these changes. He knows a fit is impending, and he is on the alert. He indulges the patient in his whims, endeavoring to soothe his morbid irritability and especially guard him against unnecessary annoyances. The patient, as a rule, is very irritable and unreasonable, and it is useless to argue with him; in fact, that generally makes matters worse. He may be restless and melancholic, having a dread of impending evil. He may be joyous, or, again, he may be very suspicious, may claim that his food has been drugged, and that that is the cause of his trouble, and not epilepsy. Others are very much devoted to their Bible, claim they are good men, and do not want to be disturbed. Others believe they have been insulted, and are ready to do violence.

In some cases the aura now follows. This may be of one of the special senses of sight, a bright light, flashes of light, etc.; of hearing, as hissing, blowing, or explosive sounds, or there may be a loss of hearing, or the aura may begin in the epigastrium and rise in the throat, producing a choking sensation, or there may be violent palpitation of the heart. But, as before stated, frequently there are no such premonitions, but the patient falls suddenly, as if he

had received a heavy blow. The "epileptic cry" is very frequent among the insane. This may be a low, plaintive wail, or a loud, wild scream, or a succession of piercing shrieks, as if overcome by terror. It may be a hoarse gurgling in the throat, or a prolonged groan. An attack of *grand mal* is too well known, and I will not take up your time in describing it. This period may last for only a few minutes or for several hours.

In attacks of *petit mal* there may be nothing observed beyond momentary loss of consciousness and pallor of face. The patient may be standing or sitting, but does not fall. He may drop what he holds in his hand or suddenly be arrested in movement, but may instantly recover himself and act as if nothing unusual had occurred. Esquirol relates the case of a lady equestrian who had frequent attacks of *petit mal* when on horseback, yet never fell off. There was a momentary arrest in her conversation, the bridle dropped from her hands, but in a few seconds she had recovered and finished the sentence of conversation interrupted by the attack. One of the premonitory auræ before noted, with some vertigo and reeling, may constitute an attack. A patient may be subject to such attacks for years without a single seizure of *grand mal* occurring, or they may alternate in the same patient. Dr. Lewis cites the case of a patient in the West Riding Asylum who one morning, while sitting up in bed, was requested to write his reply to a question. He wrote a lengthy answer, interrupted by four or five attacks of *petit mal*. There was a momentary loss of consciousness, the head drooped slightly, the pencil slipped through his fingers, but was almost instantly regained, and the sentence was continued without any apparent disconnection of words or displacement of letters; the interruptions were so slight that if he had not been closely watched the condition might have readily been overlooked. In a medico-legal sense such a case is of the utmost importance to recognize, as in the midst of his slight seizures such a patient might easily have written a letter showing no confusion of ideas and consistent in all respects. It is also well known that the slight attacks issue in the most rapid impairment of the intellect. This is because, as pointed out by Hughlings-Jackson,

the disease is of the "very highest nervous arrangements in the whole nervous system, that is to say, the substrata of consciousness." As he also points out, in such cases we do not have muscular convulsive seizures, but convulsions of the ideas.

We now come to the period after the seizure, and this is a very important one. The mental automatism then displayed is in many cases prolonged, and affords us the opportunity of careful study. The mania may be of a very transient duration, but is not always so. It may extend over many days without further epileptic seizures. The excitement does not bear any relation to the severity of the attacks or the number of them. The greatest excitement may follow attacks of *petit mal*; and on the theory of Hughlings-Jackson we might expect this, seeing that the conscious substratum is most involved. The excitement is most acute, attended by almost ungovernable violence and frenzied fury. No maniacs show such blind, uncalculating fury as the epileptic. On this account he is one of the most dangerous subjects we have to deal with in our asylums, for the attacks often occur with slight, if any, warning; the signal first given being often an attack of brutal and impulsive violence. The expression of the patient is pale, ghastly, eyes staring vacantly. He may not utter a word, rushes madly at his attendants, struggles wildly, and appears wholly oblivious to existing conditions around. At these moments suicidal or homicidal acts are not seldom accomplished. (The above is not always the rule, for I have seen epileptics who were almost always good-natured, but such cases are very rare.) He may be urged on by some delusional notion of persecution. This he may have had before the seizure, and it now reappears; for it is a fact, that what was most vivid in the mind just before the seizure is frequently the most vivid after the seizure, when consciousness is returning. Just before the seizure he may have been answering a question but did not finish it; on returning to apparent consciousness he completes the answer. This is a very important point to remember, for before the attack he may have had sufficient self-control to withstand the delusion, but now having no such control of himself he performs a suicidal or homicidal act. From a medico-legal point of

view, we cannot too strongly insist upon this feature, that the leading ideas in the pre-epileptic stage are likely to become operative in conditions of post-epileptic automatism. This automatic condition is of great interest. Patients at this stage perform not only the most incongruous acts, but carry out what would seem to be complicated purposive acts, to which they are entirely oblivious on return to normal consciousness.

Maudsley, one of the ablest writers on mental diseases, and an expert as a medico-legal jurist, cites case after case of homicidal acts of the epileptic, and among them such cases as where considerable ingenuity has been displayed in attacking the victim unawares and afterwards in concealing the crime. The whole deed was performed automatically, as it were; a mere impulse, with no—or very little—remembrance of it afterwards.

While assistant superintendent in Kingston Asylum, I remember a man being sent from Ottawa. He was a married man, about 45 years of age; had been an epileptic for years. Shortly before being sent to Kingston Asylum, it seems he consulted a lawyer on some business. The lawyer could not coincide with his views. This annoyed the man; he left the office, went to a hardware store, bought a butcher's knife, returned to the office and stabbed the lawyer. At the trial he was found insane and sent to the asylum. This man claimed he did not remember going to the office to consult the lawyer, or any of the subsequent events. I believe him. He acted automatically; that period of his life was a perfect blank to him.

In the case of Harvey, who was hanged at Guelph something over a year ago for killing his wife and two daughters, I believe he was the victim of epilepsy—not the typical muscular convulsive form, but, as Hughlings-Jackson puts it, a case of convulsion of ideas. This man claimed the whole affair was a blank, and no doubt it was so.

There is no form of insanity that, outside of asylums, is more frequently the cause of murders, except, perhaps, the alcoholic.

One-tenth of epileptics become inmates of asylums, and there, possibly, to spend the balance of their life.

Seeing that the asylum or the gallows is the

end of so many of our epileptics, should we not consider it our bounden duty to do all we can for this unfortunate class?

If we cannot hold out a sure cure, we can in most cases promise considerable amelioration of their disease; but we must impress on these people the necessity of faithfully carrying out all our instructions. Unless they promise to lead such a life as is mapped out for them, unless they will take their medicine regularly and persistently, I am afraid we will fail in doing good. The epileptic is a creature of impulse, and one of the first difficulties is to get him to control his appetite. He is frequently addicted to alcohol, and is often a gourmand. An insatiable appetite is often a precursor to a fit. His diet should be plain, easily digested, with no surfeits; his life should be regular, meals at fixed hours, retiring early at night, rising early; he should do a certain amount of work, manual preferred; take daily baths, and get plenty of fresh air.

Of all the drugs that have been tried in this disease, none have been so beneficial as the bromide salts. We should arrest the fits as soon as possible, and with this end in view should prescribe the bromides in preference to any other drug. Should begin with moderately large doses, say, half a drachm or two scruples three times a day. My own experience has been with the bromides of potassium and ammonium, and I prefer them, as they appear to agree with the stomach better than the combination of potassium and sodium. Then the ammonium is more or less stimulant, and thus does good where there is depression. In the asylums we have patients taking drachm doses three times a day; that is, half a drachm each of the potassium and ammonium salts. This dose has been given regularly for years to the same patients.

It is believed by a great many that the physical and mental depression resulting from their prolonged toxic effects constitutes a condition worse than the malady for which they are exhibited. The accuracy of this assertion is questioned by the best authorities. Dr. A. Hughes Bennett published a very valuable paper in the *English Lancet*, May 17th, 1884, with the object of showing that the above belief is erroneous. As physician to the Hospital for

Epilepsy and Paralysis, Dr. Bennett had had a large experience in the treatment of epilepsy. He writes: "The present enquiry is the result of an experience of 300 cases of epilepsy treated by myself with the bromides of potassium and ammonium. In all of these the clinical facts, as well as the progress of the malady, were carefully studied and recorded. The general conclusions arrived at were as follows: In 12.1 per cent. of epileptics the attacks were completely arrested during the whole period of treatment by the bromides. In 83.3 per cent. the attacks were greatly diminished, both in number and severity. In 2.3 per cent. the treatment had no apparent effect. In 2.3 per cent. the number of attacks was augmented during the period of treatment."

He further adds: "The form of the disease, whether inherited or not, whether complicated or not, recent or chronic, in the young or in the old, in healthy or diseased persons, appeared in no way to influence the treatment, the success being nearly in the same ratio under all these conditions."

In the same paper he gives a table showing the effects of the continuous administration of the bromides in the epileptic state in 141 cases.

At the end of one year in 51 cases the physical and mental powers were unaffected in 39, impaired in 6, bromide eruption in 8.

At end of two years in 34 cases the physical and mental powers were unaffected in 28, impaired in 2, bromide eruption in 6.

At the end of three years in 30 cases the physical and mental powers were unaffected in 28, impaired in 1, bromide eruption in 3.

At end of four years in 16 cases the physical and mental powers were unaffected in 12, impaired in none, bromide eruption in 2.

At end of five years in 6 cases the physical and mental powers were unaffected in the whole 6. No eruption.

At end of 6 years in 4 cases the physical and mental powers were unaffected in the whole 4. No eruption.

Minimum dose given was $1\frac{1}{2}$ drachms daily, viz., 15 grs. each of bromides of potassium and ammonium three times a day.

It must be remembered that the effects of epileptic fits on the physical and mental powers resemble considerably those attributed

to the use of the bromides, so possibly the latter have often been blamed for symptoms which were the result of the disease.

I have been in the habit of combining the the bromides with other drugs. Vegetable bitters for the stomach's sake, and Fowler's solution to counteract tendency to bromide eruption and also as a tonic.

Dr. Hughes Bennett states that the form of the disease, age of patient, etc., did not seem to affect result of treatment. However, some good authorities claim that epilepsy of childhood is much less benefited by treatment than when it appears later in life, and I know among the epileptic insane, nocturnal epilepsy is not so amenable to treatment as when the fits occur in the daytime. It is well in these cases to add digitalis to the mixture and also give a double dose of the bromides at bedtime.

The female epileptic insane are not benefited by the bromide treatment to the same extent as the men. Fortunately for the former sex, epileptic insanity is not nearly so common as among the male sex, although, according to Gowers, there are six female epileptics to every five male in the the world.

If the bromides fail it is well to try other remedies, but I think in most cases it is wise to combine them with the bromides. Among the more prominent of the drugs that have done good are digitalis, belladonna, chloral hydrate, ergot, oxide of zinc, iron, nitro-glycerine, nitrate of soda, etc.

In March of last year Dr. Seguin, of Providence, R.I., in a series of lectures delivered before the Medical Society of Toronto University, gave in detail the treatment of epilepsy. He said: "In undertaking the care of a case of this affection you should stipulate for plenty of time to study the case in all its aspects, and for rather frequent visits at first for the purpose of adjusting the doses, securing proper hygiene, etc." He adds: "Remember that you are prescribing the drug, not against the disease as a sort of entity or tangible enemy, but for the individual patient to reduce the excitability of parts of his nervous system to a certain point. The susceptibility of persons to the action of bromides varies very greatly. From these two considerations you readily perceive how delicate a matter it is to find the right dose for a given

patient; it sometimes requires one or two months of experimentation." Unpleasant bromism has been produced by very small doses in one case, while others can bear nearly half an ounce daily without any evil results.

He states that little children bear much larger doses proportionately than adults. Children from two to six years will need 40 to 60 grs. daily to arrest the attacks; and take these quantities without bromism.

Organic cardiac disease or feebleness of heart decreases the ability to withstand bromides. Acue is no guide to the dosage of bromides. It depends a great deal upon the peculiarities of the patient, as, for instance, an unhealthy skin, etc.

Dr. Seguin prefers the sodium salts and gives it alone, and advises it to be given largely diluted in slightly alkaline waters.

How the bromides act is not satisfactorily known, and possibly will be only theoretically surmised until we know more about the pathology of the disease. It is supposed that the morbid state in epilepsy is essentially an instability of the resistance in the cells of the cortex of the cerebrum. Like an electric battery, there is a discharge from the cells. Now the bromides are supposed to act by increasing the stability of this resistance, and, if they effect cure, they produce nutritive changes rendering the cell energy more stable.

Until recent years all that was done with the epileptic insane in asylums was to prevent them from doing acts of violence, destroying clothing, furniture, etc. They were looked on as among the most dangerous and troublesome of lunatics. Many of them spent most of their time in straight-jackets, muffs, strapped in chairs securely fastened to the floor, or tied in bed. When I first entered the asylum service this was the condition with some of these unfortunates, but the writings of Bennett, Gowers, Clouston, and others, on the efficacy of the bromides and the harmlessness of their continued use in most cases, have revolutionized affairs.

The epileptic, like all other insane in the asylums, is no longer in restraint. (And I might here add parenthetically that the word restraint will soon be unknown in these institutions. It is practically unknown in the Ontario asylums.) Thanks to the bromides, many of

the epileptic insane who formerly were most dangerous and maniacal are now quiet, industrious inmates, some of whom, remaining fairly well mentally, are allowed to go home to their friends. The trouble is, when they get away from the asylum care and routine, they are apt to neglect their medicine, live more or less irregular lives, and soon have to be sent back. Many of them are among the useful patients in the asylums, working steadily, and can be trusted by themselves. I know several epileptics in the Kingston Asylum who are working steadily, some in the carpenter shop, others on the farm, etc. Should these same refuse to take the bromides, as occasionally they do, fancying there is poison in the dose, then the epileptic demon bursts forth in fury and for a few days has full sway of his victim.

The medicine must be taken as regularly as the food, or it will fail. I know patients in Kingston Asylum who have taken one to three drachms of bromides daily for years, and their bodily health is just as good now as it was when they began treatment, and their mental condition, if anything, is better. Dr. C. K. Clarke, superintendent of that institution, informed me of two patients who had taken bromides for years, went home recovered, and have remained well for four or five years. A very pleasant old gentleman (a farmer) was admitted to the asylum while I was there on account of epileptic seizures. He was afraid of himself and was anxious to be placed in restraint. It so affected him that he would sit down and cry like a child. We put him on the bromide treatment. He had no more fits; in six months went home, and, I believe, has remained there since, keeping well and taking his medicine regularly. Occasionally he sent a letter to the superintendent, informing him how happy he was. I could go on citing cases, but I am sure I have wearied you. But I hope what I have stated will encourage you to persevere with your epileptic patients. For if so much benefit can be effected to the epileptic insane, how much more should be effected with the epileptic who still has his "right mind."

To prevent bromism in epileptics, Huchard recommends the use of diuretics, and especially of milk.

IS ALCOHOL A STIMULANT?*

BY H. ARNOTT, M.D., LONDON, ONT.

Especially in practical therapeutics, the dead past has not buried its dead, and consequently many of its ghosts do duty as active forces in our treatment of to-day. Phlebotomy has only been partially laid to rest, and many other venerable absurdities pass muster. Among the latter I class the prevalent notion that alcohol is a stimulant. The theory of stimulation should be thoroughly discussed, for it lies at the very foundation of medical treatment. Purgation is another name for the stimulation of the function of the intestinal mucous membrane, and a similar remark would hold good regarding many expectorants, stomachics, diuretics, etc., and any misapprehension regarding their action must lead to error and bad practice.

A false theory regarding the action of medicine must lead to misapplication of it. One case may give the most encouraging results which the next may flatly contradict. In this manner we have gone on in the use of alcohol, with frequent announcements of infallible indications for its administration, with the result that, at the present time, there is no medicine regarding which such varying and directly antagonistic views are held by competent men. Whilst the majority of text-books repeat the old chestnut that it is a stimulant, we have in the old country such eminent men as Whitla, of Belfast; Henley, of Univ. Coll., London; and B. W. Richardson, in America; Davis, of Chicago; Palmer, of the University of Michigan, and many others, who boldly declare that we will never understand its action and never be able to use it to the best advantage as long as we cling to the stimulant theory. They teach that it is narcotic and sedative with an antiseptic action, and *that* in proportion to the quantity taken.

My purpose is to prove that alcohol is never a direct stimulant, but that it is narcotic and sedative in all doses. Advisedly I use the expression "direct stimulant," for any narcotic or sedative may act indirectly as a stimulant by quieting undue nervous excitement. In this manner chloroform and opium often increase the strength of labor pains; opium acts as a pur-

gative, and a glass of whisky steadies the hand of a nervous operator.

I am not attacking alcohol as a medicine, but simply the theory that it is a stimulant. I wish also to urge that, in common with other narcotics, it is a dangerous remedy to prescribe, especially in chronic cases. Indeed I have never been able to comprehend why we prescribe opium with so much and such proper caution, whilst we deal out alcohol, which does tenfold more harm, as if it were the most harmless drug in existence.

Our views about the meaning of the term "general stimulant" are somewhat hazy. So universally is the word "stimulants" applied to alcoholic liquids that a foreigner might easily imagine that we believed there was and could be no other form of stimulant; that even men who admit that alcoholic is narcotic and sedative still speak "giving stimulants."

The horse illustration probably conveys as clear an idea of the general application of the term as we can get. It teaches that as a whip calls forth the energy of the horse without putting any into him, so will alcohol call forth the latent vital force of the system without supplying anything to assist in its development. It teaches that as the horse would stick in the mud without the application of the whip, so would the machinery of the system stop before its force was exhausted but for the use of alcohol.

That nature could or would give up before all her force was exhausted is probably as absurd an idea as could be imagined, and yet that is the plain teaching of the illustration. Many ingenious theories have been proposed to account for such extraordinary teaching. One is that there is a reserve force in the system which nature would not put in the field unless forced to do so by so-called stimulants. We need not dwell upon this. Another says that the coarse alcohol atoms coming in contact with the fine brain cells explodes them and sets free their contained energy. As a theory this is very pretty; but as it implies that alcohol supplies no material for repair, it would seem very much like a "bull in a china shop." Moreover, this theory would not be consistent with any but a very short period of stimulation. As so-called stimulants are given to tide a

*A paper read before the Ontario Medical Association.

patient over a difficult time, it means that only for them the patient would die. But as it supplies no force it must, as the illustration implies, act as a whip, spurring nature into greater exertion.

If we accept the theory that alcohol can spur nature into greater exertions, is it not a mad policy thus to squander the vital powers? Would it not be wiser to economize every particle of fuel by running the machinery as low as possible? Are we not like the madman heaping more wood on the fire, lest it go out, till he burns up the house; or like the boy lashing his horse into a gallop lest he would stop? So even if we accept the doctrine of general stimulation, it is an unwise course to follow.

Van Helmont believed that vital force was an immaterial spirit which could be soothed to repose or roused to fury. The physiology of to-day believes that it is the resultant of the various nutritive changes going on in the system. It does not believe in a ghost that can be soothed to sleep or frightened into action. It does believe that medicaments can divert force from an organ or to an organ through the agency of its blood supply. But as blood or force directed to one organ is diverted from another, the idea of general stimulation is unsound.

There is a difference between feeling strong and being strong, between feeling elevated and being stimulated. Have we not been taking the shadow for the substance—appearance or feeling for reality? Have we not been attributing feelings caused by diminished sensibility to increase of power? If the ease and buoyancy experienced after a dose of brandy be really due to increase of power, then it would be of the greatest value during severe exertion. But the opposite is the case.

Many seeing the absurdity of stimulating without nourishment have fallen back on the theory that alcohol is a stimulant because it is a form of food which can be digested and assimilated when no other can. The question of the food value of alcohol has been carefully studied with variable results. Those most in favor of alcohol admit that an average man can only assimilate about three ounces of whisky in twenty-four hours. Even Anstie says that any quantity beyond that becomes a source of

mischief. How then can we defend the enormous quantities administered to patients whose digestion is weakened by disease? Only the most blind fatuity would attempt any such defence.

Again, a wholesome food does not lower temperature as alcohol has been proved to do. N. S. Davis, and many others, have shown that during the active digestion of ordinary food, the temperature of the body is always increased; but after taking alcohol the temperature begins to fall, and in exact proportion to the quantity taken. Dr. Hayes, the Arctic explorer, says that "while fat is absolutely essential to the inhabitants and travellers in Arctic regions, alcohol is positively injurious." Dr. McRae, speaking of Arctic exploration at the meeting of the American Association for the Advancement of Science in 1856, said, "The moment that a man swallowed a drink of spirits, it was certain that his day's work was nearly at an end. It was absolutely necessary that the rule of total abstinence be rigidly enforced if we would accomplish our day's work. The use of liquor as a beverage when we had work on hand in that terrific cold was out of the question."

There is abundant evidence that it does not give muscular strength in any dose. Persons in training abstain from it, although previously accustomed to its use. On severe marches there is general agreement that men do better without it. Ringer, Farquharson, and others, say that nothing is better proved than that alcohol lessens the capacity for muscular exertion. Such an expression, coming after having extolled it as a digestive agent and lauded it as a valuable stimulant and most digestible form of carbonaceous food, is a remarkable illustration of the power of alcohol to blind the judgment. How an article which is a food, a digestive agent, and a stimulant, can lessen the capacity for exertion, I must leave to more powerful intellects than mine to explain.

Many observers seem to think that whilst harmful during exertion, it is useful after the fatigues of the day. The explanation of its action at such a time is plain. In the words of the "Encyclopedia Britannica," it "benumbs or paralyzes the useful sensation of weariness," and causes the men to feel and act jolly when they should be obeying the mandates of nature and

resting their weary limbs. If it were either a food or a stimulant, surely the proper time for its use would be during the hours of exertion.

All are agreed that it is narcotic in large doses, but many cling to that refuge of despair that it is stimulant in small doses. This is the last stronghold of king alcohol as a stimulant and it is already tottering to its fall. It is difficult to conceive how a medicine can have one action in one dose and an entirely opposite one in another dose. If such were the case, we would have a sorry time of it; for when you thought you were giving a stimulant dose, it might very inconveniently turn out to be narcotic and *vice versa*. This would especially be true of alcohol, which affects different people, and even the same person, under different circumstances so differently. A drug may have an entirely different action in different doses, but not an entirely opposite one. Thus, tartar emetic may be expectorant, emetic, or purgative, according to the dose. This is different, but not opposite, effects. But when science prescribes two ounces of whisky at night to soothe a man to sleep and one in the morning to wake him up and rouse him to action, there is grave fear that her usually well-balanced mind has become somewhat muddled.

The idea of the stimulant properties of narcotics in small doses has arisen from the supposed stimulant action of their primary stage. Is the primary action of chloroform, opium, and alcohol stimulant, or is it only paralysis of some of the sensory functions and of the inhibitory forces preceding the latter paralysis of the sensation of pain and of muscular powers? This seems to me the proper explanation.

The first effect of a narcotic is a diminished sensibility which drowns unpleasant sensations and causes a man to have a feeling of ease and buoyancy. He is no longer conscious of the friction of the machinery of his system. Next, the restraining influences of bashfulness, education, self-restraint, etc., are deadened, leaving him stripped of all affectation, his real self—*in vino veritas*. Now he feels as strong as Samson and as bold as a lion. The increased action of the heart has been shown to be due to paralysis of its inhibitory nerves instead of to increased power, as has been supposed. Later on, the acceleratory nerves are involved and the heart's

action becomes slower. The increased action is no proof of increased power. A man running is not stronger than when walking, and moreover cannot keep it up so long.

The systole of the heart has been shown to be shorter and quicker, and the work done by the heart diminished, within a minute after the administration of even moderate doses. This was demonstrated by the recent experiments of Prof. Martin, of Johns Hopkins University, on the effects of different proportions of alcohol on the heart of a dog. Drs. Ringer and Sainsbury also carried out a series of experiments in which they could tell the strength of any preparation of alcohol by its action on the hearts of frogs. These latter say that, by their direct action on the cardiac tissue, these drugs are clearly paralyzant, and that this appears to be the case from the outset—no stage of increased force of contraction preceding.

If this be conceded, then there is no such thing as a stimulant stage; but that which has been so-called is narcotism of the inhibitory forces and influences, including the heart. But even if the first stage were stimulation, by what law do we conclude that small doses have no secondary action because such is not apparent?

But we have positive proof that small doses of narcotics have a secondary action in the facts that they relieve pain, and also that they cause that craving for more which is characteristic of all narcotics. I have seen a typhoid patient in the third week, delirious, picking at the bed-clothes, and grasping at vacancy, repeatedly soothed to sleep in a few minutes by the hypodermic injection of an eighth of a grain of morphia. This was a typical case for whisky, but perhaps some will say it was the stimulant effects of the morphia which so quieted him. To such I would have no answer.

These considerations satisfy me that the action of alcohol is narcotic or sedative in all doses. But if further evidence be needed, we have it in the consideration that its action can best be explained from that view. I know of no effect of alcohol that I have ever observed that cannot be satisfactorily explained from its narcotic or its antiseptic qualities.

On the other hand, there are very many of its effects that cannot be explained from the stimulant theory. My firm belief is that many

patients which have been sent into eternity reeking with brandy would have lived to bless the good sense of the doctor if he had had the courage and the faith in nature to withhold it. But just as we continued to bleed and blister, when we knew better, through fear of public opinion and under the tyranny of what Shakespeare terms "dam'd custom," so do we continue to dose our patients with whisky and brandy when we know that in health or disease, in small doses or large, it weakens the vital powers.

THE SECOND CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

[COMMUNICATED.]

The second Congress of American Physicians and Surgeons commenced on the morning of Tuesday, Sept. 22nd, by the meeting of special societies.

The first general meeting was held in the afternoon, when a very able and exhaustive paper was read by Prof. Welch on "The Conditions Underlying the Infection of Wounds," including a discussion of disinfection with reference to treatment of wounds, of relation of bacteria to suppuration, of the resistance of tissues to the multiplication of bacteria, and of the effect of antiseptic agents on wounds.

Some of the practical points referred to in the paper were:

(1) That wound infection takes place in the great majority of cases from want of cleanliness of instruments, want of cleanliness in the operator, as well as of the patient operated upon.

(2) That there is some danger of infection from the surrounding atmosphere.

(3) That the general health of the patient is of great importance in the question as to whether a wound will become infected or not.

Dr. Roswell Park, of Buffalo, followed in a paper from which similar conclusions might be drawn.

Mr. Thomas Bryant, of Guy's Hospital, astonished many of his hearers by his treatment of the subject of bacteriology. He spoke of it as a very interesting study, but that after all the results were of little value to the practical surgeon.

He was taken rather severely to task by Dr. Chiene, of Edinburgh, who spoke eloquently of the work of the bacteriologist, and of the great benefit surgery had derived from him.

The intense heat which prevailed upon this as well as the second day of the Congress prevented many from paying that close attention which the able discussion merited.

An exceedingly able paper was read in the Dermatological Association by Dr. White, of Boston, upon the clinical aspects and relations of tuberculosis of the skin.

He made the following divisions: Lupus vulgaris, verruca necrogenica, tuberculosis cutis—including ulceration—acute tuberculosis of the skin, suppurative infective lymphangiectasis, scrofuloderma, including under that head chronic ulceration, accompanying bone-disease, dactylitis, sinuses, etc. He does not think there is sufficient evidence that lupus erythematosus is of tuberculous origin. He demonstrated the relationship which these various forms bear to one another, and that although they differ widely in their external appearance they have essentially the same pathological process. He referred (1) to the clinical proof; (2) to the presence of the bacillus in all forms. This organism he considers the active agent in the production of the disease. (3) By inoculation experiments the same disease—tuberculosis—is always reproduced in animals. (4) Auto-inoculation as shown by clinical observation. (5) Association with pulmonary tuberculosis. A large percentage of lupus cases die of tuberculosis.

A weak point in the paper, to my mind, was his doubting the existence of such a thing as hereditary tendency to tuberculosis, and he was inclined to explain the frequent occurrence of a number of cases in the same family on the ground that the chances of contagion were much increased. We may in the past have placed too much importance upon this factor, but that it would be prudent to do away with it we very much doubt.

In the Association of Physicians a paper was read by Dr. Lusk upon the remote effects of the removal of the ovaries and tubes, which was followed by a discussion in which the too frequent performance of the operation was severely condemned. Case after case was given in

which cures had been made, and many in which the gravest results had followed. The consensus of opinion was that the operation should not be performed unless it could be fairly shown by examination that structural disease actually existed in these organs. The great difficulty, however, to my mind, is the fact that some operators have such fertile imaginations that they can discover disease both before and after operation where individuals blessed with the ordinary amount of common sense cannot find it.

A paper was read by Dr. Stewart, of Montreal, upon nerve-stretching as a remedy for inveterate cases of trigeminal neuralgia. He spoke of the fallacy of considering cases cured unless the patients had been kept some years under observation and no return had taken place. Five per cent. of cases had been cured by nerve-stretching and a much larger proportion had been temporarily relieved.

Dr. Delafield read a magnificent paper on the diseases of the kidneys popularly called Bright's disease.

He classified diseases of the kidneys according to the morbid processes under three heads: Congestion, degeneration, and inflammation. The latter he considered under three heads: Exudative, productive, and toxic. The classification seems to be a very valuable one, but it needs to be tried, when no doubt many defects will be discovered. It is impossible in this brief sketch to give even an idea of the paper. It should be closely studied by those interested in this important subject.

In the discussion which followed, Prof. Gairdner, of Glasgow, gave a very interesting history of the various changes which have taken place from time to time in our ideas upon this class of diseases. He was still inclined to adhere to at least one of the old subdivisions, viz., the separation of the intra-tubular from the interstitial variety.

Very interesting observations were made upon the question of testing the urine for albumen. The general opinion was that heat and nitric acid, separately and together, were the most reliable tests, and that the use of the more delicate reagents, as picric acid, chloroform, carbonic acid, etc., often leads to fallacious results, as by them a precipitate is often given when

pathological albumen does not exist in the urine. This matter is of special importance to those who examine for life insurance companies.

Thursday morning.

Dr. Morrow read a paper giving notes of the successful treatment of scars upon the scalp by the transplantation of skin from another portion of the scalp, or from another person. He punched a round piece of tissue out from the cicatrix going down to the subcutaneous areolar tissue; then he fitted in a similarly shaped piece punched out of the healthy scalp. He was quite successful in getting the hair to grow on the transplanted piece.

Dr. Morrow then read a paper on the treatment of alopecia areata. This was followed by a discussion, in which much difference of opinion was shown.

The great majority were agreed that there are two forms of the disease, a parasitic and a neurotic. One section of those present was of opinion that about 90 per cent. of the cases belonged to the former and 10 per cent. to the latter. Another section reversed these percentages.

Dr. Bulkeley read a paper on the treatment of alopecia areata by the application of strong carbolic acid. He uses a 95 per cent. solution, applying first with a small swab, and then rubbing it well in; vesication is produced and in some cases the hair grows very well. The general opinion was expressed that there was no specific remedy, and that an important indication was the sustaining of the general health.

In the Association of Physicians a long and interesting discussion took place on "Intestinal Perforation in Typhoid Fever." In such cases as are really of the nature of appendicitis or a combination of the two conditions an operation might be useful, but in those where perforation takes place in other situations the cases are hopeless and ought not to be operated on.

On Friday morning Dr. Graham read a paper on *molluscum contagiosum*. A main feature was the presentation of a report of the microscopical examination of the tumors made by Dr. A. B. Macallum, of the Toronto University.

Dr. Stellwagon, of Philadelphia, then read a paper based on the history of two fatal cases of *mycosis fungoid*.

In the Medical Section a paper was read by Dr. Atkinson, of Baltimore, upon tachycardia in acute articular rheumatism.

In the discussion, Dr. Orde expressed the opinion that the pneumogastric nerve was particularly affected in rheumatism, and that the peculiarities of the pulse might be accounted for in that way.

The writer has given, in a very brief and imperfect way, a few of the points made at meetings he attended. Where there are so many sections, so many valuable papers are read at the same time that it is only possible for one to hear a very few.

On Wednesday evening, Dr. Weir Mitchell delivered his presidential address on the history of instrumental precision in medicine. As might be expected, the address was remarkable for the research made into old literature, and for its beautiful diction. One has rarely the opportunity of listening to such a charming and interesting paper.

A reception followed, which was largely attended.

On Thursday evening a dinner was held jointly by the Association of Physicians and the Association of Surgeons. Many of the English guests were present, and speeches of a complimentary character were made. Dr. Chiene was loudly applauded when he attributed the great success of the United States to the faith which the individual American had in his country and in his town or village, however small the latter might be. He not only looked upon his own town as the most successful in the Union, but looked upon himself as the principal agent in that success. A little more of the former kind of spirit might be of service in Canada.

The Congress has been a great success—quite equal, if not superior, to the first. There were, however, two drawbacks—the excessive heat and the very great length of some of the papers. To listen to two papers in succession, each of which was over an hour in length, and at the same time to fairly melt at a temperature of over 90°, is more than the average man can endure. When the papers are necessarily so very extensive, it might surely be possible to epitomize so as to bring them down to a reasonable length for reading.

Among the gentlemen present from Toronto

might be mentioned Drs. Reeve, Cameron, Nevitt, Machell, King, and Lehman. Drs. Gairdner, Orde, Sir Wm. MacCormack, Mr. Bryant, and Mr. Durham, were among the foreign guests. J.E.G.

ORTHOPEDIC SURGERY AS A SPECIALTY.

BY A. B. JUDSON, M.D., NEW YORK.

The President's Address, delivered before the American Orthopedic Association at Washington, D.C., Sept. 22nd, 1891.

A flourishing medical society sometimes divides into sections. It is an involuntary process, or at least one to which the members are forced by the necessity of thoroughly accomplishing the objects of the society. The process may be called an analysis. In the present instance, however, if I understand the organization of the Congress of American Physicians and Surgeons, we have a synthesis. A number of societies voluntarily combine to secure ends which were not contemplated at the beginning of each. A division of labor having been made, according to which each society has its special work to do, it is proper and useful for the societies to meet together for co-operation. Let us, therefore, briefly consider some of the salient features which mark our specialty of orthopedic surgery. A better knowledge of ourselves will put us in more quick relation with other workers, both general and special, and enable us better to do our humble part in the grand plan.

In common with other specialists, we occasionally hear that we are limited in the possible range of our achievements. The limitation is, however, entirely voluntary, and the work within these limits is practically inexhaustible. If we were not so busy, we might perchance be troubled because we are not always and exactly understood. The sign before an orthopedic hospital in New York is supposed, by some of the passers-by, to indicate a homœopathic institution. I am probably not alone in having been asked to perform the minor surgical operations of the chiropodist. Many, even among the learned, suppose that the latter part of our name is derived from the Latin word for *foot*, instead of from the Greek for *child*. We are also confounded in the minds of some with the instrument makers. I mention these things

in passing, without a serious thought. If they exist, like morning mist, they will pass away.

It is well, however, to recognise the fact that our practice is comparatively lacking in popular qualities. We have no critical, capital, or brilliant operations. What of brilliancy is there in keeping a limb in such an attitude that the weight of the body in locomotion shall be a favorable, instead of an unfavorable, agent until the natural growth of the member results in comparative symmetry; or in controlling the environment of the diseased joint and the patient, so that the natural processes of recovery and repair shall have their triumph, while the limb is daily growing in symmetry and ability with the growing child? This is not bold surgery, but there is great pleasure in watching and reverently assisting these constantly recurring natural miracles. And will any of us forget the delightful friendships made among our little patients, their pretty bashfulness, their ready confidence, their irrepressible cheerfulness, their graceful acceptance of what is, alas, inevitable? The combination in them of childish and heroic qualities is a daily wonder. To watch them at play is like a dream in which the birds and wild flowers are enacting a tragedy and improving the precepts of Stoic philosophy.

Our practice is not only lacking in brilliant achievements, but it is also uninviting, because, as a rule, our patients do not make absolute recoveries. There is always, or nearly always, a residuum of disability and deformity, and in this is to be found perhaps one reason why our specialty has existence; for what general practitioner would lightly assume the care of a case so exceptional in his practice and so momentous as those which fall into our specialty?

The why and the wherefore of specialties in general, and ours in particular, are questions of interest. Some will say that we have a natural aptitude for mechanics, an inherited preference for slow and sure methods compared with those that are quick and uncertain, or an inborn reverence for what is physically demonstrable. These personal characteristics may explain why some of us are orthopedists, but I believe the reason why our specialty exists and thrives is to be found in the desire of the public, the final arbiter, that experts should be invited to bear the responsibility of orthopedic cases.

One very attractive feature of orthopedic practice is its *reality*—for want of a better word. It is especially the domain of physical demonstration, where the acceptance of pathological doctrine, as well as therapeutic precept, must be preceded by absolute proof. Here subjective symptoms are forgotten in the presence of objective signs. The data for diagnosis are visible, palpable, and measurable. Treatment is by forces whose action is nicely directed, increased, diminished, and accurately measured. The very weight of the body is duly considered in trauma and therapeutics, and finally the results of the treatment are recorded in degrees of a circle and fractions of an inch. Dealing thus, as we do, with physical realities, it is well for us to keep our eyes open to the moral verities also, which no less form part of the tissue of our daily professional work. Let us remember that diligence is the price of success, and that the only desirable success is that which is reached by the rejection of error and the loyal recognition of truth.

Since our last meeting, there has occurred the death of one of our corresponding members whose hostility to error might, in all friendly criticism, be called intemperate, one whose diligence and devotion to the interests of his patients make him an exemplar worthy of our affectionate remembrance. But I will not trespass on the subject of the first paper of our session, which is by Dr. A. A. Steele, of St. Louis, on the orthopedic work of the late Mr. Thomas, of Liverpool.

Selections.

RINGWORM IN ELEMENTARY SCHOOLS.*

BY MALCOLM MORRIS, F.R.C.S. EDIN.,
Surgeon to the Skin Department, St. Mary's Hospital, London.

It is seldom that such an opportunity offers itself for the medical man, sanitarian, and educationist, to meet on a common platform as is offered by this special Section of the Congress; and it is a matter for congratulation that the Section is presided over by one whose knowledge of elementary education is probably unique. I have therefore availed myself of this

*Read in the Section of Infancy, Childhood, and School Life, of the International Congress of Hygiene.

occasion to express my views on a certain aspect of a disease of the skin which unfortunately is extremely common in this country. I am unable to produce trustworthy statistics of the proportion of children attending elementary schools who suffer from ringworm owing to the obvious difficulties of investigation, but I can, from personal experience derived from prolonged observation in the out-patient department in one of the large London general hospitals, and from confirmatory statements of colleagues at other hospitals, vouch that ringworm is far commoner in London than in any of the continental cities with which I am familiar. Although it is not my intention to dwell upon the medical side of the question at any length, it is yet necessary to say a few words about the nature of the disease in order to elucidate the subject.

Microscopic examination, cultivation and inoculation experiments, incontestably prove that all the phenomena of the disease, however varied in their clinical manifestations, are due to a fungus which invades the upper layers of the epidermis. This fungus consists of mycelium, representing the mature elements, and spores—so to speak, the seeds—which latter, either by personal contact or through the medium of the atmosphere, are capable of transplanting the disease on a suitable soil. The extreme contagiousness of the malady, which is familiar to every one, is thus accounted for. Many of the perplexities which arise are due to the difficulties in recognizing its earlier manifestations, which are too often regarded, both by parents and school authorities, as merely “scurly-heads.” The same remark applies very often to the disease in its later stage, when cure is supposed to have been effected. When ringworm attacks the body it is quickly and easily eradicated, as the fungus lies quite near the surface; it is therefore only with ringworm of the scalp that I am concerned in this paper. Here its obstinacy to treatment is due to the anatomical fact that the fungus is present, not upon the surface of the skin only, but also around the roots of the hairs in the deep hair sacs or follicles. This fully accounts for the difficulty in effecting anything like a rapid recovery, even in most favorable circumstances; while among the poor, owing to indifference, lack of time and

skill, the disease is certain to last for many months, and not infrequently for years. In this respect it shows a marked contrast to all the other contagious skin diseases of children—as, for example, scald head, the itch, and other animal parasitic disorders, which yield quickly to suitable treatment. The question now arises, What is the present attitude of the authorities with regard to the disease? To this no satisfactory answer can be given, as no line of conduct is uniformly pursued.

On the one hand, the schoolmaster who is watchful and zealous as to the physical well-being of the children under his charge refuses to admit a child with ringworm to his school; whereas, on the other hand, he who is lax is apt to overlook or minimize the importance of the disease. In both cases, in my opinion, a grievous injustice is committed; for in the former case a child, presumably in good health, is banished from school and all its advantages, both moral and educational, for a prolonged period, at a time of life when these are essential to its well-being; in the second case the spread of the disease to other children is inevitable, and the community at large, as well as the individual children, must suffer. Of these alternatives, from a medical point of view, the former is the only logical course, though its effect must of necessity be a marked diminution in the general standard of national education and the reduction of the educational returns. It can hardly, I think, be questioned that it is the duty of the State to remedy this, and I would suggest the following practical recommendations as the only ones which have suggested themselves to my mind as offering any solution of the difficulty. It is clearly necessary before attempting to cope with the disease that the exact extent and frequency of its occurrence should be estimated. This can only be carried out by means of *systematic inspection*, in order to accomplish which persons should be trained in each school by skilled medical men to make a weekly examination of every child's head. By this means alone trustworthy statistics would soon be obtained. My second recommendation is directed toward the eradication of the disease without interrupting the educational progress of the child. In the more crowded districts, or wherever feasible, special schools ought to be

established, in which both systematic treatment and instruction could be carried out. In less populous districts a single class-room might be isolated, with a separate entrance. If such a system could be enforced, the advantages would be that the education returns would at once show a marked improvement, that the children would no longer be deprived of their just privileges of education, and that ringworm would be materially diminished in this country, if not entirely eradicated.—*Lancet*.

SEA SICKNESS.—Sea sickness is one of those minor miseries of existence for which there appears to be no cure. Many have been loudly trumpeted, but none have really succeeded in susceptible persons. As a matter of fact, very little serious study has been given to the subject; persons who do not suffer are apt to despise those who do, and persons who do suffer are too glad to forget their misery to be disposed to give any thought to its source. Professor Rosenbach, of Breslau, has recently published a small monograph,* the outcome of observations and study of the phenomena of sea sickness extending over ten years. He gives his experiences in the form of theses, which he uses as the basis of his explanations and arguments as to the nature of the disease.

His arrangement of facts is as follows: (1) The malady commences as soon as the vessel pitches, that is, rotates on its transverse axis. (2) The rolling, that is, rotation on its long axis, is less severe, but the combination of the two is very unfavorable. (3) The phenomena appear more quickly and are more severe the further the patient is from the middle of the ship. (4) Persons sleeping are attacked, also small children and animals. In small boats without sails very sensitive persons may be affected; when sails are used sickness is more likely to occur. (5) A moderate amount of food in the stomach and a small quantity of alcohol is more likely to act as a preventive than an empty stomach. (6) The horizontal position on the deck acts in some degree as preventive. (7) Anxiety and apprehension precede sickness; a certain exhibition of energy and resolution may in short voyages and with slight vessel motion control

the tendency to sickness. Soft winds (for example, sirocco), strong odors, etc., are unfavorable. (8) There are two categories of the affection dependent on individual predisposition; in one the head, in the other the abdomen is principally affected. Cases where both are affected are common.

In regard to intensity: (a) Some women begin to feel uneasy from the beginning of the voyage, in perfectly smooth conditions of the surface; they are pale, and have no appetite. There is a certain dread also. It is questionable if they are cases of sea sickness. Perhaps they represent the purely psychological form. (b) In another variety there is a general irritation of the nervous system during the whole voyage. The digestive organs are unfavorably affected. (c) This series forms a transitional variety. Slight motions of the vessel affect sensitive persons and produce sickness with general loss of appetite, indisposition to move or speak, and painful sensations in the head or abdomen. These symptoms are a delicate reagent to the disturbing action of the vessel.

As to the theories of the disease, they are arranged under three heads: (1) The psychological theory (so named by the author), according to which all the symptoms are produced through the action of certain sensory organs upon the consciousness, giving rise to uncomfortable or unwonted sensations of disturbed equilibrium. (2) The theory of disturbed equilibrium, according to which the permanent disturbances of equilibrium act as painful irritations to the contents of the skull and of the abdomen, and are thus the causes of the phenomena. (3) The theory of the disturbance of the circulation, according to which the disturbances of equilibrium and the swinging motions of the body produce circulatory disturbances in certain parts.

As regards the psychological theory, the arguments generally adduced in its favor are: (1) That the sight of the pitching vessel and of the up and down motions of the vessel favor the occurrence of sickness. (2) That the abnormal effects do not occur with the eyes shut. (3) That sleepers generally escape. This conclusion the author rejects, for he states that energetic will and closure of the eyes do not quite succeed in warding off the attack.

* *Studien über die Seekrankheit.* Von Dr. O. Rosenbach, Professor an der Univ. in Breslau. Pp. 60. Berlin: Hirschwald. 1891.

The action of visual disturbances in inducing the sickness he considers very important, but only secondary as factors in the result. That the sufferer may be roused from sleep in a full paroxysm of the attack; that children at the breast and young children suffer, though less than adults; and that horses, who in their boxes do not see the movements, also suffer—these facts prove, the author states, that the external mechanical influences alone must be the cause of the sickness. These facts, on which the author seems to rely for his conclusions as to the secondary importance of visual disturbances, if in themselves correct, do not appear to demonstrate that visual disturbances were absent in the cases mentioned, and it is to be remarked that in a note the author speaks of closure of the eyes or avoidance of the sight of the mast and bulwarks of the ship as being of great assistance in preventing the attack.

The third theory—that of circulation-disturbances—the author rejects. The second theory is particularly developed, and the disturbing effects of various kinds of unwonted movement are described and analysed. Thus, it is shown that backward travelling may produce illness, pains, even vomiting. The motion in swings, the effects of circular motion, are next described. The effects of rapid upward or downward motion have been particularly experimented on by the author in the rapidly-moving American elevators. The author thinks that he has discovered a new and substantial explanation of the action of external movement impulse by the phenomena observed in rapid elevators. It is found that in ascending with the eyes closed, no noise being heard, there is experienced a peculiar feeling at the epigastrium which goes off during the rise, say, of four or five floors, but reappears the moment the elevator stops. The same thing occurs when the elevator moves downwards, the sensation being felt only at the outset and on the arrest of the motion. In the motion of the elevator there occurs a sudden movement and sudden arrest of the movement, and the effect of this in producing the epigastric disturbance is held to be analogous to the effect of the motion observed in the vessel at sea. This explanation furnishes a theory which the author accepts because it covers the ground to the necessary extent. Further, the author is led to

the conclusion that the complex symptoms of sea sickness are due to the molecular disturbances produced by rapid movements arising from sudden change of direction of the motion, whereby a severe intramolecular shaking and irritation, primarily acting on the cells and the protoplasm of particular organs, is produced.

The immediate transition from one movement to another movement in a different direction is assumed to be the cause of the disturbances experienced. Thus the painful sensations in sea sickness, in the act of swinging, in the oscillation liable to occur in rapid railway journeys, agree in this, that the peculiar symptoms of irritation, the distressing feeling at the epigastrium, the cold sweats, the general feeling of illness, and the headache, appear at the moment when the direction of the movement changes.

As regards the cure of sea sickness, the authors consider that the only real cure is "custom." He speaks favorably of certain medicines as being often operative for very short sea voyages—quinine, antipyrin, bromide salts, cocaine, morphine, chloral, and other anæsthetics. He speaks with approval of the advice of older writers that the horizontal position at mid-deck should be taken before the voyage begins, and that a bandage should be tightly placed over the liver, whereby the intensity of the motion is diminished, and a certain degree of fixation of the abdominal contents promoted.

Professor Rosenbach has made a most valuable and suggestive contribution towards the solution of the much-vexed question as to the nature and cause of sea sickness; and, no doubt, his views will excite discussion calculated materially to advance our knowledge of the subject.—*British Medical Journal*.

ON CORNS UNDER THE NAILS. — A corn consists, I suppose, of a mass of much thickened and horny epidermis, under the centre of which, and probably in part as its cause, there is some hypertrophy of papillæ. In warts the hypertrophy of the papillæ is very great, and there is comparatively little excess in the accumulation of epidermis. In the corn the indurated epidermis completely conceals the overgrown papillæ, but it would be, I suspect, a mistake to believe that there is no overgrowth of the latter. Those who have attempted to

pare down corns well know that at a certain depth a very sensitive and vascular structure is reached, and in many this is decidedly above the level of the surrounding skin. Corns, according to an observation which was, I believe, originally made by Hunter, usually result from intermittent pressure. If the pressure is continuous, atrophy rather than hypertrophy results; but if it is intermitted there is an opportunity for the structures which have been made vascular by recent pressure and irritation to take on overgrowth. It is somewhat difficult to apply such an explanation to the development of corns under the edges of nails. It is, however, an unquestionable fact that they do sometimes form in this position:

A young lady named S—, aged about 25, was under my care for some time on account of a most troublesome growth under the edge of one of her finger nails which had all the characteristics of an ordinary corn. It was very hard, and had somewhat lifted up the edge of the nail.

I pared away both the nail and the corn under it, and then applied strong nitric acid. A sore resulted which took some time to heal; but the end was a complete cure.

The nail of one of her little toes had been quite destroyed by a corn under it.—*Hutchinson's Archives of Surgery.*

PERIPHERAL NEURITIS IN DIABETES.—In a communication by Auché, of which a summary is given in the *Neurologisches Centralblatt*, the author refers to the fact that although there is strong clinical evidence of the existence of peripheral neuritis among diabetics, no absolute proof that the condition giving rise to symptoms of neuritis is really one of inflammation of the peripheral nerves has as yet been brought forward. This, however, is the view which the writer adopts, and which he proceeds to prove by means of his own observations and those of others, embracing almost every form of disturbance of the nervous system occurring in diabetics. He also cites his histological observations, showing widespread inflammatory processes in the peripheral nerves. In the summary of his views of the subject, the author states that the upper extremities are attacked with less frequency than the lower, that the affection is mostly bilateral, but may be one-

sided, that the functions of the bladder and rectum are unimpaired, and that atrophy and the reaction of degeneration are present in the affected muscles. Sensory disturbances, consisting of pains, hyperæsthesia, paræsthesia, or anæsthesia, frequently precede motor troubles, but may accompany them, or may occur alone. Vaso-motor troubles, such as hyperidrosis, œdema, shiny skin, and ecchymosis, may also be present as well as trophic disturbances, such as perforating abscesses, local atrophy of skin, falling off of nails, etc. The loss of knee-jerk which occurs in some cases of diabetes is to be ascribed to neuritis. The author, in conclusion, refers to the generally accepted opinion that the nervous symptoms are not at all proportional to the quantity of sugar in the urine. Some researches which he made as to the effect of injections of saccharine solution in the vicinity of the sciatic nerve led him to conclude that sugar was not the active agent in setting up changes in nerve; but that such changes are more probably to be ascribed to the presence in the blood of acetone or of some as yet undescribed chemical substance.—*Lancet.*

STAINING BACILLUS OF DIPHTHERIA.—The following is Dr. Sims Woodhead's process for staining the bacillus of diphtheria: "It is only necessary to remove a small fragment of the false membrane by means of a piece of absorbent cotton tied firmly to a pair of forceps; from this it is transferred to a scrap of blotting-paper, and thence to a cover-glass, where it is broken down as finely as possible, heated over the flame in the ordinary fashion, and stained with Löffler's alkaline methylene blue, or by a method adopted by Roux and Yersin, who use a blue composed of equal parts of aqueous solution of violet dahlia and methyl green, with water added until a clear, but not too deep, blue is obtained. A drop of this is placed on a slide, the cover-glass on which the fragments are dried is inverted and lowered on it, the superfluous fluid is removed with a piece of blotting-paper, and the organism is examined at once. The organisms occur in small groups, as short, straight, or curved rods, with ends sometimes pointed, sometimes curved."—*St. Louis Med. and Surg. Jour.*

THE MARKINGS ON THE FINGER-TIPS.—Dr. D'Abundo has published the results of some researches on the markings on the tips of the fingers. He examined the fingers of seven idiots, and found that the markings on the tips of all the fingers on each hand were identical, thus showing a marked difference between those of idiots and of sane people. The thumb-tips of one idiot had the same markings as those on his fingers. There was a noticeable smoothness of the finger-tips in all the idiots. In one case Dr. D'Abundo remarked a perfect resemblance between the markings on the fingers of an idiot and on those of his mother. Out of twenty cases of imbecility, Dr. D'Abundo found in four only one sort of tracing on all the fingers; in the rest there was a tendency to repetition on almost all the fingers. In hemiplegia, when the lesion was of old standing, he noticed in the part affected a distinct smoothness of the finger-tips, which prevented him from obtaining a clear-cut impression. From a medico-legal point of view, these researches may ultimately have an important bearing on crimes of a sanguinary nature. For instance, if drawings were taken of the impression of a hand bathed in blood the markings would be most clear, more especially if the criminal had not merely laid his hand on any papers, but had actually fingered them. The evidence of crime would be still more valuable if the criminal had some cicatrix or deformity on the fingers.—*Lancet*.

PAINFUL CONCOMITANTS OF DEATH FROM RODENT CANCER.—It is scarcely possible to exaggerate the horrors of a death from rodent cancer of the face. By slow degrees the nose, cheeks and facial bones are all eaten away; and the patient becomes an object of disgust to all about him. He may lose both his eyes, and may become quite unable to make himself understood in speech; yet he lingers on from year to year, and has to die simply from a failure of strength which is to be brought about with extreme slowness. I have seen several such cases in which the patient and all his friends were longing for his release several years before it came. In one such, a gentleman of the highest intelligence, and of intellectual tastes in various directions, lost in succession

his speech, his sight, his smell, and his hearing. He was able to swallow only fluids, or solids which had been pounded. Yet in this lamentable condition he continued to live on for several years. The whole duration of his disease from the beginning was twenty years, and, being a man of remarkable vigor of constitution, he lived in spite of it till he was 77. Such being the ultimate realization of this malady, it is impossible to lay too great a stress upon the necessity for early and efficient treatment. It is in the earliest stage only that measures can be adopted which will be radical and efficient. Yet, but too often, while the growth is small and apparently insignificant it is either wholly neglected, or is attacked only by imperfect operations.—*Hutchinson's Archives of Surgery*.

MENSTRUAL ODDITY.—Dr. T. Marion Duragan, of Kerens, Tex., reports the following case: Frankie C., colored, mother of ten children, and another *in utero*, assured me that she never menstruated in her life, and was nineteen years old and the mother of two children before she knew that such a phenomena was characteristic of woman (for such ignorance, she being a simple member of her race is fully accountable). She is an unusually stout and healthy woman, does hard labor constantly for her living, and the only inconvenience she experiences is an occasional "swimming in the head," which does not trouble her enough to notice.

Such an oddity, besides being an *oddity*, is interesting from the fact that it proves conclusively that *menstruation* and *ovulation* are not essential to nor dependent upon each other. *Archives of Gynecology*.

ETHERIZATION IN LARYNGEAL CROUP.—Dr. Freid Betz (*Memorabilien*, April 18th, 1891) reports the case of a child, aged eighteen months, that presented the typical symptoms of laryngeal croup. The case appeared so hopeless that tracheotomy was, although proposed, rejected. Dr. Betz then proposed "etherization." Three drops of a mixture of ether sulph. 3 parts, acetic ether 1 part, menthol 0.1 part, were ordered to be inhaled every quarter of an hour, just as chloroform is inhaled. It was hoped that the cold from the evaporating mix-

ture would contract the surface blood-vessels of the larynx, and thus reduce the oedema present. The child was seen again in two hours, and the condition had somewhat improved. The etherization to be continued, 3 to 4 drops every half hour. After six hours the condition was unmistakably better; so much so, in fact, that the etherization could be dispensed with. A piece of intestine filled with ice was placed round the child's neck. After this, progress was so rapid that in twenty-four hours the child was out of danger. In desperate cases one would think the application in this way would not be likely to do any harm, and it would in any case lessen sensibility, and to some extent the torments incident to such a dreadful disease as laryngeal croup.—*Archives of Gynecology*.

THE TREATMENT OF RANULA.—Dr. B. Hernandez Briz, of the General Hospital, Madrid, writing in *La Andaluca Médica* on "Ranula in Children," mentions a case of one of these tumors which was as large as a hen's egg, and which he cured in a very simple way. Intending to empty it, he inserted the needle of a common hypodermic syringe into it in order to employ aspiration. The contents were, however, evidently too thick to come through such a fine tube. He then filled the syringe with a mixture of ten parts each of tincture of iodine and water, with one part of iodide of potassium, and injected fifteen minims of this mixture. Three days later the tumor was decidedly smaller. A second similar injection was given, and when the child was next seen, three days afterwards, the ranula had almost disappeared. Several months have now elapsed, and there is no sign of the return of the tumor.—*Lancet*.

HYPEREMESIS GRAVIDARUM.—Ward (*Med. News*, April 11th, 1891) says: Without pretending to possess an infallible judgment, or powers of discretion above the average, my deliberate opinion is that after a few days' use of oxalate of cerium, of Fowler's solution of arsenic alone or combined with the deodorized tincture of opium, morphine, with or without cocaine (hypodermically or not), restricted diet, popcorn (a homely remedy, but one I have seen used with good effect), absolute rest in bed, rectal feeding, correction of uterine displace-

ments, should such exist, with local applications—I say, after using each of these for a few days and failing to relieve the patient, I would then dilate the os uteri, and this likewise failing, would stop treating symptoms and proceed to attack the disease at its headquarters, viz., in the uterus, and before a great febrile rise, before the brown tongue, the glazed and reddened buccal cavity, the anxious facies, and delirium warn us of the rapid approach of the "grim monster," this must be emptied, or so treated that it will empty itself, always providing that one of our former procedures—dilatation—has not already brought about such a consummation.—*Archives of Gynecology*.

THE USE OF PURE BENZOLE IN WHOOPING-COUGH.—After some years' experience of the use of benzole in whooping-cough, I can safely say that it effects better results than all the other remedies recognised as useful in this affection. In the adult and child it is of equal benefit. In an infant just now under treatment the attacks have been reduced from twenty to thirty in the night to two or three, and whereas when the treatment was begun evidences of bronchitis were present, now the chest is clear and the child able to be taken out of doors daily. All this improvement was brought about in less than ten days. I have administered benzole in whooping-cough, where convulsions and other complications were fast reducing all chances of recovery, with perfect success in a few days. In adults, where pertussis assumes often serious aspects, benzole has proved equally efficacious. Two minims in mucilage are sufficient for a child six months old, and five minims in mucilage on sugar or in capsule for adults. I am indebted to an article in the *Practitioner* of some years back for information regarding this treatment, and can heartily recommend a trial of it. Whenever the benzole odor is observed in the breath of the patient, then all anxiety as to the result may be allayed.—*W. Robertson, M.D., Glasgow, in the Lancet*.

THE *Medical Press and Circular* says that for every 100,000 inhabitants, there are 14.4 medical students in France and Germany, 23.8 in Austria, 26.7 in Holland, 24.2 in Belgium, and 20.6 in Italy.

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS
OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, OCTOBER 1, 1891.

THE HEALING OF TUBERCULOSIS.

The following *excerpta* from a paper read by Dr. Wm. Osler before the last annual session of the Medical and Chirurgical State Faculty of Maryland are interesting. The title of the paper was "The Healing of Tuberculosis." He draws a clear distinction between the puckered cirrhotic depressions found, at the apices more particularly, in the lungs of so many elderly persons, the *cicatrices complètes* of Laennec, which may or may not indicate a healed tuberculous spot; and the *cicatrices fistuleuses*, fistulous scars, which always indicate tuberculous process and often have tubercles, more or less numerous, diffused about them, and which are only in a quiescent state, surrounded by a fibrous zone of separation, and communicating with a bronchiole. The *cicatrices complètes* or masses of fibrous tissue contain no tuberculous matter, and it is not yet settled whether or not they always or even often represent a tubercular lesion that has been cured, not simply rendered quiescent. Dr. Osler then goes on with some very interesting statistics: "Heitler, of Vienna, found in a long list of *post mortems* of cases in which death was not due directly to phthisis 47 per cent. of obsolete phthisis. With each decennial period up to the sixtieth year, the number of cases increased. Bollinger found in 27 per cent. of 400 bodies evidences of tubercular lesions in the lungs. Staudack, r, in 737 cases, found apical cirrhosis in 202. Massini found evidences of healing in 39 per cent. in 223 bodies examined. Harris, of Manchester, found in 139 cases, 54, or 38.84 per cent., in which there were relics of former active tuber-

culosis. The greater number of these were in the 3rd, 4th, and 5th decades. In the Paris morgue it is said that 75 per cent. of suicides and those accidentally killed present evidences of old tubercular lesions. These facts demonstrate, first, the widespread prevalence of tuberculosis, and, second, the fact, as shown by the above figures, that at least one-fourth of all infected persons recover spontaneously." He then goes on in an interesting way to point out the vast importance, in the light of these facts, of proper hygienic surroundings, as has been proved experimentally with rabbits, confined and not confined. "A patient confined to the house in close, overheated rooms, or in the stuffy, ill-ventilated dwellings of the poor, or even in hospitals, does not stand the chance with the patient in the fresh air and sunshine all day long. The home treatment of consumption is important. Fresh air and sunshine is all-essential. Altitude is a secondary consideration in comparison with these." In the same paper, Dr. Osler gives a concise statement of the opinion formed at Johns Hopkins of the Koch treatment: "Koch's lymph, or tuberculin, has a very limited use. (1) In a limited number of cases with early local lesions and not much constitutional disturbance, its use seems beneficial; the cough disappears, the patient gains in weight, and the local signs improve. In none of these, however, after four months' treatment, can we say there is a cure. (2) In cases with more advanced lesions, particularly with consolidation, the febrile reaction induced is severe, the local condition is aggravated, and the patients lose ground, often with rapidity. (3) In advanced cases, with cavities and irregular pyrexia, the remedy is most injurious, and aggravates every feature of the disease."

THE INTERCONTINENTAL AMERICAN
MEDICAL CONGRESS.

The time and place for the proposed Pan-American Congress will probably be settled at the meeting of the Committee on Organization, which will be held at St. Louis, October 14th, 1891. There seems but little doubt that the meeting will be held in 1893, *i.e.*, the year of the Columbian Exposition in Chicago.

The New York *Medical Record* speaks as

follows with reference to the place of meeting: "There will probably be less unanimity concerning the place of meeting, although we think there is but one city where it can be held. Chicago should by all means not be selected. It will be crowded with strangers off on a holiday and devoting their entire energies to sight-seeing and amusement, and its atmosphere will not be congenial to scientific thought. Doubtless, all those taking part in the deliberations of the Congress will want to visit the Fair, but they can do this before or after the medical work. Most of the Mexican visitors to the Congress would probably reach this country by rail, but those from the West Indies and Central and South America would all come by sea and, with the exception of a few coming by San Francisco or New Orleans, disembark in New York; so that the objection of entailing the fatigue and expense of an extra journey on the members, if the meeting were not held in Chicago, cannot be raised. The Congress is to be an American meeting, held in the United States as being the leading American country, and will without doubt be endorsed by the Senators and Representatives in the next Congress as being under government patronage. In such cases, therefore, it seems to us that there is but one city in which the Congress, the first one at least, should be held, and that city is Washington, the capital of America."

THE MEETING OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

This meeting, which was held in New York, September 17, 18, and 19, was highly successful in all respects. The attendance was fair—the largest, we understand, since the Association was organized—and the discussions excellent. A cordial invitation to come to Toronto next year was received and carefully considered, but it was thought better to wait until 1893 or 1894. St. Louis was chosen as the next place of meeting, the time to be decided hereafter; it will probably be in the latter part of the month of September. The following Canadians are now Fellows of the Association: Drs. I. H. Cameron, Nevitt, J. F. W. Ross, Machell, and A. H. Wright, of Toronto; Dr. Griffin, of Hamilton;

Dr. Howitt, of Guelph; and Dr. Praeger, of Nanaimo, B.C. All were present at the meeting, and, in addition, Dr. Rosebrugh, of Hamilton; Dr. Mackinnon, of Guelph; and Drs. Jas. Ross and Elliott, of Toronto.

CANADIAN MEDICAL ASSOCIATION.

The recent meeting of the Canadian Medical Association was a very good one in many respects, although the numbers were not as large as they should have been. The representation from Western Ontario was small—much smaller than it should have been. We have before referred to a combination of circumstances which had considerable influence in this direction.

Those who attended from a distance were delighted with the treatment they received from the Montrealers, who well upheld their reputations as magnificent hosts. We hope to be able to give a report of the meeting in our next issue.

Meeting of Medical Societies.

HURON MEDICAL ASSOCIATION.

The quarterly meeting of the Huron Medical Association was held in the Y.M.C.A. Hall, Seaforth, on July 14th. There were about thirty members in attendance. Dr. Smith, Seaforth, occupied the chair.

Morning session, 9.30—12 o'clock.

Dr. McLachlan, Auburn, read a paper on Sciatica. Dr. B. E. McKenzie, Toronto, took up the general treatment of Spinal Curvature, explaining his methods on cases presented at the Association. Dr. J. F. W. Ross, Toronto, described the operation of Hysterectomy, and exhibited several specimens of Uterine Fibroids, and Extra-Uterine Foetation which he had removed. Dr. Taylor, Goderich, showed a case of Ulceration of the Rectum.

Afternoon session, 1.30—5.30 o'clock.

Dr. Gunn, Clinton, showed several specimens of Calculi removed by the lateral operation. Dr. Milne, Blyth, presented a case of Multiple Neuritis where the brachial plexus was principally involved. Dr. Holmes, Brussels, showed a case of probable Anterior Poliomyelitis where one arm only was affected. Dr. Gunn exhibited

a case that resembled tumor in the base of the brain. Dr. Amos, Exeter, showed a case of Rheumatism. Dr. McKenzie described his favorite methods of treating club-foot and hip-joint disease, illustrating the same by cases presented by different members. Dr. Ross gave practical demonstrations of Intestinal Anastomosis, and related the history of dogs that he operated on. Dr. Wood, Mitchell, reported several cases of Erysipelas in Infants which had recently come under his observation.

A vote of thanks was tendered to Drs. Ross and McKenzie for their presence and contributions to the programme.

A resolution was passed expressing regret that Dr. Sloan, of Blyth, had left the county, he having been for many years one of the most active workers in connection with the Huron Medical Association.

The next meeting will be held in Clinton.

Correspondence.

Editor of THE CANADIAN PRACTITIONER :

SIR,—A rather unique experience in twins has fallen to my lot since 18th February last, as out of twenty-five consecutive confinements four have been plural births.

The children were two pair of females and two pair male and female; all came to full term, and seven of them are to-day living and all fairly healthy.

The mothers were all multiparal, healthy, of medium size, an average age of about thirty-three, had all resided in Manitoba and within a radius of three miles of Oak Lake for the past three years.

This I consider "speaks volumes" for the productiveness of Manitoba; and when the next decennial census shall have been taken, our politicians will have slight cause to complain of deficiency of increase in so far as this part of the Dominion is concerned.

Your correspondent, having been blessed with one of the pairs in his immediate household, may possibly account for his interest in the matter of twins.

H.H.W.

Oak Lake, Man.,
Sept. 5th, 1891.

Book Notices.

The Souvenir edition of the New England Medical Monthly.

The *New England Medical Monthly* is well known as one of the most able and most successful medical monthly journals published on this continent. The September number is the last of the tenth year of its existence, and an extra effort has been made by the editors and publishers to present a very attractive issue. A rather novel feature is introduced in inserting the portraits of its editors and principal contributors. The Souvenir edition, as it is termed, is in all respects creditable to both editors and publishers, and to the latter we have much pleasure in extending our hearty congratulations.

Personal.

DR. A. H. BARBOUR, of Edinburgh, is at present staying in Toronto, where he is the guest of Sir Daniel Wilson. He leaves October 6th for the Pacific Coast, on his trip round the world.

Therapeutic Notes.

PRURITIS ANI.—Kelsey prescribes acetate of potassium, ten grains three times a day internally, and a ten per cent. solution of nitrate of silver locally, to be followed by the following ointment :

R.—Menthol 1 drachm.
Simple cerate 2 ounces.
Oil sweet almonds. 1 ounce.
Carbolic acid 1 drachm.
Powdered oxid. of zinc . 2 drachms.

M. Sig. Apply morning, noon, and night, after cleansing the parts.—*Med. and Surg. Rep.*

CHOLELITHIASIS :

R.—Sod. Benzoat
" Salicyl.
Pulv. Rhei. aa. gr. v.
Pulv. Nuc. Vom. gr. ½.

Take at meal times.

—Huchard

ERYSIPELAS:

R.—Ichthylol 1.
 Collodion 2.

Apply to the affected part.

VOMITING OF PREGNANCY:

R.—Menthol 1.
 Spts. Vini. Rect. 20.
 Aq. dist. 150.

Tablespoonful every hour.

—*Gottschalk Frauenarzt, 1891.*

SALOL is the best of the intestinal antiseptics, because it is always well borne by the digestive tract; it is but slightly soluble, and is decomposed into carbolic and salicylic acid only in an alkaline medium, *i.e.*, in the intestine. Iodoform and naphthol, which are always toxic and irritant, are much inferior to it, for it is but slightly toxic. Almost equally valuable is the salicylate of bismuth, which acts on both stomach and intestine.

R.—Salol
 Bism. Salicyl.
 Sod. Bicarb. aa. ʒiiss.

Div. in caps. xxx.

—*Dujardin Beaumetz.*

TREATMENT OF NOCTURNAL INCONTINENCE OF URINE.—Dr. Van Tienhoven (*Gazzetta degli Ospitali*, No. 51, 1891) regards nocturnal incontinence of urine as dependent upon weakness of the sphincter. As soon as a few drops of urine reach the prostatic portion of the urethra, the detrusor urinæ contracts and expels the urine. Proceeding from this hypothesis, the writer made the children under his treatment sleep with their pelvis elevated, in order that the bladder may retain a quantity of urine before it reaches the neck of the bladder. From experiments made upon the bladders of cadavers of children with the pelvis elevated, he found that into the bladder of a three-year-old child one may inject six hundred drops, and one thousand drops into that of a ten-year-old child, before the liquid rises up to the neck of the bladder. Fourteen children treated by this method (thirteen males and one female) were cured after an average period of treatment of forty-two days, with only one relapse.—*Cincinnati Lancet-Clinic.*

DERMATOL A COMPETITOR OF IODOFORM.—

Dermatol is a basic combination of gallic acid with bismuth, of a saffron-yellow color, and extremely like iodoform in appearance. It is a fine powder, is not hygroscopic, decomposes with difficulty, is insoluble and antibacterial, possesses the peculiarity of drying up the secretions of wounds, does not irritate the skin, and last, but not least, is odorless. It is suggested as a substitute for bismuth in stomach as well as in intestinal diseases, especially in profuse diarrhoeas dependent upon ulcerations of the mucous membranes.—*Cincinnati Lancet-Clinic.*

SEMMOLA reports ten cases of pulmonary tuberculosis treated by hypodermic injections of blood serum from the dog. Six seem to have been benefited. Whilst no positive deduction can be drawn from these cases, he believes this method of treatment is a step in advance. In his opinion, the safest method of treatment is to modify the soil on which the organism subsists, by which means the fructification of the tubercular bacilli is checked and the disease is overcome.

TERAY, who has been experimenting on the physiological action of the bitters, finds that cetrarin (the bitter principle of Iceland moss) increases both gastric and intestinal peristalsis. He has therefore administered it in various forms of disease in which anorexia and constipation are prominent symptoms. Especially striking have been the results in cases of chlorosis, in which he gave it in 1½ grain doses twice a day before meals.

GOODHART, in the *American Journal of Medical Sciences*, says that to order dialyzed iron for cases of chlorosis is to play with the remedy and to waste time. The saccharated carbonate of iron, or reduced iron, in half drachm doses or more, three times a day, for at least six weeks, will cure such cases.

ALOIN acts as slowly when given hypodermically as by the mouth. Given hypodermically, it is excreted from the blood chiefly into the bowel, where it is gradually decomposed into a more active body. This also explains its slowness of action.—*Brit. Med. Jour.*

DR. JOHN STRACHAN, in the *Provincial Medical Journal*, says that the circumstances which exclude salines, with all other purgatives, are inflammation and probable perforation of the vermiform appendix, perityphlitis, and peritonitis from perforation.

DR. MONCORVO, in the *Bulletin Général de Thérapeutique*, states that in one case of incipient chorea in a little girl, the choreic movements ceased entirely after five days' use of ex-algine; 20 centigrammes having been given daily. On the strength of his observations, Dr. Moncorvo strongly recommends the use of this drug in pædiatrics.—*Med. and Surg. Reporter*.

Miscellaneous.

DETROIT GYNECOLOGICAL SOCIETY.—At the August meeting of the above society, Dr. Jenks announced the sad news of the death of our honored corresponding Fellow, Dr. George A. Tye, of Chatham, Ont. The President, Dr. A. W. Imrie, appointed a committee to draw up suitable resolutions, and the following were read and adopted at the September meeting:

Whereas this society has learned of the recent death of Dr. George A. Tye, of Chatham, Ontario, one of its distinguished corresponding Fellows, who has met with us on several occasions and has furnished valuable contributions to our transactions, we desire not only to pay a tribute to his memory, but to express as far as possible our appreciation of his many sterling qualities as a man and of the enviable distinction he had attained as a physician and surgeon.

Resolved: That we deeply deplore his loss to the profession he had so long adorned.

Resolved: That we recognized in the character of Dr. Tye the attributes of an accomplished physician and valued friend.

Resolved: That the family and friends of our late brother have our heartfelt sympathy in their bereavement.

Resolved: That a copy of this preamble and the accompanying resolutions be forwarded to the family and, for publication, to the medical journals of Ontario and Detroit.

E. W. JENKS, M.D.,

H. A. GERRY, M.D.,

Committee.

After the reading of the resolutions, an eloquent and touching tribute was paid to the memory of Dr. Tye as a friend, a physician, and a Fellow of this society.

(Signed) H. A. GERRY, M.D., *Secretary*.
84 Lafayette Ave.,
Detroit, Mich.

ON TAKING FLUID WITH MEALS.—I observe with pleasure that the verdict of general experience and common sense has been confirmed by scientific experiment in the matter of taking fluid with meals. Dr. Lev. O. Stratievsky, of St. Petersburg, after elaborate trials, has found that fluids materially assist the assimilation of proteids, and announces the following conclusion, which it is to be hoped no future experimenter will controvert:—

“On the whole, the widely-spread custom of taking fluids during or just before one's meals, proves to be rational and fully justified on strict scientific grounds.”—*Hutchinson's Archives of Surgery*.

AN IODOFORM SQUABBLE.—The amount of iodoform used in the Paris Hospital is something extraordinary. The authorities contracted for a supply of 48,000 kilogrammes (about 24 tons) at the beginning of the year, but by last month the supply had run out, and the surgeons were asking for more. It was not, however, until one of them, irritated by the hesitation of the authorities to accede to his demand for a further supply, purchased some at his own expense, that the authorities were shamed into contracting an additional supply, this time at the rate of 60 instead of 42 francs the kilo.—*Medical Press and Circular*.

DR. COULTER'S COMBINED VAPORIZER AND INHALER.—Dr. Coulter, who practised for many years in Lindsay, has invented a new instrument for vaporizing oils and drugs for inhalation, as well as for deodorizing and disinfecting sick rooms. This ingenious instrument has many advantages, on account of which we can recommend it highly. It is made with nickel-plated copper, being very simple, and at the same time durable. It is not simply a spray producer, but is really a vaporizer, and thoroughly volatilizes oils, breaking the oils into very small particles.