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THE

# Canadian Journal of Medical Science.

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## Selections: Medicine.

### TREATMENT OF DELIRIUM TREMENS.

BY GEORGE W. BALFOUR, M.D. ST. AND.

Physician to the Edinburgh Infirmary.

GENTLEMEN,—Having now had, in the ordinary course of our clinical rotation, for some little time under my care Ward 10, into which are admitted all maniacal and noisy cases, as well as those suffering from the effects of drink, and as the results obtained during that short time have been somewhat remarkable, I wish to make you acquainted with them; and also to guard you against a dangerous fallacy, which, to my astonishment, I have found to be still somewhat prevalent.

You are aware that the drink cases admitted into Ward 10, and usually classified under the heading of "delirium tremens," include every variety of alcoholic poisoning, from the excited, agitated, and prostrate condition popularly known as "the horrors," up to the very worst type of delirium tremens, often ushered in by severe and repeated epileptic attacks, forming a true *status epilepticus precursor*. You all know, I dare say, that, up to a comparatively recent date, the production of sleep was, very properly, as I think, regarded as the most important part of the treatment of this disease, and that this was sought to be induced by the most unjustifiable doses of narcotic poisons. Subsequently, chiefly owing to the writings of Ware, of Boston, delirium tremens came to be regarded as not in itself so dangerous as the means employed to cure it—to be looked upon, in fact, as a disease, which might safely be left to itself, and which terminated naturally

in from sixty to seventy-two hours. More recently still, modern chemical research having supplied us with safer and more active nervine sedatives, the production of sleep has again been recognized, not as a *sin quid non* in the sense of the former dogma that the patient must sleep or die, but as a very important and most efficacious means of cutting short the attack,—so safe and efficacious, indeed, that it seems almost a premium upon vice to promulgate it, though it is neither safe nor efficacious unless it is properly employed; this, however, has relation to the causation of the disease, of which I shall presently speak.

Twenty (now thirty) years ago the formula in use for delirium tremens cases in Ward 10 was, tincture of opium one drachm, tincture of hyoscyamus two drachms, common spirit (whisky) one to two ounces, given in a sufficient quantity to produce sleep. It seems impossible to account for the manner in which this most dangerous treatment was adhered to for years, except on the supposition that it was made to be less dangerous than it seems by that antagonism between opium and hyoscyamus which had been shown to exist by Mr. Benjamin Bell and others (more recently by Dr. Chevers and Professor Frazer). Be that as it may, there can be no reason to doubt that this treatment must have been most positively injurious in all but the most wary hands, too often substituting opium for alcoholic poisoning, and that it only maintained its ground because it was less fatal than the indiscriminate bloodletting which, as a treatment, immediately preceded it. And amid the many attempts every now and then made to revive the practice of bloodletting in inflammatory affections, it may serve to

strengthen the principles in which you have been trained to remember that arguments precisely similar to those made use of as to its efficacy in inflammation were formerly employed in favour of its use in delirium tremens—a disease which it only too often fatally cut short, yet one which is now-a-days rapidly and safely cured without it, though no one as yet has broached the theory that there is any change of type in this form of disease.

The treatment recommended by Mr. Jones, of Jersey, has never obtained any footing here. It consisted in administering half a fluid ounce of tincture of digitalis at once, and half of that dose, or two drachms, every two or three hours afterwards for twice or thrice. I have known many who preferred this treatment to that of opium; I myself believe it to be less dangerous, but though I know that half a fluid ounce of tincture of digitalis is not necessarily a fatal dose, I cannot help thinking it to be a dangerous one. It contains very nearly double the quantity of the drug which old Withering used to give, and the symptoms he often produced are not less likely to conduce to the safety of a patient suffering from delirium tremens.

The treatment by large doses of cayenne pepper, recommended by Dr. Kinnear—scruple boluses repeated every two or three hours—was also never adopted here; yet it was never dangerous in itself, and was often rapidly curative, as I myself have frequently had occasion to observe in private cases.

The expectant treatment, however, introduced by Dr. Ware, of Boston, was largely employed here, and gave rise to a free use of the dark and padded cells, which, I dare say, few of you have ever seen, and which are relics of a time when, as is but right, the treatment of lunacy was part of the daily duty of the physicians of the most complete and perfect teaching hospital of its day. Under this expectant method the patients undoubtedly recovered; but they were a good while about it, and during the process they ran many risks of various kinds—risks to themselves from their own violence, besides risks from constitutional exhaustion, from exposure to cold, and all that in such cases may flow from that, in-

cluding subsequent inflammatory attacks, &c. I have tried this system very freely, and can assure you that the various risks were not small, though, with careful watching the ultimate success was extremely gratifying.

Next followed the use of tartar emetic and ipecacuanha, as recommended by Dr. Preddie, of Edinburgh. I do not know that this treatment ever obtained any footing in this institution; it was less injurious than the opiate treatment, more dangerous except in skilful hands than the expectant treatment, and not more successful. But, on the other hand, it was most useful in cutting short a debauch, a full emetic of tartarised antimony seldom failing to put a speedy end to the most prolonged debauch, while, as it can be easily administered in the drink taken, it even yet may prove a most useful and efficient adjunct in the treatment of such cases.

Chloroform has also been employed in the treatment of delirium tremens, but it has proved unreliable, and too often dangerous.

The introduction of the bromide of potassium into medical practice, and its recognition as a safe and reliable nervine sedative, ushered in a new era in the treatment of delirium tremens. Instead of waiting and watching through a tedious convalescence, during which the patient ran various risks of death, from twelve to twenty-four hours' treatment was enough to induce a sufficient amount of refreshing sleep to restore the patient to a rational condition and speedy convalescence. From a pretty considerable experience of this treatment, I can say that it only failed in very exceptional conditions, and in some of these failures the cure was completed by the subcutaneous injection of morphia; while the few cases in which death occurred were in patients exhausted by primary disease or maltreatment, or affected by severe epileptic convulsions—a form of disease usually amenable to the bromide of potassium, but which, as a precursor of delirium tremens, too often proved intractable and fatal. Only in the very rarest cases was it found necessary to conjoin this treatment with the administration of stimulants, and these cases were always tedious and most unsatisfactory. On the other hand, several cases treated outside, ineffectually,

by the bromide of potassium accompanied with stimulants, were at once cured by the same remedy *minus* the stimulants. One of the most remarkable of these cases was sent in by a medical man, who seemed to think the case a very serious one. He anxiously inquired if I thought it possible that the patient, should he survive, would be well enough to be removed at the end of a fortnight, as his passage to America was taken, and his friends were anxious to get him away. He smiled incredulously when I told him if he called back next day he would find his patient either well or asleep, and fit to be removed at the end of a week. The result was, however, as predicted, and my friend is now a firm believer in the air of No. 10, though still sceptical as to the virtue of the bromide of potassium. The dose of the bromide was, however, large—half a drachm or more; and required to be frequently administered—every hour,—and that often till so much as ten or more doses were given before it took effect. In such cases this frequent repetition of the dose was always irksome and often troublesome, and the recent introduction of the hydrate of chloral was therefore welcomed as a possibly useful substitute. The first case of delirium tremens submitted to it was one of a fortnight's duration and of maniacal ferocity. He had had the bromide of potassium at home, and was sent in because it was found impossible to manage him, and his case was looked upon as most dangerous. Two doses of hydrate of chloral, of thirty grains each, with an interval of an hour between each dose, sufficed to induce refreshing sleep, from which the raving maniac awoke a rational man, requiring no further special treatment. Similar success has attended the chloral treatment in all the cases of delirium tremens which have been admitted to Ward 10 of late. In several severely maniacal cases a dose of forty-five grains has been administered with a result equally gratifying and surprising. In a case of puerperal mania one such dose sufficed to restore reason to the patient, at least so far as quietness and docility were concerned, though it completely failed to make her believe that she had ever given birth to a child.

So far, therefore, as our present experience

is concerned, we seem to possess in hydrate of chloral a remedy which in all such cases, from the slightest to the most severe, acts rapidly, safely, and efficaciously—*cito, tuto, et jucunde*—and which seems to deprive indulgence in drink of all its horrors and nearly all its dangers. Unquestionably fatal cases must occasionally occur under this as well as under other modes of treatment, but the number of them must be much decreased, because, from the rapidity with which a cure is brought about, many dangerous risks are averted. Thus, we avoid all the risks arising from a long continuance of maniacal excitement, or from a suicidal state of mind, all risk from the exhaustion following persistent sleeplessness, or defective nutrition, the result of long-continued insufficiency of food, &c. The risks the patient actually runs are not now, as formerly, connected with the treatment, but with his previous state of health. Thus, if he has a fatty heart, or has been exhausted by long-continued debauchery, or if he is from any cause an epileptic, he may die suddenly during the attack. But if he is otherwise healthy, he is sure of a safe and speedy convalescence.

So much for the treatment of delirium tremens. The fallacy to which I promised to direct your attention is this—that delirium tremens does not arise from drinking, but from ceasing to drink. In regard to this matter I myself have no doubt, and my confidence is derived from two sources:—First, I have found that so long as you permit your patient to obtain drink just so long will his disease prove obstinate and intractable to treatment; while when you continue the treatment, *minus* the drink, the cure is rapidly obtained. Of this we have had many examples, and it is this which has gained Ward 10 its well-earned reputation. Secondly, by stopping a man in his drinking by means of an antimonial emetic, you may often save him from an impending attack of delirium tremens, but you will never bring on one. Having had repeated occasion to employ this treatment, I speak with perfect confidence as to its results.

P.S. (December, 1878.)—Ward 10, which used to be under the care of each of the infirmary physicians alternately for a period of

three months, is now placed under the care of one of the assistant-physicians, so that henceforth I am not likely to see so much of delirium tremens as heretofore. I wish, therefore, to record that my experience of its treatment by chloral during the last nine years has been most satisfactory. It has, however, been my experience that there are very few cases indeed which yield to a less dose than fifty grains, and a considerable number which require a good deal more; those cases requiring the largest doses being those ushered in by the *status epilepticus*, which chloral arrests as rapidly and safely as it does delirium tremens itself. But even in these cases I have never required to give more than 120 grains of Liebreich's chloral, in divided doses, and this dose, though large, is not a dangerous one. Richardson tells us that the dose of chloral is proportionate to the weight of the animal, that a human subject weighing from 120 to 140 lb. is thrown into a deep sleep by a dose of ninety grains, and into a sleep that is dangerous by a dose of 140 grains. He finds also that an individual who has taken enough of chloral to be affected by it gets rid of it at the rate of seven grains an hour, so that though 144 grains given at once is a dangerous dose, yet twelve grains may be given every two hours for twelve times with perfect safety. From the irritated condition of the mucous lining of the stomach of a drunkard it is probable that the absorption of indigested fluids is not so rapid as usual; it is but fair, therefore, for that reason also, to allow a moderate interval between the doses, so as to avoid as far as possible any risk of giving more than enough. At the same time we must shun the opposite extreme of giving doses in themselves too small to have any decided effect, and which have any possible cumulative effect destroyed by too long an interval being permitted to elapse between the giving of each dose.

Acting upon the principles involved in the foregoing statements, I have for long been in the habit of treating cases of delirium tremens by giving forty grains of chloral hydrate every hour, for three times if necessary. Sometimes, but rarely, the first dose has been enough, most commonly two doses have been required, and it

has only been in the very rarest instances that the third dose has been necessary. If the attack be ushered in by *status epilepticus*, I shorten the interval between the doses to half an hour, as in these cases time is of the utmost importance, and a large dose is sure to be required. Should the heart be feeble, I give each dose of chloral in half an ounce or an ounce of the infusion of digitalis; the chloral, unlike the bromide, has no tendency to weaken the heart's action, while, like chloroform, it seems to induce a more equable distribution of the blood, the digitalis toning the heart, and increasing the arterial blood-pressure. Even should pneumonia be present, though the risk to the patient is enormously increased, the treatment does not require to be in any way modified; it is still of the utmost importance to quiet the nervous system, and to keep up the heart's power; while, even should the inflammation, the treatment is not the worst that can be employed, and is indeed that with which I have for many years treated all my cases of pneumonia, as all my students know, with great relief to their sufferings, and with at least an average amount of success; this treatment being indeed an improved and modern analogue of the chloroform treatment which proved so successful in the hands of Varren-trap, myself, and others, three cases of which were published in *The Lancet* for April, 1869, by my then resident medical officer, Mr. Frank Hodges, F.R.C.S., now of Leicester.—*London Lancet*.

THE PATHOLOGICAL ANATOMY OF ACNE.—At the *Société de Biologie*, M. Cornil stated that "numerous micro-graphic researches had enabled him to establish the fact that the acne pustule results from primitive inflammation of the hair follicle, and that the neighbouring vessels, greatly developed, allowed serum to weep from them, which accumulated in the pustule by the phenomenon of diapedesis.—*Le Progrès Médical*.

A few grains of pulv-rhei, it is said prevent the nausea that often follows the administration of morphia. It should be given with the morphia.

## ON CHRONIC BRIGHT'S DISEASE, AND ITS ESSENTIAL SYMPTOMS.

BY F. A. MAHOMED, M.D.,  
 Medical Registrar to Guy's Hospital.

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The pulse of high pressure has been described under various titles, but none of them are satisfactory, because each describes one character, but no one title includes all; thus it is known as either the *hard*, *cord-like*, *persistent*, *long*, or *slow* pulse. Now, in enumerating all these forms, I have mentioned all the qualities of the high pressure pulse, but they are not all present in every case in which the condition occurs. The quality which is least constant is the one by which the pulse is most commonly described—the *hard* pulse; this description is, therefore, the most objectionable; while the most constant sign is that described by the last term—the *slow* pulse; and this term is the one least frequently employed, and is also that which is least generally understood.

Let us now take a pulse and examine it with a view to determining whether or not high pressure exists in the vessels. Having recognized the position of the artery, first pass the finger very lightly to and fro transversely across the wrist; if it appears to pass over a ridge each time it crosses the vessel, and this ridge is there at all times, irrespective of the pulsation of the artery (in other words, if the artery is constantly distended, during diastole as well as systole), then the pulse is called *persistent*, and this is one of the most constant and reliable symptoms of high pressure. It means that the arteries are constantly full; they cannot empty themselves as readily as they should do in health, and, remaining thus overfull, they offer an increased resistance to the cardiac contraction; for it is manifestly more difficult for the heart to empty itself into arteries which are already fairly full of blood than into arteries which are nearly empty. Thus the ventricle, having more work to do, takes a longer time to do it in; hence the *systole is prolonged*, and the systolic expansion of the pulse is also prolonged, and the tidal wave in the tracing is unduly sustained. This gives to the pulse the character which the old physicians

described as\*the *pulsus tardus*, as opposed to the *pulsus celer*. (This was long ago pointed out by Dr. Burdon-Sanderson, and since then by others.) It is the most valuable and important sign of high pressure; it is the sensation of *slow* and *long* expansion which some pulses give to the finger, and the gradual way in which they subside, as opposed to the sudden subsidence and rapid falling away of the "quick" or "short" pulse. Types of the latter are seen in the "splashy" pulse of hæmorrhage or aortic regurgitation, while the pulse of Bright's disease is typical of the former. The two terms, *slow* and *long*, are synonymous; and the latter is more convenient, for the former is liable to be confused with or mistaken for *unfrequent*, as opposed to *frequent*—terms which, correctly speaking, should be used to denote the frequency of the beats per minute in place of quick and slow, which are commonly so used. These characters of the *long* and *short* pulse, and the use of the corresponding terms by the ancients, have been dwelt upon by Dr. Burdon-Sanderson in his classical little book on the sphygmograph, published in 1867. In that work he pleads much more powerfully than I can ever do, for what I seek to enforce to day; yet it appears to me that his teaching, vastly important as it is, has not received the attention it deserves; indeed, it is unknown to, or is forgotten by, the great majority of the profession. I find, indeed, that he there states a belief in the great doctrine I am seeking to prove—namely, that there exists a large class of people who constantly have *long* pulses, or pulses of high pressure, and that this is the indication of a diathesis which the old physicians—who, I cannot but think, were far keener observers than we generally give them credit for—recognized and treated. I feel sure that the doctrine of diathesis, or temperaments, will rise again, even in our generation, as a far more enlightened and complete conception than that which has been, or is at present, held concerning it, and that it will prove an invaluable guide in diagnosis and in treatment. In saying this, I am again echoing the words of that distinguished physiologist, but it is a lesson which the sphygmograph has taught me, as it taught him, and as it must

teach everyone who constantly employs it and seeks to profit by its use. To return to the point from which I have digressed, let me add that Marey has lately formulated a law which I believe from my own experience is true, and which both accounts for and explains the *long* pulse: Marey says that *the length of the ventricular systole is directly proportional to the arterial resistance*; in other words, if the arterial pressure is increased, the systolic expansion must be proportionately increased and the pulse become *long*.

The quality of *hardness*, when applied to the pulse, means its resistance to extinction by compression; it is not easily compressed by the finger. This quality is not always present in the pulse of high pressure, though it very generally is so. It indicates the force of the ventricular contraction. A strongly or excitedly acting heart produces a *hard* pulse; so also hypertrophy of the heart produces it. The *hard* pulse may therefore be a functional or an organic condition; but if the heart dilate, and its action becomes weak and failing, as it is very apt to do under high pressure, the pulse no longer remains *hard*, it may now appear *feeble* or *soft*, although *persistent* and *long* as before. A dilated heart may, however, give a covertly *hard* pulse—one, that is, which is not immediately recognized as such. It appears at first a feeble, easily compressed pulse, but if it be studied more carefully, it will be found that, behind its apparent feebleness, there remains a very considerable lifting power, which, though not discoverable at once, comes out by careful manipulation.

The *cord-like* pulse is said to be characteristic of high arterial pressure; under this term are included two distinct conditions. A pulse is said to be *cord-like* when it can be traced like a cord up the arm, rolled under the finger, and resembles to the touch the *vas deferens*. This character may be produced by mere *persistence* of the pulse, or overfulness of the vessels, although it appears as if due to an actual thickening and degeneration of the coats of the artery, so hard, knotted, and irregular does it feel; yet such a pulse can often be made to disappear by treatment. On the other hand, there is also a *cord-like* pulse which is really

due to thickening and degeneration of the arteries. To distinguish between these two forms of *cord-like* pulse, the functional and organic, we must proceed as follows:—Place the index-finger of one hand upon the pulse, and having carefully observed it, compress the artery firmly against the radius by means of the other hand, immediately above the point of observation. Let the pressure be so complete as to effectually arrest the flow of blood; now carefully examine the empty artery with the index-finger previously employed; in most cases it will be no longer distinguishable, but if it still remains so, it is probably due to thickening of the vessels, and the case is one of general arterial disease. If this test be carefully employed, it will be found that thickened radials do not occur so frequently as is thought to be the case, at least not such thickening as can be recognized by the finger.

The pulse of high pressure may be either *large* or *small*. This quality depends chiefly on the relaxation or contraction of the arteries; if they are relaxed, the pulse will be large, and even have a tendency, perhaps, to slight dicrotism; but it will remain persistent and long, for although the arteries are relaxed, the resistance (which I believe exists in the capillaries) is still present, and the cardiac systole is still long, perhaps laboured, though not so much so, possibly, as before. Relaxation of arteries may give temporary relief to an overtaxed heart by permitting it to empty itself more completely for the time, but it does not appear to afford any permanent benefit. If, however, the directions be all carried out with the most scrupulous care, it still occasionally happens that we remain in doubt, or fall into error, as to whether the pulse is one of high pressure or not. For example, a pulse frequently feels persistent when the arteries are relaxed and the pulse dicrotic—that is, when the very reverse condition to high pressure exists,—the fulness of the pulse and the large dicrotic expansion giving it sometimes even a sensation of *length* to the finger. It appears also that in some cases an unusually superficial vessel may give the character of persistence, especially if the pulse-wave be a large one.

Fortunately, however, we have a means of

checking our observations on the pulse, and this should be employed on all occasions. Dr. Sibson has pointed out the signs of high arterial pressure to be found in the heart—namely, a long or reduplicated first sound heard over the inter-ventricular septum, and an accentuated second. These variations in quality of the cardiac sounds appear to me to be of the utmost importance, and very frequently furnish most valuable information. The accentuation of the second sound is easily appreciated in any case in which the pulse is that of high pressure; but if this quality of the second sound is not present, it may generally be assumed that an error has been made with regard to the pulse. With this, as with all other signs, fallacies arise; and it is not unfrequent to find a markedly accentuated second sound when the arterial pressure is low. I think I have more particularly noticed this to occur during the convalescence from acute rheumatism, and it is, of course, present in all cases in which the pulmonary circulation is impeded; in the latter cases it is well known to be due to accentuation of the sound produced by the closure of the pulmonary instead of the aortic valves, and probably it is due to this cause also in the other cases in which it is heard accentuated when the arterial pressure is low, though how this high pulmonary pressure is brought about it is not so easy to say.—*London Lancet.*

**NEW MEANS OF PREVENTING CANTHARIDAL CYSTITIS.**—M. Guyot Danney, Chief Pharmacist to the Bordeaux Hospitals, recommends substituting for the precaution of powdering blisters (vesicatories) over with camphor, that of incorporating with them a certain quantity of carbonate or bicarbonate of soda. He makes a mixture of equal parts of carbonate of soda and powdered cantharides, and spreads this mixture over the vesicating plaster, then he presses it strongly with the palm of the hand in order that the powder may remain adherent to the plaster, and lastly he covers the whole over with oiled silk. These vesicatories produce their effect as rapidly and as surely as one made simply with the powdered cantharides without any addition; and the trial made of it for a number of years in the Bordeaux Hospitals seems to demonstrate that this addition is a better preventive than camphor, of the accidents so often observed on the part of the bladder after the application of blisters, whether camphorated or not.—*Lyon Médical.*

## TREATMENT OF LUMBAGO.

BY ALFRED STILLE, M.D.

The treatment of the acute form of lumbago is very simple and very effective. Perhaps the best treatment at first is the application of scarifying cups to the muscle, or muscles affected, to be followed immediately by narcotic fomentations in the shape of a bag of hops soaked in hot water, hot vinegar, or alcohol and applied directly over the scarified parts. There are various stimulating and anodyne liniments which are really excellent in their way—such as turpentine, ammonia, camphor, etc. If opiates are to be employed they should be administered early in the course of the attack. The best form in which to administer opium is in the shape of Dover's powder. This may be given in ten grain doses. It is usually very efficient in affording relief to the pain and at the same time is very likely to produce copious diaphoresis. Where a rapid effect is desired the opium must be given hypodermically in the shape of morphia.

In most of the cases of lumbago which are encountered in private practice the patient will be found to object seriously to the use of scarifying cups unless all other remedies are found to be in vain. In fact, you will most of you find in time that the use of this most excellent remedy must be limited to hospital and dispensary cases. Where scarifying cups cannot be employed the best treatment is that by morphia hypodermically, and Dover's powder by the mouth. (In the University Hospital the great pain accompanying lumbago is at once and very often permanently stopped by the hypodermic injection into the affected muscle of a solution containing one-eightieth of a grain of atropia and one-eighth of a grain of morphia. Great care being always had in the administration of morphia and atropia to nursing women, as belladonna is the most powerful antilactagogue known, and as too large doses of morphia not infrequently affect the child through its mother's milk.—*REP.*)

Another most valuable drug in the treatment of lumbago is the iodide of potassium which would seem to be clinically proven to have a peculiarly beneficial influence over rheumatism of the lumbar region—more influence over this

form of rheumatism in fact than over any other. Dr. Graves, of Dublin, is the first one reported to have made use of iodide of potassium in lumbago and he tried its effects upon his own person. He found that in doses of from five to ten grains given every three or four hours, its effects were truly wonderful.

This clinical fact—I refer to the peculiar influence of the iodide of potassium upon rheumatism of the lumbar muscles—is very difficult of explanation, but it is undoubtedly true. The iodide has been tried in the treatment of muscular rheumatism of other parts of the body and its effects in such cases have been found to be not by any means so immediately successful.

In the chronic form of lumbago the condition is one of great obstinacy and is very difficult to treat. Such cases are very apt to persist in disappointing your hopes of cure. The most useful class of remedies here are of course the various forms of counter-irritants, such as blisters, sinapisms, the actual cautery, etc., etc. Thoroughly and conscientiously applied local friction and *massage* may do good in some instances where counter-irritants have signally failed.

Of all remedies, however, for chronic lumbago, I am accustomed to rely most upon the influence of tepid water upon the affected parts. The action of water, though slow, is a very permanent one. The water may be applied either in the shape of wet compresses kept in constant contact with the part, or you may use a douche and allow a stream of water to fall steadily upon the rheumatic muscles for some time from a height of from eight to ten feet. This use of water does great good in all forms of muscular rheumatism no matter where located. After the treatment by douche, or by wet compresses, the parts should be briskly rubbed with a coarse cloth or a skin brush, and then covered with cotton, or wool, or a piece of India-rubber cloth.

I have occasionally derived very advantageous and rapid results from the use of a metallic brush, rubbing the affected part briskly with it. This rubbing acts of course as an electric stimulus, and always gives immediate, if not permanent relief, though my experience has been

that the use of the electric brush afforded permanent as well as immediate relief.

Very often I advise tying a cloth over the lumbar muscles and ironing them thoroughly, two or three times a day, and then following up the ironing with the application of some stimulating liniment.

If a person is subject to attacks of lumbago he should of course protect the parts by wearing constantly a Burgundy pitch plaster, or perhaps better still, a plaster that has lately been patented—I refer to the various makes of porous plaster. These plaster acts in two ways, first by protecting, and secondly by affording constant mechanical support to the affected muscles.

I think that I have already pointed out to you the most important remedial measures generally employed, but before closing I must not forget to tell you that guaiacum sometimes does great good. So, too, with regard to mezereum. Sulphur also is occasionally used with much benefit in the shape of sulphur baths, or sulphur water by the douche. Many recommended highly the continuous use of sulphur waters internally, or again, sulphur powder may be quilted in between two cloths and these kept in constant contact with the loins.

The treatment of chronic lumbago, if it is to be at all successful, must be constantly changed.

Dr. Stillé then speaks of rheumatism of the deltoid, muscles of the scalp, abdomen, eye, diaphragm, &c., all of which he treats in essentially the same way as lumbago.

The treatment of all these local forms of rheumatism is in general essentially the same as that for lumbago.—*Hospital Gazette*.

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EXTRACT OF MALT OF THE TROMMER EXTRACT OF MALT Co., FREMONT, OHIO.—We find that this extract converts starch into glucose and dextrine rapidly, and in large quantity. In flavour it is excellent, and we have, therefore, no hesitation in praising it highly. Malt extract seems to be steadily increasing in favour for diseases involving impaired nutrition; but its preparation requires great care, as it is easy in making it, to destroy its activity for starch converter, and so render it nearly useless.—*London Lancet*.

## Surgery.

### NOTES ON PHTHIRIASIS.

BY L. DUNCAN BULKLEY, A.M., M.D.

The presence of lice is a far more frequent cause of irritation, and consequent lesion, of the skin than is commonly supposed, and must ever be borne in mind by the physician even when practising "among the best families." As is well known, there are three varieties found, affecting severally the head, the body, and the pubis and axillæ: the treatment is, of course, entirely local, and differs somewhat according to the locality of the parasite; we will, therefore, speak separately of phthiriasis capitis, phthiriasis corporis, and phthiriasis pubis.

Among the poor my almost constant treatment for lice in the head is kerosene oil, which not only operates as a destructive agent to the insects, but acts very kindly upon the artificial eruption, which is sometimes observed in great severity among the lower classes, where a large part of the scalp is often found to be covered with exuding surfaces. My method of using the oil is as follows: The ordinary kerosene, which is found in every family for use in lamps, is poured on the head freely, and well rubbed in. At bedtime another similar application is made, and in the morning, on rising, a third, the head being kept in the meantime covered with a cloth. After the scalp has thus soaked the kerosene oil for twenty-four hours, it is thoroughly washed with soap and water, and a small amount of weak ammoniated mercury or oxide of zinc ointment is applied to any existing sores, or a subsequent anointing with cod-liver oil affords admirable results. This single application of the kerosene oil for twenty-four hours effectually destroys not only every louse, but penetrates the ova or "nits," and they will be found loosened from their attachments, and even if left on the hairs they will not hatch out. I never order the hair to be cut even in the very worst cases; where the hairs are matted together with filth and exudation, the oil penetrates and softens all, and among hundreds of cases thus treated I have never seen it fail, whilst cheapness and safety,

as compared with washes of bichloride of mercury, etc., especially recommend it.

The coverings for the head must also be treated or a new infection may take place; these I order to be placed in the oven of a range or stove, upon a board, and to be thoroughly baked for at least two hours.

Although the idea of applying the oil to the head of those in better classes of society may seem repulsive, I have employed this treatment in a number of cases in private practice and with the same results. The end is accomplished so surely and so quickly that patients submit to the disagreeable odor for the time (in them it may be counteracted afterwards by the essential oils, as bergamot, lavender, or rose, in washes or pomades,) while there is no other remedy with which I am acquainted which will with such certainty destroy the nits.

If the oil is objected to for its odor, or for other reasons, we have in the infusion of stavesacre, the seeds of the delphinium staphisagria, a cleanly and efficient remedy; but this requires a longer application, and, I believe does not affect the nits, which must afterwards be patiently picked and combed out; the destruction of the nits is assisted materially by the frequent use of a wash of alcohol and aromatic vinegar or aromatic spirits of ammonia, in equal parts, diluted if necessary. When there are but few lice an ammoniated mercury ointment (gr. xx—xxx ad ʒi) will suffice, or of powdered stavesacre seeds (ʒi ad ʒiv); this latter will be much stronger if the ointment is melted and the powder added while hot.

Phthiriasis corporis, or lice on the body, may be speedily removed by absolute cleanliness and a proper treatment of the clothing. It is well known that the ova of this variety are deposited on the clothing; the undergarments, therefore, should be thoroughly boiled or baked, and clean ones, which have been thus treated, put on immediately after a bath. Among the poor I very commonly give a wash of carbolic acid and caustic potash after the following formula:  $\mathcal{R}$  Acidi carbolici. ʒii, Potass. caustic., ʒi, Aquæ, ʒiv., M, the potash to be dissolved in the water, and to be added slowly to the carbolic acid, in a mortar, with friction. This is an admirable anti-pruritic, while at the same time the carbolic acid assists in driving off the insects.

Where they can be employed, alkaline baths are of great service in relieving the pruritus which often remains after the removal of the lice.

Phthiriasis pubis refers rather to the variety of the parasite than to the region occupied, for the same round, crab-like insect may be observed on the hairs of the pubis, chest, axillæ, eyelashes and eyebrows, and even in the beard. The condition often passes unrecognized for a length of time, and unless pretty carefully sought for the animals will not be seen: they are found, as is well known, firmly attached to the hairs at their very exit from the follicle, and present rather the appearance of a minute crust or scab than of a living creature. Occasionally nits or ova are found on the hairs in abundance, but always very near their attached extremity.

Thus much is said in regard to the features of the disease because unless they are well borne in mind the parasite will not be reached. In vain is it simply to take baths and change and treat the underclothing, the crab-lice remains firmly attached, and is only gotten rid of by measures which reach it at its seat. The most common application is the ordinary mercurial ointment well rubbed in, but cases of salivation are continually occurring from this treatment, and other measures equally efficacious should be used. My usual remedy is the ointment of ammoniated mercury, either in full strength or once or twice diluted; if circumstances permit, kerosene thoroughly applied acts more speedily and surely than any other remedy: it should be well rubbed on with a cloth several times daily for one or two days. Stavesacre or sabadilla in powder or ointment, or a tincture or infusion of cocculus Indicus, are common prescriptions for this state. Turpeth mineral, twenty to thirty grains to the ounce, is a safe and efficient parasiticide. Where the lice exist in many places sulphur vapor baths are of service, but do not reach the nits. Occasionally cases with the crab-lice will prove very rebellious, and can only be overcome by continuous treatment for some time; the reason of this is that the nits resist the destructive agents, the new lice are continually hatched out, again deposit their nits, and so keep up the infection.—*Archives of Dermatology.*

## WOUND TREATMENT.

BY SAMPSON GAMGEE, F.R.S.E.

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By the courtesy of the Council of the Midland Medical Society, the students of this school were privileged to hear the deeply thoughtful and richly instructive address which Prof. Lister lately delivered here. His title, you will remember was "On the Healing of Wounds without Antiseptic Treatment." I shall only recall to you one passage which I took down *verbatim*, as my distinguished friend and old fellow-student was endeavouring to explain some of the published results of my practice. He did not question the reported recoveries after wounds into joints, and amputations under dry and infrequent dressing, rest, and pressure. Here is the pith of his answer—"that the healthy living tissues have the power of preventing the development of bacteria in their vicinity." This admission goes a very long way towards solving the question at issue. Since the great majority of wounds, whether inflicted by accident or by the surgeon's knife, are in healthy tissues, the development of bacteria need not be feared. Life resists putrefaction. Administer economically, preserve and utilise the resources of life, and you will have the benefit of its power in your surgical work. You will secure nutrition and repair, and, under the circumstances mentioned, have very little need to wage a war of extermination against atmospheric dust. But all wounds are not into healthy tissues—to wit, an incision into a joint filled with pus, an opening into a psoas abscess, or an empyema. It is in these cases that the argument of the germ-theory is full of suggestiveness; it is in these cases, not improbably, that a special triumph will be reserved for Professor Lister's treatment. If so, the triumph will be a grand and glorious one. I for one shall most heartily congratulate my distinguished friend, if experience prove the superiority of his plan of treatment in the exceptional pathological conditions just referred to. But for the great mass of surgical cases, for the treatment of wounds in every-day life and in the work-shop, at the pit's mouth and on the battle-field, the requisite knowledge is old

and sound. Much of that knowledge has never been sufficiently appreciated; no small part of it has been forgotten. The work of collecting and digesting scattered information, of applying a combination of therapeutic resources, separately valuable, and collectively most powerful for good, is an investigation at once deep and intricate; it demands no less learning than practical skill, and can only be successfully mastered by the combined energies of a number of men. Let anyone read Liston and Syme, living teachers of the other day, in the very first rank of historic surgeons; then let him think of the present discussion on wound treatment. They thought water dressing of recent wounds perfection; many of us look upon it, as I do, as an abomination. Treating of sprains, Liston said, "Avoid such compression as may interfere with swelling from effusion, which is a salutary process, and should be encouraged, and not repressed." We say compress, and you will have no effusion, which is a pathological process to be discouraged and repressed, whether the swelling attend a sprain or a compound fracture, whether it be bloody or inflammatory, beneath an unbroken skin or associated with a wound. Are these truths or errors? *Experientia docet*. Let me repeat to you my favourite quotation from the inexhaustible treasure-house of the old French Academy of Surgery: "*L'Académie n'aime pas les systèmes.*" Theories and systems are what you have to avoid. Facts and their strict interpretation are what we have to search after. It is in this search that we are engaged. It is in this search that all those surgeons who are diligently working out the problem of wound treatment are destined to find a reward which cannot fail to redound to the honour of our art and to the good of our race.—*London Lancet*.

**CAPILLARY VARICOSITY OF THE LEG.**—The next is a very important case, especially taken in connection with the preceding. This woman also has on her leg a lesion which I think almost any observer, from the appearances which it presents, would at first sight certainly pronounce syphilitic. It forms, therefore, one of those remarkable exceptions which we meet with in occasional instances, and to which almost every general rule is subject. On mak-

ing a careful examination here, it is found that the superficial veins of the whole limb are in a marked varicose condition, and this patch upon the leg, so far from being of syphilitic origin, is simply the result of the same varicosity affecting the capillaries of the part. The brownish discolorations grouped together, which under ordinary circumstances would be regarded as characteristic of the stainings left by a tubercular syphiloderm, are here undoubtedly due merely to disintegration of the red corpuscles of the blood which has followed the rupture of the vessels. On the other limb we find the same marked varicose condition of the veins, and also similar patches above as well as below the knee, which might easily be taken as evidence of the syphilitic nature of the case. But she has not had syphilis; these stainings have never been preceded by any other lesion; they have long remained in their present condition, and are certainly not due to syphilis. I have seen several of these cases. The lesion is not described in the books.—*Dr. Bulkeley in Phil. Med. Times*.

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*L'Union Médicale.*

TREATMENT OF CONSTIPATION.—(THOMSON.)

If constipation result from deficient secretion in the small intestine, we increase the quantity of intestinal fluid by making the patient drink much more at his meals than he is in the habit of doing. Besides, we make him take in the morning before breakfast a glass of water containing in solution one drachm of the sulphate of magnesia, and one grain of the sulphate of quinine. A notable effect is produced after 8 to 15 days of this treatment. In old persons, and in those of sedentary habits, constipation is ordinarily due to defective innervation of the small intestine. In these cases we should be careful not to advise copious draughts, which only weaken the digestive power of the stomach and destroy the appetite. We prescribe, in the morning on rising, a hip bath, with water as fresh as the patient can bear, or sponging of the spinal region and abdomen with fresh water, or a rain-douche to the abdominal region. If it be defective innervation of the large intestine which determines the constipation, we unload the rectum from time to time by means of cold enemata, and then restore the innervation by means of hypodermic injections of strychnine.

## Midwifery.

[Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.]

*Hôpital, St. Louis.—M. S. Duplay.*

### CYSTS OF THE BROAD LIGAMENT (PAROVARIAN CYSTS.)

GENTLEMEN,—I shall take for the subject of the present lecture the patient occupying bed No. 69, in the ward *Sainte-Marthe*. This young girl, 23 years of age, is not married, has never had children nor a miscarriage. She became regular at 14 years of age, since that time her courses have been sometimes accompanied by lumbar and abdominal pains. Four years ago she observed that her belly was increasing in size. This augmentation advanced slowly, and, so to speak, insensibly, but for the last year it has remained stationary. During all this period of its development the patient has not experienced the slightest pain, and her health has remained excellent throughout. On admission we found the abdomen pretty large. Its general outline presented nothing characteristic; its form might suggest an ovarian cyst, but there is not that prominence in front which is usually observed in cysts of the ovary. The belly is rounded, slightly prominent in the flanks. Absolute dullness is found upon percussion, except in the region of the upper demi-circumference of the abdomen, and the extreme parts of the flanks. Moreover—an important character—this dullness is fixed and undergoes no modification no matter what position the patient may assume. Along with this dullness there is found perfect fluctuation, transmitted in all directions under the slightest percussion. The tumour presents a resilience, an elasticity, alike in all its parts except in two points at its upper extremity where it is a little less depressible. It is movable upon the deep parts, and may be displaced from above downwards and from right to left. If the hand be applied to the abdomen during full inspiration there is not found that alternate elevation and depression which is impressed upon tumours connected with organs which are in contact with the diaphragm, such as the liver and the spleen. On the other hand, vaginal exploration very evidently establishes

rather close connections between the tumour and the internal genital organs. In the first place movements impressed upon it are very readily transmitted to the uterus. Moreover, the cervix is carried very high up, and the uterus is displaced and compressed against the concavity of the sacrum. It is a remarkable fact that a tumour of such dimensions should give rise to but very trifling functional disturbances. It has not determined any of those phenomena of compression of the rectum or bladder or lower limbs which are so frequently met with in the various abdominal tumours, and particularly in tumours of the uterus and ovaries. The general condition is excellent, and the various functions of the economy are absolutely unaffected. Lastly, the catamenia are quite regular, and menstruation has occurred since her admission.

We are evidently concerned with a liquid collection; but where is it located? Is it in the peritoneum; or is it an encysted collection? It is very easy, I think, to show that it is a cyst and not an ascites. You know, in fact, that in ascites the fluid, obedient only to the law of gravitation, always occupies a dependent situation in the abdomen, which varies with the position of the patient. The intestine, of a less specific gravity, floats on the surface. If then the patient be lying horizontally, on the back for example, you will find dullness in the hypogastrium and flanks, and on the other hand resonance in the epigastric and umbilical regions. But if the position of the patient be changed, if she be placed on one side, for example, the whole of that side will be dull, and the other side will present an exaggerated resonance. In our patient I have already remarked to you that dullness is found over almost the whole abdomen, and that this dull region does not change with the position of the patient. In her case, therefore, we are concerned with a cyst and not an ascites.

With what variety of cyst then have we to do? I shall not undertake to lay down here the differential diagnosis of all abdominal tumours; such a study would carry us much too far. I shall proceed more generally, and shall insist especially upon certain points which I wish to bring into relief. In the first place we

shall eliminate altogether the different kinds of solid tumours, because we know our patient's is a fluctuating one. We shall also pass over in silence those tumours which are at once solid and fluid; such tumours are not fluctuating in all directions as is the one under observation. We shall also readily distinguish from it tumours of the upper part of the abdomen, such as cysts of the liver and spleen; for these tumours are adherent to the diaphragm and follow all its movements. Renal cysts are very rare; they are preceded by functional disturbances of the kidneys. Lastly, an important characteristic: Such cysts are located upon one side of the abdomen, or, if they occupy the whole of it, they have first appeared upon one side. I shall only mention as a curiosity encysted dropsy of the peritoneum. This affection is extremely rare, and it is almost impossible to diagnose it if you have not witnessed the beginning and the evolution of the malady. We must therefore refer our patient's tumour to the utero-ovarian system, more especially as I have already pointed out to you its connexions with the uterus.

We can now proceed still farther in narrowing the diagnosis. Let us take up, in the first place, uterine cysts, or fibrocystic tumours. These tumours are irregular, being formed of several sacs. But, in the present case, we have to do with a very regular tumour, resilient and fluctuating in all directions. Moreover, the vaginal touch has not discovered any abnormal projection from the uterus itself. We can not rest satisfied with a supposition of pregnancy, although in all cases of abdominal tumour the possibility of such an occurrence should ever be present to the mind. But here this differentiation is unnecessary. In the first place we know that the patient has been regular within a few days. Moreover, the tumour is so liquid, and its walls are so thin, that it in no respect recalls the characters of the gravid uterus. There remain, lastly, ovarian cysts. But it is now known that unilocular ovarian cysts are extremely rare, so much so, in fact, that some authors absolutely deny their existence. In a recent communication to the *Académie de Médecine* upon the indications and contraindications of ovariectomy, I laid it down as an

absolute rule to make an exploratory puncture in all cases of encysted tumour of the abdomen. This puncture will, as a first result, afford you information as to the nature of the cystic fluid, and you will, before long, see this point acquire the highest importance in view alike of prognosis and of treatment. I have, therefore, practised in our patient a puncture which gave issue to eleven litres of a fluid whose characters differ from those of true ovarian cysts. The fluid contained in these latter cysts is thick and thready, like a solution of gum or of silicate of potash; it is variously coloured, sometimes red, sometimes yellow, sometimes green. In our patient, on the contrary, the fluid was limpid, transparent, and clear as crystal. So from these characters alone I felt justified in affirming that it was not a true ovarian cyst, but a cyst developed in the vicinity of the ovary. We know, in fact, that there exists a variety of cysts situated in the broad ligament, and formed from the *debris* of the Wolffian body. Not long ago these cysts were scarcely known clinically; but in the last few years Spencer Wells, in England, and Panas, in France, have directed the attention of surgeons to them, and have insisted upon the benignity of their prognosis and the facility of their cure. I therefore deem it of utility to point out to you briefly both the origin and the mode of development of these cysts. You are aware that the genito-urinary organs are developed at the expense of the Wolffian body which is at first situated within the abdomen along side of the vertebral column, and part of which presides over the development of the kidney; whilst the other part gives origin to the testicle in man, and to the ovary in woman. In the latter, after the development of the ovary, this body atrophies, and is thenceforth represented merely by its extremely shrunken excretory canal, and by its flexuous secretory canaliculi. Under this wasted form it constitutes what has been termed the body of Rosenmüller, or the *par-ovarium*. Roseumüller's body is situated in the broad ligaments, and is made up of a certain number of very fine canaliculi which are all directed towards a principal canal in which they terminate. In consequence of new transformations this principal canal becomes short-

oned, and the different canaliculi it receives all converge towards the same point. These latter have a very fine, rather irregular calibre; here and there they present swellings, elsewhere they are, on the other hand, constricted. You will readily perceive that such a disposition is eminently favourable to the development of cysts; and in point of fact you often meet at autopsies with cysts having such an origin. But these cysts may acquire much greater dimensions. It is very frequently extremely difficult to distinguish them from true ovarian cysts. I believe, however, it is possible to make this differential diagnosis by taking into account the following facts: in the first place, cysts of the broad ligament are in general formed of a single sac; but we now know that true ovarian cysts are almost always, if not always, multilocular. In general, the form of the belly is not the same in the two varieties. In cysts of the parovarium the belly is rounded even into the flanks; in ovarian cysts, properly so called, it is rather prominent above the pubes. Cysts of the broad ligament have closer connexions with the uterus, which is often displaced and pushed back against the sacrum. But it is especially exploratory puncture which will remove all doubts. In fact, as I have already said, the fluid presents very different characters in the two varieties. In cysts of the parovarium the fluid is colourless, of a perfect fluidity, and a clearness similar to that of crystal. Chemical analysis reveals in it no trace of albumen, or absolutely insignificant quantities. But you know that true cysts of the ovary always contain considerable proportions of it. Lastly, in these latter cysts the microscope reveals the presence of *Éléments figurés*, of special cells, which are the *cellule calciformes*. In cysts of the parovarium on the contrary such are never met with. \* \* \* \* \* Now as to prognosis and treatment. While on the one hand veritable ovarian cysts are amenable only to ovariectomy, parovarian cysts, on the contrary, will be cured by simple puncture, or by a series of successive punctures which may be followed up by iodized injections. I am myself not very far from believing that the majority of cysts cured by simple puncture followed by iodized injections were merely cysts of the parovarium. The prognosis therefore, of these cysts, is benign. \* \* \* \* \* —*Le Progrès Médical*.

## DANGER FROM WASHING OUT THE PUERPERAL UTERUS WITH DISINFECTANT SOLUTIONS.

In No. 14, sec. 313, and No. 16, sec. 341, of the *Centrablatt für Gynäkologie* are two contributions, by Kustner and Fritsch respectively, drawing attention to the possible risks that may follow from the too free employment of disinfectants in the form of injections into the cavity of the puerperal uterus. The symptoms were those of acute poisoning. In Kustner's case, which subsequently proved fatal, and in which the section showed that the introduction of the catheter had in no way injured the uterus, there were suddenly developed unconsciousness, contraction of pupils, rapid respiration (40 per minute), and the pulse ran up to 148, being weak and scarcely perceptible. Clonic spasms seized the arms, the head was thrown backwards, the jaws were clenched, and the small muscles of the face were convulsed, and a clammy sweat covered the patient. In 10 to 15 minutes she improved considerably. In half an hour afterwards the patient vomited black matter, and the urine, removed by catheter an hour afterwards, was perfectly black. The solution used on this occasion was one of acid to twenty of water. Fritsch records three cases of dangerous symptoms arising from washing out the uterus with disinfectants immediately after delivery. In one of these cases the disinfectant used was salicylic acid, in the other two carbolic acid. In all the cases, sudden collapse, unconsciousness, and extremely rapid pulse were observed. In the cases in which carbolic acid was employed, there followed the characteristic coloration of the urine. All these ultimately recovered. In all three cases the uterus was ill-contracted. Both authors regard these accidents as due to rapid poisoning from the entrance of the disinfectant into the blood through the patulous sinuses of the badly-contracted uterus; and, while strongly in favour of disinfectant irrigation of the puerperal uterus in cases where there is reason to apprehend putrid absorption from the endometrium, recommend strongly that the injection should be performed with the greatest caution and the avoidance of a forcible stream.

*Abstract.*

### THE DILATATION OF THE CERVIX UTERI BY TANGLE TENTS.

This is the subject of an interesting article in No. 7 *Centralblatt für Gynäkologie* of this year, by Dr. B. S. Schultze, of Jena. The underlying principle of his procedure is the assumption that for safe dilatation the tangle tent must never come in contact with a raw wound surface. But, besides this, Dr. Schultze takes the strictest antiseptic precaution that the conditions of the operation allow of. To gain the end in view, namely, safe dilatation of the cervix, Schultze employs flexible copper sounds, of varying thickness, by which he ascertains the exact size and curvature of the cervical cavity. Having settled these points, a tangle tent, corresponding in thickness with the sound, which just passes the cervical cavity, is immersed for one or two minutes in boiling water, and being thus rendered flexible, the same curvature is given to it as that of the sound, which has been previously adapted to the cavity of the uterus. On cooling, the tent retains the curvature thus communicated to it, and after steeping it in a  $\frac{1}{1000}$  solution of carbolic acid, it is introduced through a speculum, the cervix being meanwhile held down by an assistant with a hook or vulsellum. If a drop of blood is seen coming from the cervix during any of these processes, the operation is to be postponed for at least twenty-four hours. The patient is to be kept strictly at rest during the whole time that the tent is dilating, and the strictest care is to be taken in the removal of the distended tent that no injury is caused to the cervix. The vagina and cervical canal ought to be then carefully washed out with a  $\frac{1}{100}$  solution of carbolic acid. By these precautionary measures, the author states that he has been able, in several hundreds of cases, to dilate the cervix without any accident, and maintains that if his method is followed the usual contraindications to dilatation of the cervix can be very largely dispensed with. He holds that, according to his experience, chronic metritis, chronic perimetritis, and parametritis, even when the resulting catarrh is inconsiderable, are very beneficially influenced by repeated dilatation and subsequent washing out with carbolic acid. In a number of cases of enlarge-

ment of the uterus from chronic inflammation, Schultze was able to demonstrate by actual measurement diminution in size to have resulted from this treatment. These precautions seem to us worthy of consideration at the present time, when the attention of gynecologists is so largely directed towards dilatation of the cervix as an aid in the treatment of uterine affections.—

#### Abstract.

WARM FOMENTATIONS TO THE HEAD IN CASES OF UTERINE HEMORRHAGE.—Dr. Koehler (*Allg. Med. Central-Zeitung*, No. 1, 1879) states that he has for the last seven years, in cases of uterine hemorrhage, applied warm fomentations to the head to prevent anæmia of the brain, and also to the heart. Hot sand-bags are also very efficient, and the patients often will bear sand which is so hot that it can scarcely be touched by the hand. As soon as the fomentation or bag has been applied, consciousness is restored; the pulse grows stronger; the patient herself states that she feels better, that the ringing in the ears has ceased, and that she likes the application. As soon as it becomes cooler, she wishes it to be renewed. Dr. Koehler has, he says, saved patients even in most dangerous cases of hemorrhage by this proceeding, by which the physician never loses time, as the fomentations may be watched and renewed by any one. This method has been found equally efficient in anæmia caused by epistaxis, hemorrhages produced by wounds, etc.

EXULCERATIVE SYPHILITIC HYPERTROPHY OF THE NECK OF THE UTERUS.—Dr. A. Martin states, that in about 48 per ct. of all cases in women, during the early secondary period of syphilis, the uterine neck hypertrophies sheds its epithelium, looks varnished, of a livid hue, and suppurates slightly without ulceration. There are no subjective symptoms of inflammatory disturbance affecting the utero-ovarian system. The malady comes on, on an average, 58 days after the appearance of a chancre, sometimes preceded by fever. It customarily co-exists with secondary hypertrophy of the tonsils, to which it is quite analogous. The secretions from the lesion are contagious but not auto-inoculable. Four or five weeks of internal treatment, cause its disappearance. Local treatment alone is of little or no value.—*Archives of Dermatology.*

## Original Communications.

### CHEYNE-STOKES RESPIRATION.

BY R. ZIMMERMAN, M.D., L.R.C.P. LONDON.

Read before the Canada Medical Association at Hamilton,  
Sept. 12th, 1878.

The literature of Cheyne-Stokes Respiration is so meagre, that I have thought it might interest the members of this association to report a case that occurred in my practice during the past year:

The patient, A. M., aged 55, by occupation a tailor, first came under my observation in July, 1876, when I attended him in an epileptic attack brought on by excessive drinking. He was a man of exceedingly plethoric habit, and had been a hard drinker of spirits all his life. He remarked to me at one time that he had been almost nursed on whisky. He stated that he had hip-joint disease when a child, which was cured with considerable deformity, but that since then he had been healthy up to the last few years, when his breathing became short. In April, 1877, I attended him for phlegmonous inflammation of the leg, which suppurated, and confined him to bed for five weeks. After recovering from this attack he returned to work and continued at work until January, 1878, though the dyspnoea due to emphysema of the lungs continued to increase in severity. At times he could not walk further than a few yards without resting. In spite of repeated warnings he continued to drink to excess. The illness which terminated fatally began in January, 1878, when he had a return of the inflammation in his leg, which, however, did not suppurate. The leg had continued more or less œdematous during the nine months preceding this, and latterly both legs were dropsical. He was now confined to his bed almost constantly, the dyspnoea increasing gradually to orthopnoea; the appetite failed, and the œdema of the lower extremities increased; cough troublesome, and he slept very badly. There was no cardiac murmur. Up to the time when the peculiarity in respiratory rhythm began, that is near the end of February, there was no albumen in the urine and no casts could be found; the secretion was not at any time in excess in quantity, and was usually high-coloured;

bowels usually constipated. I may here remark that no treatment adopted appeared to have much effect. I succeeded at one time in reducing the œdema of the legs considerably by 20 grain doses of resin of copaiba, but the œdema returned and then the remedy failed; tonics, diuretics, and expectorants, such as iron digitalis, sweet spirits of nitre, bromide of potash, belladonna, strychnia, carbonate of ammonia, &c., were all tried, without more than temporary relief. About the end of February the right arm and hand became œdematous, the left not so; the respiration, which had all along been very laboured, assumed the character which has been called Cheyne-Stokes—Cheyne in 1818, and Stokes in 1846, being the first to describe it. This peculiarity in respiratory rhythm continued, sleeping or waking, with but one slight intermission, to the time of his death. The phenomena as observed were as follows: After a period of complete cessation of respiration the patient would begin to respire gradually, beginning with a low inspiration, then one more decided, and so on, increasing to a maximum, and then declining gradually until a state of complete apnoea would be produced, lasting, as a rule, eight to ten seconds, to be followed by a new ascending and descending series, and another period of apnoea. During the period of dyspnoea at its height the expirations were almost explosive in character, so violent was the action of the expiratory muscles. During apnoea he would lie quiet without moving. He did not suffer any pain, and appeared unconscious of any peculiarity in his dyspnoea. The following are the notes taken during the last three weeks of his life:

March 6th.—10.30 p.m. Resp. 24, pulse 104, a trace of albumen in the urine, no casts, sp. gr. 1020. The period of dyspnoea lasts fifteen seconds, during which the number of cardiac beats is 24. Apnoeic period 10 seconds, cardiac beats 20. During one period of 20 seconds, dyspnoea occupied 12, apnoea 8.

March 8th.—8 a.m. Pulse 78. During period of dyspnoea, cardiac beats 10 in 10 seconds. In apnoea, 15 in 10 seconds. Less œdema of the arms. Periods of dyspnoea, resp. 9 in 15 seconds, followed by apnoeic periods of 10 seconds.

March 11th.—10 p.m. Resp. 30. Pulse irregular 88 to 100. Dyspnœa lasts 15 seconds, apnœa at first only 4 or 5 seconds and after a few minutes' observation disappearing, shallow feeble respirations replacing it. During dyspnœa, pulse 25 in 15. Apnœa, at first, 9 in 5.

March 12th.—3.30 p.m. Dyspnœa present. Apnœa absent; but respirations, at times, barely perceptible; pulse, hitherto fairly strong, is weaker; œdema of legs less. At 9 p.m. Resp. 21, pulse 80. Dyspnœic period 7 to 9 in 13 seconds. Apnœic 7. Pulse, during 7 seconds of apnœa, 14. During 15 of dyspnœa, 19. He is weaker.

March 13th.—9.30 a.m. Resp., 30; pulse, 80; dyspnœa, 10 in 15 seconds; apnœa, 10; pulse in dyspnœa, 18 in 15; in apnœa, 17 in 10; œdema of hand and legs much the same; passes fair amount of water, and takes nourishment fairly well.

March 14th.—9 p.m. Resp., 24; pulse, 88; urine, 1020 trace of albumen; resp., 8 or 9 in 15, during dyspnœa; apnœa, 10; Pulse in dyspnœa 10 in 10; in apnœa, 15 in 10 seconds; œdema of the lungs, face puffy, bowels constipated.

March 15th.—11.30 a.m. Resp., 25-30; pulse, 80; resp., 10 in 15; apnœa, 10 seconds; pulse same as 14th; urœmic odor, less œdema of the legs, more of right arm, face puffy, was delirious during night. 8.30 p.m. Resp., 27; pulse, 86; urine scanty; resp., 9 in 15 seconds; apnœa 10. Pulse in dyspnœa, 18 in 15; in apnœa 19 in 10 seconds. Lungs very œdematous, face congested and puffy, is delirious at times, takes a fair amount of nourishment.

March 16th.—Weaker, drowsy, not delirious. Pulse, 84. Respiratory rhythm unchanged. At 7 p.m. Resp., 25; pulse, 80; urine scanty, is drowsy, very thirsty, takes less food. Resp. unaltered.

March 20.—Was better since last notes up to last night, when he was seized with acute pain in the bowels, became unconscious, and passed his fœces involuntarily, is weaker, extremities cold, much œdema of arms, speech at times incoherent, but no delirium, pulse weak, resp. same.

March 21st to 26th.—Rallied somewhat during the past five days, conscious, does not

pass fœces involuntarily, urine scanty, takes a little nourishment, œdema increasing.

March 20th.—Has been getting weaker during the three days, and died comatose at 8 p.m., during my absence in the country.

I have not considered it necessary to detail the treatment, as it is unessential.

*Post Mortem.*—Vessels of scalp gorged with blood, and scalp very adherent. The meninges of the brain much congested, and the arteries very atheromatous; fluid in the ventricles; no other morbid appearances. The lungs very much congested and emphysematous. Heart greatly hypertrophied, especially the left ventricle, weight 23 ounces, valves healthy, ascending aorta atheromatous. The liver large, slightly fatty, with slight increase of interlobular connective tissue; surface, smooth; spleen, normal, save some congestion; small amount of fluid in the abdominal cavity; kidneys, large, weighing seven ounces each; surface, smooth; capsule, not adherent; cortical substance, somewhat diminished; vessels hypertrophied, slight increase of intertubular connective tissue, and of that around malpighian bodies; cells swollen and granular.

There appears to be some confusion in the minds of observers as to what really constitutes Cheyne-Stokes respiration. Many cases are recorded where it is said to have occurred in cerebral affections, that may have been merely cases of sighing respiration, which the Editor of the *London Lancet* regards as totally distinct; still, Stokes speaks of it as the more commonly occurring form. Cheyne, in 1818, writes as follows: "For several days his breathing was irregular, it would entirely cease for a quarter of a minute, then it would become perceptible, though very slow, then by degrees it became heaving and quick, and then it would gradually cease again. This revolution in the state of breathing, occupied about a minute, during which there were about thirty acts of respiration." In this case fatty disease of the heart was marked, while the valves were healthy, and the aorta was studded with steatomatous and earthy concretions. This condition closely coincides with what was found in my case. It was not until 1846 that Stokes drew general attention to the

peculiarities of the symptom, and attributed it to fatty heart, regarding it as only to be found in this condition, and followed in a few days by death. Soon, however, it was found that it was not confined to this disease. Dr. Hayden in his case, found the cardiac beats and pulse unaltered during the respiratory changes in rhythm and force; but Dr. Little and M. Biot found the cardiac pulsations increased in apnoea, and decreased in dyspnoea, as obtained in the case above given. Dr. Hayden attributes the phenomena to want of oxygen in the circulation and in the tissues. Traube explains it by the accumulation of  $C.O_2$  in the lungs, at first the pneumogastric nerves alone being excited, the  $C.O_2$  continuing to accumulate in the arteries of the body; soon all the sentient nerves are excited, and the respiration becomes dyspnoeic. This deep respiration eliminates the  $C.O_2$ , and the respiration becomes superficial when there is not sufficient  $C.O_2$  to excite the sentient nerves of the periphery; finally there is no longer enough to excite the pulmonary nerves and apnoea supervenes. Filehne, of Erlangen, believes that by the accumulation of  $C.O_2$  the activity of the vaso-motor centre is increased, but still not sufficient to excite the respiratory centre. The arterial contraction that comes on at the end of a pause causes a progressively increasing anæmia of the respiratory centre: this excitation causes respirations to be deeper and deeper until the blood becomes well oxygenated, when the vascular contraction ceases, and the anæmia of the respiratory centre, and the excitation to respiration ceases. Dr. Paul Cuffer, of Paris, in a pamphlet on "Alterations of the Blood in Uræmia, on the Pathogeny of Uræmic Accidents, and on Cheyne-Stokes respiration in Uræmia," published this year, investigates this subject clinically and experimentally. He observed seven cases in the Necker Hospital in 1876, and adds two that occurred in the Charity Hospital. All these patients had interstitial nephritis. Seven cases of Cheyne-Stokes respiration, out of nineteen of interstitial nephritis, is certainly a large proportion, when we consider the rarity of its reported occurrence in the practice of others.

Cases I. and II. interstitial nephritis and

mitral disease. Respiration, 14 in a minute, apnoea lasting 30 or 40 seconds, returning every 2 minutes. During apnoea cardiac action slower.

Case III. Aged 51. Renal disease, interstitial, from lead poisoning, cardiac hypertrophy. Period of apnoea 25 seconds.

Case IV. Aged 47. Cardiac and hepatic hypertrophy, chronic interstitial nephritis.

Cases V. and VI. Aged 62 and 70. In these cases the apnoea was not complete. Interstitial nephritis.

Case VII. Aged 49. Similar lesions to case 4.

Case VIII. Aged 55. Patient gouty, with a history of having had Cheyne-Stokes respiration for six years; in all the previous cases it occurred a few days before death, but not during coma in more than one.

Case IX. Aged 44. (Female). Is peculiar; patient was seized suddenly after a chill, with all the symptoms of interstitial nephritis, polyuria, urine clear, slight albumen, slight œdema, cardiac hypertrophy, bruit-de-galop, very rapidly followed by uræmia, troubles of vision without retinal lesion, headache, vomiting, pains in the joints without swelling, dyspnoea soon becoming intermittent. The case then proceeded as one of chronic interstitial nephritis without further symptoms of note. Cuffer attributes the nephritis to a chill causing vascular spasm, but gives no reasons for belief that there may not have been long antecedent renal trouble.

In the *London Lancet*, of March 31st, 1877, a case is reported of its occurrence in a case of amputation of the thigh following compound fracture; there was profound anæmia, and the man only lived 4 days. The heart was healthy, no mention of the kidneys. A peculiarity about this case was, that after the period of apnoea had lasted 6 or 8 seconds, it could be always arrested by pulling forward the tongue; this could not be done if the tongue was pulled forward earlier in the apnoea.

In the *London Lancet*, March 10th, 1877, R. Wharry, M.B., reports four cases, two of valvular disease, fatal; one of scarlet fever and acute nephritis in a child—in this there was no apnoea but merely respiration ascending and descending in rhythm, fatal. The fourth case

occurred in a typhoid fever patient; the case was severe. Cheyne-Stokes respiration appeared about the twenty-fourth day, and lasted four days. The patient recovered; no cardiac disease; condition of urine not mentioned.

From September 30th to October 28th, 1876, M. Biot watched a case of incompetency of aortic valves, with atheroma of the peripheral arteries, and gives comparative traces of pulse and respiration—ratio in dyspnoic and apnoic periods, (*Lyon Medical*, 50 and 51, 1876.) He is the first to record such a comparison. The details in all the cases, I have been able to find, are exceedingly meagre. In some cases the respiratory troubles were accompanied by rolling of the head, oscillation of the eyeballs, and at the commencement of apnoea movements of deglutition, and changes in the pupils. In some cases it occurred only in the comatose period of uræmics in others, the intelligence did not appear affected. In some cases the heart is said to have been accelerated in the period of apnoea, others give it the reverse. The ages of the patients where given were 38, 44, 47, 49, 51, 55, 58, 62 and 70: only one case occurred in a female. In investigating this obscure symptom, one naturally looks to the respiratory and cardiac nerve centres for an explanation. Is it due to disease located there? or is it due to changes in the blood and blood vessels? Nothing indicating the former has been found. Physiologists teach us that respiration takes place in the tissues, and not in the lungs, that "le-besoin de respiration" depends on want of oxygen and is not due to the presence of  $C.O._2$ . The respiratory centres are excited to action directly by blood changes, and reflectorially by the sentient ends of other nerves. If Cheyne-Stokes respiration depends on blood poisoning, we have to determine what these poisons are, how they act, whether they only act in certain conditions of the system, and what those conditions are. Many more cases will have to be carefully observed and recorded to decide these questions. In animals, whose pneumogastric nerves have been divided, excitation of the central ends during the state of apnoea produces no respiratory movements, so long as the blood has been surcharged with oxygen, by previous excessive artificial respira-

tion. The same current of electricity that tetanizes the diaphragm in the normal state has no effect when the blood is overarterialized. But if the blood be poor in oxygen its excitation tetanizes all the extra muscles at the time in action. Blood, surcharged with oxygen, causes a state of apnoea. As a consequence of the previous dyspnoea, respiration is no longer necessary, and rest is required. If any of us breathe rapidly for several times in succession we require to cease breathing and rest. In most of the cases recorded the secreting organs were diseased, probably primarily, if we except those of brain lesions.

Cuffer injected urea into rabbits, without causing convulsions, respiratory changes, or changes in the blood; but when he injected creatine or carbonate of ammonia into the veins of dogs, the phenomena of Cheyne-Stokes respiration followed,—violently in the latter case, tranquilly in the former; and in both instances examination of the blood showed that the red corpuscles were greatly diminished in number, absorbed oxygen with difficulty, seemed inert, incapable of function,—paralysed, so to speak. The leucocytes were increased in number. He examined the blood of patients bled during uræmic coma, and found identical changes from a healthy standard. Cuffer also produced the phenomena of Cheyne-Stokes respiration experimentally without the use of any toxic agent, by performing tracheotomy on dogs that were, from agitation, previous to, and during the operation, breathing rapidly. The blood becoming hyperarterialized, soon the respirations became slower, and finally ceased, to be followed by a return of respiration. He states that he has observed similar phenomena after tracheotomy in an infant. In an animal that was tracheotomized, and had its lungs surcharged with air by artificial respiration, on ceasing artificial respiration a stage of apnoea followed; not so, however, when an irrespirable gas was used; on the contrary, there was continued dyspnoea. By another series of experiments Paul Cuffer shows that the artificial circulation through the brain, of blood, charged with  $C.O._2$ , causes convulsions and tumultuous respiration, and that the blood charged with oxygen causes the force and frequency of the respirations to diminish, but

not to cease ; forcing a conclusion then, he says, "Respiration ceases when the oxygenization of the blood is sufficient, and consequently there is no need of respiration reproducing itself." Cuffer's experiments then, and his observations of cases of interstitial nephritis, would explain Cheyne-Stokes respiration as follows :

Deficient excretion, causing impure blood to circulate. Irritation of the vaso-motor nerves and spasm of the capillaries of the lungs, heart and general system, with hypertrophy of the heart. The circulation of the impure blood through the heart, lungs and respiratory, centres causes, by reflex action, dilatation of the peripheral vessels, and dyspnoea. This action would take place in the heart through its nervous supply reflected to the vaso-dilators, in the lungs by the pneumogastric terminal filaments ; the tension being thus taken off the heart its action increases during the apnoea, and helps thereby to circulate the blood through the dilated vessels ; apnoea lasts till the blood again becomes impure, and the dyspnoea is renewed. This may explain, perhaps, the change in the rythm, but it does not altogether explain the complete intermissions ; as for this Cuffer says that it is the nature of spasm to be intermittent, and that overworked muscles, need rest. We know, too, that nature in her many wonderful acts of compensation for disease sometimes errs, and in this case, by too much action during the dyspnoea, may have oxygenated the blood too highly even to purify the blood poisoned during the previous stage of apnoea. Dr. Cuffer's explanations may do for some of his cases, but he does not attempt to tell us why, out of nineteen cases of interstitial nephritis under observation in one year, only seven had the rythm of respiration disturbed. Was there not vaso-motor spasm in all ? This would be one important point to determine. Was there cardiac hypertrophy in all ? A careful quantitative analysis of the urine in cases where it does occur, and a comparison with cases in which it does not, also would be of importance. We may thus perhaps discover what is the excrementitious matter retained that acts in this peculiar manner. Cardiographic and sphygmographic traces too are necessary.

Dr. Cuffer does not attempt to explain the

occurrence of this Cheyne-Stokes respiration in other diseases, where, obviously, the conditions are vastly different from those of interstitial nephritis.

Since reading the above paper I have met with two cases of Cheyne-Stokes respiration. One, in a man over eighty years of age, who was suffering from emphysema and chronic bronchitis, and was moribund when I saw him ; the other, a child eighteen months old, with pneumonia of the right lung. In this case the respiratory rythm was similar to the case related above ; the periods of apnoea and dyspnoea being of about the same duration, but the Cheyne-Stokes respiration was not continuous ; the pulse was 140 ; respiration varying from 48 to 60 per minute (when the Cheyne-Stokes respiration was not observed). This patient had many symptoms pointing to tubercular meningitis, but recovered.

### POLYPUS UTERI.

BY I. H. CAMERON, M.B.

Read before the Toronto Medical Society, May, 1878.

E. O'N——, aged 29. Married, (eleven years in June, 1878). Five children. Youngest, 2 years old. No miscarriages. No pathological history.

24th April, 1878. Presented herself at the Toronto Dispensary, saying that she had been flooding since the 17th of March last. It appeared, on enquiry, that her menstrual period was due on that day ; that the flux appeared as usual, but instead of abating in 4 or 5 days, as was customary with her, its quantity progressively increased up to the time of application at the Dispensary. She had been previously quite regular, and knew of nothing to account for her unusual condition. It was elicited, that upon the day of the appearance of the flow, she had been washing, had lifted heavy tubs, and been engaged in other heavy work. Notwithstanding the occurrence of the discharge, she continued to pursue her ordinary avocations. She was ordered a mixture, containing ʒss. of fluid extract of ergot, and 15 grains of bromide of potassium to the dose, to be taken every 4 hours ; and she was enjoined to observe the strictest rest.

8th May, 1878. (Wednesday.) Patient returned to say that she was no better. Affirmed that she had taken the medicine as directed, but admitted that, instead of resting, she had followed her daily pursuits as usual. Her mixture was ordered to be repeated; and she was directed to go to bed immediately, and remain there until the following Saturday, when she was to report, in person, if the flow had stopped, if not, she was to send word by messenger, and remain in bed.

11th May, 1878. (Saturday.) Sent word to say that she was worse, and appeared to loose more after each dose of medicine. Accompanied by Dr. Zimmerman, my associate at the Dispensary, I visited her at her home. She was found moving about the house, instead of resting. On vaginal examination, it appeared that the os uteri was soft and patulous, with torn extremities and rough granular edges. The anterior wall of cervix and body, was very much thickened and prominent, and felt as though a sessile polypus might be adherent to its internal wall. Pressure on the anterior portion of the body of the uterus, elicited pain.

The surroundings not being adapted for further examination, she was directed to remain in the recumbent position until Monday morning, when she was to present herself at the Dispensary for further examination. The dose of ergot was increased to ʒj, and that of bromide of potassium to ʒj, every 3 hours.

13th May, 1878. (Monday.) Patient reported herself at the Dispensary, still complaining that every dose of the medicine appeared to increase the flow. On introduction of the finger along the superior vaginal wall, it came in contact with a hard, round body, which appeared to be the fundus uteri, much anteverted, and the os was felt to be directed straight backwards towards the rectum. On introducing Stohrer's speculum, it was observed, that the vaginal walls and the anterior wall of the uterus, which came into view, were very much blanched. A slow stream of dark blood was seen issuing from the patulous os, and the os itself was seen to present those conditions diagnosed by the finger on the occasion of the first examination.

The uterine sound passed to a depth of 3½

inches, but did not indicate any noteworthy deviation from the normal axis.

The intra-uterine cavity was not thoroughly explored, because any impingement of the sound against the anterior or left lateral wall, caused the patient to cry out with pain. In view of the patient's circumstances, it was deemed advisable that she should go into the Hospital, and she was accordingly recommended to do so after resting at home for the remainder of the day. The blood passed was, for the first time, observed to be clotted. During the evening of the same day I was summoned to see the patient on account of pain; and upon reaching her about 11 p.m., I found that she had passed the accompanying tumour with much relief. The tumour would appear to have been extruded with its capsule, as the patient says it was covered with a tough membrane, which floated off when it was put in water, but which she did not preserve for me.

The flow, too, was very considerably diminished. She was directed to continue her medicine.

14th May, 1878. (Tuesday.) On visiting her this morning I found her very comfortable, complaining only of a slight pain in her left side, and with very little discharge. On digital examination the uterus was found rather higher in the pelvic cavity than previously; the tumour in the anterior lip of the os was much reduced, though it still considerably exceeded the posterior lip in size. The patient was directed to remain in bed and continue her medicine. During the evening I was again summoned to her bedside, on account of pain of a very severe bearing-down character. This was relieved by morphia.

15th May, 1878. (Wednesday.) This morning the pain was found to be very much mitigated, but the hæmorrhage had returned. No change on digital exploration.

16th May, 1878. (Thursday.) On introducing the finger this morning the fundus was found to be retroflexed, but was easily replaced with the sound. The anterior and left lateral wall could now be touched with the sound without inducing pain, and in moving the sound in the cavity, it appeared to slip over something, slightly resistant, which might be

another tumour; the depth of the cavity, however, as indicated by the sound to-day, is only  $2\frac{1}{2}$  inches. On introducing the speculum, the anterior lip of the os was observed not to be nearly so much engorged; but abundant florid, spongy granulations, bleeding on the slightest touch, covered both lips. The vaginal walls presented a less blanched appearance than on the previous occasion. On the supposition that the uterine cavity contained another tumour, and that dilation of the crevix would be necessary, the woman was again urged to go into the Hospital, which, upon the advice of Dr. Machell, Dr. A. H. Wright, and Dr. Smith, of Sebringville, who accompanied me, she at length consented to do. [It is to be hoped, that, at some future meeting, we shall have a further report of her case from our worthy Recording Secretary, Dr. Graham, under whose care she came.]

#### THE EXTERNAL TREATMENT OF SOME OF THE MORE COMMON FORMS OF SKIN DISEASE.

BY J. E. GRAHAM, M.D., L.R.C.P., LOND.

(Read before the Toronto Medical Society.)

(Concluded.)

I will now take up the local treatment of psoriasis. This disease consists essentially of a dry scaly eruption which begins in punctiform nodules. These gradually increase in size to form patches of various dimensions from that of a pin's head to the palm of the hand. For purposes of treatment the disease may be divided into—

1. The very mild form, psoriasis guttata, which very often requires no external treatment, being cured by the internal use of arsenic.
2. Psoriasis in children which is also treated principally by the internal administration of tonics, ol. morrhueæ and arsenic.
3. Psoriasis in the adult, which is accompanied by a considerable amount of congestion, and in which the disease has a tendency to spread.
4. Psoriasis, attended with very little congestion; and which has no great tendency to spread.

In that form accompanied by a consider-

able amount of congestion, one must avoid the use of stimulating applications. Many cases of psoriasis are made worse by a routine treatment. A case of this kind came under my notice the other day. The patient was covered from head to foot with psoriatic patches, and in which there was a good deal of congestion present. He had been under the tar treatment for four months and had been gradually getting worse during that time. The tar was too stimulating for this form of the disease. It would have been better to have used alkaline baths, followed by some mild astringent or mercurial ointment, and to trust more to the internal treatment for the cure. According to Tilbury Fox, when the maceration of the part with water is carried out, some oleaginous material must be afterwards applied to keep the skin soft and pliable. He treats this form of the disease when occurring in children in the following way:—Every night the patient should be put in an alkaline bath, containing two ounces soda bicarb. and two or three pounds of clarified size. He should remain in it fifteen or twenty minutes, and afterwards the patches should be thoroughly soaked in olive oil. After a time potassium sulphide may be added to the bath, half to three-fourths of an ounce.

The fourth form of disease, as I have given it, viz., that accompanied by little or no congestion may be sub-divided again into—1. That in which the disease is not extensive and there is little thickening of the skin. 2. That which is extensive, and where there is great thickening and induration. In the first form tarry preparations may be used, either in the form of ointment or in its purity. T. Fox recommends ol. olivæ ʒi, ol. juniper ʒij, adipis ʒi. To be applied night and morning. Some form of mercurial ointment may be used.

R. Ung. hydrag. nit., ʒi; zinci oxid., ʒij; liq. plumbi, ʒss; acidi carbolici, gtt. ii; ol. olivæ, ʒi to ʒiiss.

In the second variety, that is where much thickening is present a different plan of treatment must be adopted.

It is here that *sapo viridis* comes into prominence. The process adopted by Prof. Hebra, called the Schmeier Seifen Cyclus, is as follows. The patient is placed between blankets, with

woollen shirt and drawers. The soap is rubbed in twice a day for six days; once for the seventh, eighth, and ninth day. A bath being then given on the thirteenth or fourteenth. Now, notwithstanding the objections raised by English authors this is a wonderfully successful mode of treatment for appropriate cases. I have seen almost every sign of the disease disappear with a single course of this kind. And often in those patients who had used other means for weeks and months. Internal remedies can of course be used at the same time. The great objection raised to this treatment is the loss of time, but in bad cases the patient will be quite ready to undergo this loss.

T. Fox is of opinion that the skin of English people is more tender than that of Germans, and one ought not to attempt such heroic plan of treatment. This may or may not be true. One ought at any rate to be careful in the selection of cases, and perhaps it is here that the English fail. I remember treating a case in the Toronto General Hospital in a similar way to that mentioned. He was a resident of Muskoka, was of dark complexion, and with a skin not at all sensitive. The disease was almost universal. Do not think I ever saw a case in which the psoriatic spots covered the body more extensively. They, however, disappeared rapidly; and in almost four weeks he went home one might almost say cured. I saw the patient again this summer. There had been a very slight return of the disease. He had been nearly three years free from it.

In cases where the patches are more local, Fox recommends macerating with wet cloths. By placing the arms and legs successively in a wet pack for a few hours, each evening the patches of disease become thoroughly macerated.

In cases of psoriasis inveterata, when it is of long standing, the scales accumulate in layers, and the skin becomes very much indurated. In this condition it has been found a very difficult and slow process to remove the scales by ordinary maceration. They may, however, be removed by a sort of scraper, brought into use by Prof. Hebra. The use of this instrument is merely an adjunct to the other modes of treatment.

Before concluding this part of my subject, I must mention a mode of treatment recently introduced, viz., the external use of chrysophanic acid. It is applied in the form of ointment,—chrysophanic acid fifteen grains to an ounce of lard. A number of successful cases has been reported by Squire and Whiten. Squire, however, says:—"It is fair to say that the remedy does not invariably succeed: in some cases it fails altogether after a fair trial." It has the disadvantage of indelibly staining the clothing worn. Squire also recommends the use of a closely-fitting dress of india-rubber in the treatment of this disease.

In summing up, the principal points to be attended to in the external treatment of psoriasis, are:—1. In the congested form avoid the use of stimulating ointments. 2. When there is a very slight amount of congestion but a large amount of scales, the tarry preparations are to be recommended. 3. When there is a large amount of induration and thickening of the skin, with crusts and scales, the soap treatment with the use of baths will be found most successful.

## Formularies.

### FOR ECZEMA SQUAMOSUM.

Dr. Bulkley uses phosphoric acid externally and internally.

R. Acid phosphor dil, glycerine, syrup, equal parts, to be applied 3 times a day, and twenty drops to be taken internally 3 times a day.

### FORMULA FOR SALICYLIC ACID.

R. Acid Salicylici . . . . .	ʒi.
Spts. Aetheris Nitrici . . . . .	ʒvj.
Sodæ Bicarbonatis . . . . .	gr. lxx.
Spirit Lavandulæ Co . . . . .	ʒii.
Aquæ . . . . .	ʒii.
Syrupi Aurantii Corticis ad . .	ʒvj. M.

Sig. A teaspoonful every 3 or 4 hours. In preparing, mix the acid and the spirits of ether in a bottle, and then add the soda, and afterward the water, gradually, till effervescence ceases; and then the lavender and syrup.—*Naphey's Therap.*

## Translations.

### THE EVOLUTION AND METAMORPHOSIS OF TÆNIA.

It has been generally admitted ever since the labours of Van Beneden and of Siebold that the complete evolution of the tænia from the state of hexacanthic embryo up to that of striped worm, cannot take place in the same animal. Thus the vesicular worm of an herbivora, such as the horse, must always be swallowed by a carnivora, such as the dog, in order to become transformed into the perfect tænia. But, according to recent researches of M. Mégnin, things do not occur thus as a matter of necessity. In a horse dead of peritonitis, this physiologist found in the intestine, alongside of a perforation in the form of a longitudinal slit, two sacs each about the size of a nut, and containing small flat worms of 6 to 8 millimetres in length. From the *ensemble* of the anatomical characters of these worms, M. Mégnin concluded that they were very young *tænia inermes* (*tænia perfoliata* of Gæze). Besides these two sacs filled with small tænia there was a third in which granular matter and echinococcus-hooklets were found. In a second horse, also dead of peritonitis, there was in the intestine a large sac containing older tænia, 6 to 7 centimetres in length, veritable adult specimens of *tænia perfoliata*. It results hence that the *tænia perfoliata* may in the herbivora follow the phases of its evolution. The same vesicular worm, the echinococcus, gives origin to two different adult forms according as it is swallowed by the horse (*tænia perfoliata*) or by the dog (*tænia echinococcus*).—*Le Progrès Médical*.

### ANTISPASMODIC POTION.—(HERMAUT.)

Essence of Peppermint . . . . .	15 minines.
Alcohol (at 80°) . . . . .	ʒjss.
Wine of Opium . . . . .	ʒijss.
Sulphuric Ether . . . . .	ʒvijs.
Mix.	

Ten drops added to a tablespoonful of sweetened water will give extemporaneously a ʒss. antispasmodic draught, so that, in the country, the physician can always have at hand an antispasmodic ready prepared, and condensed into a small compass.—*L'Union Médicale*.

### THE ORGANIC ALTERATIONS OF THE NERVOUS SYSTEM CORRESPONDING WITH CERTAIN IN- TRA-OCULAR LESIONS.—(BOUCHUT.)

In affections of the brain and spinal cord the hyperæmia, together with œdema of the optic nerve and retina, indicates hyperæmia of the brain and meninges with œdema of the pia mater.

Papillary anæmia and tenuity of the retinal vessels indicate ischæmia of the brain.

Thromboses and stases of the retinal veins indicate thromboses of the sinuses and meningeal veins. This is observed in the terminal convulsions of diseases, and in tubercular meningitis; dilatation and flexuosities of the veins, with optic neuritis and varicosity of the retinal veins, indicate an intracranial compression interrupting the circulation through the brain. This is seen in acute hydrocephalus, in large cerebral hæmorrhages, in copious traumatic effusions, in tubercular meningitis, and in certain cranial tumours.

Retinal hæmorrhages, with papillary exudation, indicate strangulation of the papilla by partial meningo-encephalitis. Retinal hæmorrhages, with cutaneous hæmorrhages, indicate the hæmorrhagic diathesis or hæmophilia. Retinal hæmorrhages, surrounded by fatty patches, indicate diabetes or albuminuria.

Miliary aneurisms of the retinal arteries reveal miliary aneurisms of the brain. This is seen in certain cerebral hæmorrhages in old people, and in senile cerebral softening, atrophy or sclerosis of the papilla, with various troubles of motility and sensibility indicate chronic encephalitis environing a cerebral tumour, or disseminated sclerosis of the brain and cord. This last condition is observed towards the end of locomotor ataxia.

Tubercles of the choroid indicate tubercles of the brain, of the meninges, and of other organs. They are met with in tubercular meningitis, cerebral tuberculosis and general tuberculosis, &c. Pneumatosis of the retinal veins indicates that there is a similar pneumatosis of the meningeal veins. This is always met with, in all cases, a few minutes after death.—*Gazette des Hôpitaux*.

## BENEFICIAL EFFECTS OF ERYSIPELAS.

We make the following excerpts from a lecture upon erysipelas, by M. Hardy, of Paris, lately published in *L'Union Médicale*. "Lastly, in certain cases, far from constituting a serious affection, erysipelas is, on the contrary, a fortunate complication, capable of determining the cure of chronic diseases, which may have lasted for a long period of years. This is the case with erysipelas, complicating certain chronic skin diseases. At the *Hôpital St. Louis* I have frequently seen erysipelas supervene in patients suffering from ulcers, and I have never failed to observe to my students that this apparently grave complication was a favourable circumstance, which would tend to bring about a prompt recovery from the primary disease. In individuals affected with syphilitic ulcerations, broken down by poverty and cachexia, and in whom all specific remedies have been tried without success, cicatrization has thus been observed to occur as a sequence of an erysipelas, and to be complete in the course of a few days.

I have thus seen, in the case of a serpiginous ulcerating syphilitic, an attack of erysipelas produce a cure in a week. It is especially, in cases of a special affection of the skin, remarkable for its tenacity, scrofulides of whatever variety, erythematous, tubercular or ulcerous, that erysipelas is seen to occur as a complication of the skin disease. Not only then does the erysipelas not present any harmful character, unless recourse be had to some ill-advised treatment, but on the other hand it is observed to become the point of departure of an amelioration, which had been previously vainly sought by the employment of rationally indicated means. I shall cite, in support of this opinion, the case of a patient who had been for a long time under treatment in our hands for an ulcerating lupus of the cheek, an erysipelas having occurred, the sore commenced to present a remarkable modification; and, two months afterwards, a new attack of erysipelas produced an almost complete cure of the ulceration; lastly, three months later, a third attack of erysipelas occurred and left behind it a definitive cicatrization."

## ACCESSORY MAMMARY GLANDS.

The hypertrophy of the "tubercles of Montgomery," in the areola around the nipple during pregnancy, has been long since observed. Smellie and Montgomery relied upon their existence as evidence of gestation, but subsequent observations have shewn that hypertrophy of them sometimes occurs in nulliparæ, as a result of various uterine affections, interstitial myomata, &c. The fact of the glands containing a secretion has also been for sometime known, and frequently observed. Bidlos and Morgagni have observed it as a limpid liquid; and Morgagni, Winslow, and Corallo, as a thick milk. It was suggested, when a milky fluid was observed to flow from these glands, that perhaps a galactopherous tubule had been diverted from its ordinary course towards the nipple and had opened into one of these glands; but the researches of M. Duval (1867), M. de Sinety (1877), and Dr. Pinard (1877), have served to manifest the error of this view, and elucidate the physiology of these glands. "They are of three kinds: Simple sebaceous glands, sebaceous glands divided into several lobes, and lastly (and this is the interesting part) true isolated mammary glands, forming both colostrum and perfect milk under the same influence as the principal gland." Dr. Pinard, lately presented to the *Société Anatomique* a work upon this subject, together with a specimen shewing sixteen of these hypertrophied papillæ very prominent upon the areola of one side, and twelve upon that of the other,—a very unusual number. The secretion was identical with that from the breast itself. The number of galactopherous tubules opening into the nipple itself in this case was eight on one side, and nine on the other. The child, in taking the breast, opens its mouth widely in order to secure the secretion from all these sources. Out of sixty women examined with a view to determine the average number of these tubercles in the areola, four was found to be the mean for each breast. In four out of the sixty they were absolutely wanting.

In the February No. *Dublin Journal of Medical Science*, there is recorded a case of tertiary syphilis, in which the whole anterior surface of the atlas was exfoliated and coughed up. The patient recovered.

THE CANADIAN  
Journal of Medical Science,

A Monthly Journal of British and Foreign Medical  
Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, APRIL, 1879.

ATTENTION!

We wish to call the attention of our readers to page 90 of the March number of the Journal, as we are sure there are many who must have either neglected to read it, or else having read it, neglected to give it that serious consideration which the importance (to us) of the subject demanded.

THE ONTARIO MEDICAL COUNCIL  
AND BRITISH QUALIFICATIONS.

Dr. Baldwin of this city, a graduate of the University of Edinburgh, has compelled the Ontario Medical Council to place his name on the register without examination. This will for the present settle the vexed question as to the right of holders of British qualifications to register in Ontario. Several members of the Executive Committee have interviewed the Dominion Government with a view to obtaining such legislative enactments, Imperial or Colonial, as will prevent this precedent becoming established. We hope they will succeed in their efforts, until at least a reciprocity of registration is granted. Of course, by exacting a very high fee for registering British qualifications, graduates in Canada intending to obtain such qualifications may be deterred from evading the Council examinations, but we would much prefer to see a reciprocity established, and we look forward to the time when such use shall be made of our abundant facilities for clinical instruction as will render it unnecessary for our students to undergo the great expense of pursuing their clinical studies abroad before entering upon the practice of their profession.

With more teaching at the bedside, and less lecturing in the class room, our schools should be able (and are able) to send out graduates with practical knowledge equal to that obtained at medical educational institutions in any country. At present, the Ontario Medical Council appears anxious to prevent students devoting much time to clinical and practical work, by compelling them to show that they have attended a far greater number of wearisome didactic lectures, than it is in the capacity of any student either to listen to attentively or digest advantageously. We have often referred to this absurdity, and trust that at the next meeting of the Council a move will be made to put an end to it, for we know that it causes students to be far more anxious to cram for the examinations than to obtain a thorough and practical knowledge of their profession.

LACTOPEPTINE.—This preparation, which is composed of pepsin, pancreatine, diastase (or vegetable ptyaline), lactic and hydrochloric acid, and sugar of milk, has already acquired an enviable reputation, both in this country and abroad, in treatment of many forms of dyspepsia and indigestive troubles in children. We have used it in a number of cases, and its use has, in our hands, been invariably followed by good results. Many practitioners use pepsin, but in this preparation we get not only the pepsin, but also several other substances of great, if not equal importance in aiding the digestive process. Not only do men like Loomis, Sayre, Percy, Packard, Meigs, Dawson, and Yandall recommend it, but the entire mass of the profession, so far as they have tried it, seem to approve of it as well.—*Exchange.*

HANCE BROS. & WHITE.—We have received from this firm samples of their absorbent cotton, which will be found of great service to surgeons and gynecologists, as a clean and pure absorbent dressing. This firm also advertises an extract of ergot for hypodermic use. One grain of the extract is equal to five grains of ergot. It is freely soluble in distilled water. Hance Bros. & White's mustard leaves afford a ready method of applying counter-irritation on short notice. *Read their advertisement.*

**PRESENTATION.**—On Tuesday evening, Feb. 25th, Dr. Robert A. Pyne was presented with an address, a case of surgical instruments and several valuable medical works, by the officers and employes of the Toronto Asylum. The chair was occupied by Dr. Lett, who expressed the regret felt at Dr. Pyne's departure from the institution. Mr. Robert Blair made the presentation on behalf of those present. Dr. Pyne made a happy reply, and was followed by Dr. D. Clark and Mr. P. Trowem, who spoke in flattering terms of the valuable services rendered by the recipient.

Reviews of "Bryant's Surgery," "Green's Pathology and Morbid Anatomy," "Ashurst's Surgery," "Whittaker's Physiology," "Tyson on Cell Doctrine," and "Athill on Diseases of Women," will appear in our May number. We have not had time to do them justice this month.

**JOURNALISTIC.**—We have received No. 1, Vol. I., of *L'Abeille Médicale Journal*, de l'Ecole de Médecine et de Chirurgie de Montreal, de l'Hôpital-Dieu, de la Maternité Ste. Pelagie et des Dispensaires. Redacteur-en-Chief, T. E. Dodet, d'Orsennens, M.D.

**COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.**—The Professional Examinations for 1879 will begin on the morning of Tuesday, April 8th, in the Convocation Hall, Toronto University. The next regular matriculation examination will be held in Toronto on April 15th and 16th.

**CANADIANS IN ENGLAND.**—W. H. Burton, M.B., James Robert Jones, M.B., and Rolph B. Leslie, M.D., graduates of Toronto University; and Paul Zotique Herbert, M.D., Edmund Graves Kittson, M.D., graduates of McGill College, Montreal, have been admitted Licentiates of the Royal College of Physicians, London. Arthur Dalziel Campbell has been admitted L.R.C.P., Edin., and L.R.C.S., Edin.

"So long as legislation is conducted and examinations regulated by those who are themselves entirely ignorant of obstetrics, reform is next to hopeless."—(W. S. Playfair, M.D., F.R.C.P., London, Inaugural address at the Obstetrical Society, London.)

## Book Notices.

*Transactions of the Medical Society of the State of Tennessee at its 45th Annual Meeting, 1878, Nashville.*

*A Case of Inflammatory Fungoid Neoplasm.* By LOUIS A. DUHRING, M.D., Philadelphia: J. B. Lippincott & Co., 1879.

*Transactions of the American Dermatological Association at the Second Annual Meeting, held at Saratoga, August, 1878.* New York: D. Appleton & Co.

*In Memoriam—Dr. Landon R. Longworth.* An address read at the commencement exercises of the Medical College of Ohio, Feb. 28th, 1879. By F. FORCHEIMER, M.D., Cincinnati.

*An Address presenting the Claims of the Medical Department.* Read before a Council in the interests of Syracuse University, held at Syracuse, N. Y., Dec. 1878. By ALFRED MERCER, M.D.

*Athill on Diseases of Women.* Third edition. Lindsay & Blakiston.

*The Principles and Practice of Surgery.* By JOHN ASHURST, jun., M.D. Second edition. Enlarged and thoroughly revised. Philadelphia: Henry C. Lea, 1878.

*A Manual for the Practice of Surgery.* By THOMAS BRYANT, F.R.C.S. Second American, from the third revised and enlarged English edition. Philadelphia: Henry C. Lea, 1879.

*An Introduction to Pathology and Morbid Anatomy.* By T. HENRY GREEN, M.D., London. Third American, from the fourth revised and enlarged English edition. Philadelphia: Henry C. Lea, 1878.

These will be reviewed in our May number.

*Consumption, and its Treatment with the Hypophosphites.* By J. A. McARTHUR, M.D., (Harv).

This is a pamphlet of notes and extracts from books and periodicals, foreign and American, on the treatment of phthisis by the hypophosphites.

## Obituaries.

The death of Edward Ledwich, F.R.C.S.I., is announced. By his death Mercer's Hospital, Dublin, loses two-thirds of its surgical staff within eleven days. Mr. Ledwich was one of the founders of the School of Medicine which bears his name; and, in conjunction with his brother Thomas, was author of the famous Ledwich anatomy.

John Macrolin, M.D., 4th February, 1870, æt. 74, Emeritus Professor of Medicine of Aberdeen, and, up to 1875, Dean of the Medical Faculty.

Benjamin F. McDowell, M.D., Dublin, Lecturer on Materia Medica at the Ledwich School of Medicine, a Member of the Council, R.C.S.I., and Surgeon to Mercer's Hospital, æt. 38.

Suddenly, on 6th February, at the age of 56, Professor Marie-Paul-Emile Chauffard. His death renders vacant the chair of General Pathology at the Paris Faculty created in 1831 for Broussais and subsequently occupied and adorned by Andral and Lasèque.

Jacob Bigelow, M.D., LL.D., of Boston, U.S., died on the 10th of January, æt. 91. He was early distinguished as a botanist, and published several botanical works. He formerly occupied the chairs of Materia Medica and of Clinical Medicine at Harvard. His son, Henry J. Bigelow, is the eminent Boston surgeon. "His character," says a contemporary, "is one which it is a pride to record, a pleasure to recall, a profit to imitate. Well saith Rome's greatest orator, 'Brief is the time, short is the space allotted to man upon earth; but the memory of a life nobly rendered is immortal.'"

ZYMATE.—Professor Tyndall is strongly in favour of quarantine; and he thereby shows himself a donkey, the great medical thunderer, the *Lancet*, thinks. Tyndall bases his advocacy of quarantine on the germ theory. This reminds us of the definition of *zymate*, which is, "a supposed compound of an imaginary acid!" Verily there could be no better commentary than this on the germ theory—that beautiful and delusive and specious and baneful *ignis fatuus* now leading hosts of honest and useful men away from clinical experiment, that almost sole source of medical truth. The germ theory, we incline to believe, is one of the wiles of the devil.—*Louisville Med. News*.

## Miscellaneous.

The very unpleasant pungent odour of iodoform can be completely masked by oil of peppermint. For instance, iodoform 2·0, vaseline 30·0, rubbed up with six drops of oil of peppermint make an ointment with a pleasant aromatic scent.

OPIUM HABIT AND AMYL NITRITE.—Dr. Leyman has successfully used amyl nitrite in insomnia consequent upon suddenly discontinuing the opium habit. Two or three whiffs, the flushing of the face being the criterion, were usually sufficient, being followed by refreshing sleep.

"I do not dispute, as for many generations has been admitted, that antiseptics are of service in surgical practice; but they are accessories and not essentials. The essentials for successful wound treatment are—accurate coaptation, dry and infrequent dressing, uniform gentle pressure, and absolute rest."—(*Samson Gamgee, F.R.S.E., in London Lancet.*)

NITRO-GLYCERINE IN ANGINA PECTORIS.—Wm. Murrell, M.R.C.P., in the *Lancet*, recommends nitro-glycerine highly in angina pectoris. He begins with drop doses of the one-per-cent nitro-glycerine solution thrice daily, and increases it as the case may be. Fifteen-drop doses have sometimes produced unpleasant symptoms. The homeopaths, no doubt, give this medicine in "explosive vomiting."

EXTEMPORE FORMULA FOR AN ANTIDOTE TO ARSENIC.—Dr. James B. McCaw remarked that dialysed iron is simply a peroxide of iron, and is exceedingly sensitive to oxygen. Hence, on slight exposure to the atmosphere (as when the bottle remains unstopped), it unites with the oxygen of the air, and the solid oxide of iron is formed. He suggests the following formula as one not generally known for an antidote to arsenic, and claims for it precedence over all others; first, because it forms the surest antidote, and secondly, because the agents are almost always accessible—even to the country doctor who carries saddle-bags: B. Murista

tincture of iron, ℥j; bicarbonate of soda (or potash), ℥j; tepid water, teacupfull. Mix.—The sesqui-oxide of iron is immediately formed in a solution of chloride of sodium (common salt). Give this mixture almost *ad libitum*. It is a perfect antidote to arsenic.

#### HYPODERMIC INJECTION OF MORPHIA.—

Dr. H. Gibbons sums up, in the *Pacific Med. and Surg. Journal*, his views of the proper use of the hypodermic injection of morphia, as follows: 1. Avoid it in congestion and inflammatory conditions of the brain. 2. Avoid it in pulmonary congestion, and where dyspnea is not the result of spasm. 3. Avoid it in acute inflammatory affections of the heart and pericardium. 4. Avoid it in high febrile excitement. 5. Avoid puncturing a vein. 6. Avoid a deep puncture, unless there is a special purpose to be accomplished by depositing the narcotic deep in the tissues. 7. Introduce the liquid slowly and not by sudden projection. 8. Require the patient to lie down and remain quiet after the operation. I may add, it is the remedy, par excellence, for the paroxysm of spasmodic asthma from whatever cause.

#### RETENTION AND INCONTINENCE OF URINE.

Retention may be due to congenital contraction of the meatus which requires surgical enlargement of the orifice (2) to phymosis, where the preputial orifice is very small, (3) to stone in the bladder. It is more difficult to find a stone in the bladder when distended with urine than empty. Great care is requisite in sounding a child. Incontinence is due (1) to rectal complaints (2) to a tight foreskin (3) to a small congenital meatus (4) to calculus impacted in the urethra; causes 3 and 4 are not usually sufficiently attended to. Stone impacted in the urethra may cause retention or incontinence according to its location. A stone so impacted does not cause so much pain and discomfort as might be imagined. Milk dieting, and the use of belladonna in nocturnal and strychnia and iron in diurnal incontinence are indicated.—(*Mr. Teevan in British Med. Journal.*)

SILPHIUM CYRENAICUM.—The *Allgem. Wiener Med. Zeitung*, No. 53, 1878, contains an article on a drug which seems to have been known many centuries ago, but which has only been analysed and officially acknowledged in our times. It is the silphium Cyrenaicum, prepared by Messrs Dérode and Deffes, chemists in Paris, which is said to be very efficient in phthisis, catarrh of the lungs, cough, etc. It does not suddenly put a stop to these affections; but it diminishes the irritation in the throat which causes the cough; it reduces the action of the heart and lowers the temperature, thereby enabling both the patient and the physician to dispense with narcotics, which after a certain time lose their power, or, what is still worse, cause permanent injury to the nervous system and the brain. It is given in different forms, as pills, tincture, syrup, and glycerine.

THE ODOUR OF HAIR, FROM A MEDICO-LEGAL VIEW.—From the mere odour of a pair of hair it is easy, says M. Gallipe (*Soc. de Biol. Paris*), to tell whether the hair has been cut from the living body or has been shed. Hair dealers who are accustomed to it, are never deceived. The fallen hair has a dull aspect imputable to disease, and it is worked with difficulty. It has, so to speak, no odour. The hair of the Chinese presents a characteristic musk odour which is not due to any cosmetic, for the odour persists after the hair has been washed in pot ash. Regarded by transmitted light, Chinese hair has a red reflection. They are polyhedral on section; they are thus called in commerce square (carrés). According to M. Gallipe the hairs of an hysterical patient at the approach of the attack assume a special odour, invariably the same. In the last place, M. Gallipe points out the electric condition of certain hairs, which throw off still more electricity on friction. M. Paul Bert observed that the red reflection of black hairs goes to support the theory that red is a variety of black. When the hair grows white from age, this commences at the point and not at the base, unless there has been disease of the hair follicle. M. Malassez had even seen zebra hairs. In such cases the hair is projected first white, then black, and then white. This is a phenomenon of growth.—*Le Progrès Médical.*

**VIBRIOS AND CARBOLIC ACID.**—At the meeting of the Société de Chirurgie of Paris on 12th February, M. Maurice Perrin read a very important memoir upon the subject of the Listerian treatment of wounds, and contended that a great wrong was done to antiseptic surgery by making it synonymous with Listerism. He questioned if Lister's was the best form of antiseptic dressing, and if the precautions which that surgeon took were not illusory. M. Perrin undertook a number of ingenious experiments to determine if the object of the carbolic acid pulverisations was attained: He placed certain fermentescible substances in vases: blood, milk, urine and a decoction of barley. These substances were placed beneath bell-jars containing different atmospheres. The air of some was taken from a hospital ward; that of others from out of doors. In a third category, lastly, pulverised carbolic acid was introduced by means of Championnière's apparatus. Well then, some days afterwards these fermentescible substances were submitted to the microscope; they all contained nomads, vibrios, and bacteria dead or living, those whose air had been scrupulously carbolicised equally with those which had been in contact with the nosocomial atmosphere. The carbolic spray is therefore insufficient; it is incapable of "killing on the wing" those germs whose ulterior development gives rise to the decomposition of liquids.

**A NEW EYE BANDAGE.**—In certain affections of the eye, particularly in iritis, irido-choroiditis, keratitis, etc., emollient applications are often found very serviceable. It is, however, not quite easy to prevent the latter from rapidly becoming dry, and therefore useless, while at the same time the patient is generally compelled to pay constant attention to them, and unable to attend to business. Dr. Maurel, surgeon in the French navy, has contrived an apparatus which removes these drawbacks, and which in its improved form, suggested by Dr. Maréchal, we place before our readers. It consists of a band of india-rubber intended to pass around the head and to be fastened by buttons. The centre of this band carries a frame in which is placed a watchglass removable at pleasure, and held in its place by a rubber band. A small

piece of linen, consisting of four to eight layers stitched together, is first placed upon the eye, then a piece of sponge which, when wet, measures at one edge  $\frac{5}{8}$  inch across, at the other end  $\frac{1}{4}$  inch, is saturated with the lotion and placed on top of the linen, narrow edge downwards, and finally the eye bandage is applied more or less firmly, according as it may be required. The upper edge of the sponge is in contact with the upper part of the orbit, so that the patient may be enabled to occasionally moisten it with the lotion without removing the bandage. The glass in front of the sponge is covered with moisture partly from the sponge, partly from confined vapors, permitting the patient to ascertain the condition of the eye in the sponge. The apparatus gives but little trouble that, if only one eye is affected, the patient may, if necessary, even attend to his regular business, and need not be confined to the house.—*Bull. Gén de Thérap.*, November 1878.

#### APPOINTMENTS.

Hugh Ross, of the Village of Brantford, Esquire, M.D., to be an Associate Coroner in and for the County of Lambton.

David William Ferrier, of the Village of Brougham, Esquire, M.D., to be an Associate Coroner in and for the County of Ontario.

Drs. Mullen and O'Neil have been appointed attending physicians to the Hamilton Hospital; Dr. Macdonald has been appointed consulting physician.

Robert Clinton Young, M.D., to be an Associate Coroner in and for the County of Kent.

#### Births, Marriages, and Deaths.

##### BIRTHS.

On March 11th, the wife of L. H. Evans, M.D., 152 Spadina Avenue, Toronto, of a daughter.

At 50 Duke Street, on March 1st, the wife of Oldright, M.A., M.D., of a son.

##### DEATHS.

At Toronto, on March 12th, Helen Archibald, sister of Dr. Charles Archibald.

On February 26th, Margaret Zoe, infant daughter of Dr. Constantinides.