Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- ☐ Coloured covers / Couverture de couleur
- ☐ Covers damaged / Couverture endommagée
- ☐ Covers restored and/or laminated / Couverture restaurée et/ou pelliculée
- ☐ Cover title missing / Le titre de couverture manque
- ☐ Coloured maps / Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations / Planches et/ou illustrations en couleur
- ☑ Bound with other material / Relié avec d'autres documents
- ☐ Only edition available / Seule édition disponible
- ☑ Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.

- ☐ Coloured pages / Pages de couleur
- ☐ Pages damaged / Pages endommagées
- ☐ Pages restored and/or laminated / Pages restaurées et/ou pelliculées
- ☑ Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- ☐ Pages detached / Pages détachées
- ☑ Showthrough / Transparence
- ☑ Quality of print varies / Qualité inégale de l'impression
- ☐ Includes supplementary materials / Comprend du matériel supplémentaire
- ☐ Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

☑ Additional comments / Commentaires supplémentaires: Continuous pagination.

THE

Canadian Journal of Medical Science.

A MONTHLY JOURNAL OF BRITISH AND FOREIGN MEDICAL SCIENCE, CRITICISM, AND NEWS.

U. OGDEN, M.D., *EDITOR.*

R. ZIMMERMAN, M.D., L.R.C.P., London, *171 Church Street Toronto, Corresponding Editor.*

SUBSCRIPTION, $3 PER ANNUM.

☞ All communications, remittances and Exchanges must be addressed to the Corresponding Editor, 171 Church St.

TORONTO, NOVEMBER, 1880.

Selections: Medicine.

[Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.]

ECZEMA AND PSORIASIS.

BY E. GUIBOUT.

Gentlemen, after a long day of marching and exploration, when night approaches the traveller delights to collect his thoughts. He ascends some high place, and casting his looks back over the route traversed, he embraces it in a single glance, both as a whole and in all its details. So we—we have just traversed a very long route. First of all, we saw what dermatology was: I have shown it to you as being, in the greatest number of cases, the expression, the faithful translation, on the external tegument, of a crowd of internal affections, the slightest as well as the gravest. Looked at from this point of view, it is indeed the light of diagnosis and the lamp of pathology.

We have then studied together the different anatomical lesions which constitute the cutaneous affections. You have seen how these lesions, by the variety which they present, form different kinds of dermatoses, which serve to distinguish them from one another, and establish their individuality and their morbid autonomy. After these general and fundamental data, we entered into the particular study of the dermatoses taken separately, and we began with eczema and psoriasis. The history of these two affections has brought together very numerous details, very numerous descriptions of conditions and of pathological facts themselves very varied. Your memory has been overburdened with them. Let us do then as the traveller of whom I have just spoken: let us look backwards—let us recall, let us co-ordinate our remembrances in order to make them more durable. Place them side by side, the two great figures of eczema and psoriasis; look at them thus united in a single picture; we will see between them notable resemblances, but differences greater and much more marked.

Eczema and psoriasis are, of the diseases of the skin, by far the most frequent. They are more important than all the other cutaneous diseases, not only on account of their frequency, but also by their gravity and by the tendency they have to become general, by the functional troubles they produce, by the deformities they occasion, by their long duration, by their tenacity, by their recurrence and by the formidable complications that accompany them. They are, each of them, the expression the most common, the most formal and the most clear, of that undeniable diathesis, although it be denied, which is called herpetism. Both are hereditary, but not contagious. Both finally belong to the great class of secreting affections. But there ceases their points of resemblance, and we then find nothing but dissemblances the most marked.

Thus eczema and psoriasis are both secreting diseases; this is true, but eczema is the type of the *humid* secreting affections. The secretion which characterizes it commences under the epidermis, which it raises into vesicles; then when these have been broken, this secretion continues to operate on the surface of the ulcerated derma. Psoriasis, on the contrary, is the type of the *dry* secreting affections. In it there is nothing moist, all is absolutely dry; its secretion is purely epidermal; it is the epidermis altered, that is all.

Eczema is an inflammation; it has all the characters and all the signs of an inflammatory disease: congestion, redness, tension, swelling and heat of skin. In eczema, the inflammation again is manifested by the sero-gummy secretion which is its principal symptom—secretion often so abundant as to constitute a true catarrh of the skin. The inflammatory character of eczema is also betrayed by subjective phenomena—that is to say, by troubles and by morbid accidents perceived and complained of by the patient: thus a sensation of tension, of heat, of smarting, of burning. It is to this very sensation of burning that eczema owes its name, since it is derived from the Greek verb ἐκζέω, "I burn."

In psoriasis all is very different. When we leave eczema to pass on to psoriasis, it seems that we leave the hot lands of the tropics to enter the icy regions of the north. Eczema was the living moist, hot eruption. Psoriasis is the dry, dead eruption; its physiognomy remains without change, ever the same, immutable and immovable in the *statu quo* of that which has no life. It is a skin petrified, parchmented, mummified, dried, deprived of its secretions, which the sweat no longer moistens, which the sebaceous glands no longer lubricate; which has lost its suppleness, its flexibility, its elasticity, its vitality. Around the articulations, around the natural orifices, it responds no more to the natural movements and tears like an inextensible and inert membrane. It is now nothing but a shell, a kind of scaly, indolent cuirass, which one may scratch, use and destroy without causing the slightest pain.

Psoriasis and eczema also differ in their seat. Eczema being an inflammatory affection, with a moist abundant secretion, requires a warm ground, itself moist and well watered, provided with a rich and abundant vascular network. Such is the genital zone and such is the axilla. Psoriasis, on the contrary, which requires only plenty of epidermis, affects the regions in which this epidermis is thick and abundant. Do you wish to seize the difference of situation in a single glance? Take the inferior extremity: you will find eczema in the popliteal space, psoriasis on the knee. In the upper limb you will see eczema in the bend of the arm and psoriasis on the elbows. Always, these are only the situations of predilection of these two diseases; just as plants which prefer moist soils may also grow in dry places, so eczema and psoriasis may be met with in all regions of the body. But then their characters are modified and altered, as those plants of which we have just spoken are themselves when they have wandered into ground unsuited to their nature.

Eczema and psoriasis differ again in the character of their complications. An inflammatory affection, eczema has complications of an inflammatory type. Let the inflammation which constitutes it be very considerable; let it spring up in some way from the bed of the eczema, it will then go on extending itself to the entire thickness of the skin, to the cellular subcutaneous tissue and to the lymphatics, and it will produce an erysipelas, a phlegmon or a lymphangitis, with its arborizations and its pink and sinuous lines. These complications are sometimes profound and visceral. They will bear upon one of the great apparatus of the economy, on the nervous centres, on the digestive apparatus, or on the respiratory apparatus; you will then have a meningitis, an acute encephalitis, bronchial or gastro-intestinal catarrhs. But these complications will always have an acuteness and an intensity in proportion to the acuteness and to the intensity of the eczema which gives rise to them.

Psoriasis, on the contrary, an affection of a type essentially chronic, gives rise only to complications having, like it, all the characters of chronicity. In the direction of the lungs there will be chronic catarrhs, often ending in pulmonary tuberculosis; in the digestive organs there will be dyspepsias and cancers—cancer of the intestine, and more often still, cancer of the stomach.

By its evolution and its march, again, eczema is distinguished from psoriasis. Eczema may be acute or chronic, but most often it is under the acute form that it presents itself. Psoriasis is always chronic; it is a torpid type of slow progress, or rather it does not progress, it remains what it is—*Est id quod est.* It is to-day what it was yesterday, and it will be to-morrow what it is to-day.

In its fourth period, eczema becomes squamous like psoriasis, but its scales differ essentially from those of psoriasis. Thin, foliaceus, opaque, containing in the epidermic layer which constitutes them something humid and crusty, they are detached in lamellæ more or less large, and very easily, from the subjacent skin. The scales of psoriasis, on the contrary, are thick—so intimately imbricated upon one another that they cannot be detached without reducing them to powder, and we never find in them the slightest trace of moisture.

And yet, gentlemen, these two diseases, so different—these two opposite poles of dermatology, may be confounded, may be fused to constitute a hybrid and bastard affection, which holds to each without being, properly speaking, the one or the other. Just as there exists a lichenoid eczema, product of the union of lichen and eczema, likewise there exists, whatever our learned master, M. Hardy, may say of it, eczematous psoriasis, product of the union of psoriasis and eczema. Here is an example of it which I place before your eyes :—See these scales, how strong they are, how thick; they are truly those of psoriasis; but they contain in their woof a crusty element—they are detached from a slightly humid skin; there is really something there which belongs to eczema; it is then eczematous psoriasis.

All these differences, so marked, which separate from each other the symptomatology of eczema and psoriasis, we find them again when we come to the treatment of these two affections. Both are (at least very often) of herpetic nature, and you know the value of arsenic in the treatment of herpes. It appears then that the first care of the medical man should be to give arsenic at once, indiscriminately, in psoriasis as well as in eczema. It is not so. In acute eczema the skin is inflamed and congested, and arsenic would aggravate still more this inflammatory condition; arsenic derives to the skin, you know. Prescribe it not then in the acuteness of eczema. Combat the phlegmasia at first with emollients; later, only when you will have extinguished the inflammation, you will employ the specific medication.

In psoriasis you have not these manifestations to guard against. You can then boldly give arsenic at once.

The difference in the treatment of these two affections is still more marked when we come to their local or external treatment. In eczema all is inflammatory; the external treatment ought then, before all, to be antiphlogistic. Lay aside irritants; do not employ even the most innocent pomades; inert at the moment of their application, they soon become irritating from the acid fermentation of the fatty bodies which they contain. Employ topically only those agents which preserve with integrity their emollient and antiphlogistic properties; cover the diseased parts with the most emollient cataplasms, as of potato starch.

In psoriasis, emollients are unseasonable—they are productive of no good. What is neccessary here is to make the scales fall, to modify the vitality of the skin by irritating substances, endowed with energetic and penetrating properties, which attain as far as the diseased derma—to restore to it its normal vitality, by a kind of slow substitutive inflammation. Go and treat an eczema thus, and you will see what incendiary results you will produce. Thus, gentlemen, these two affections, so different in the lesions which characterize them, differ no less in the treatment which suits them.

Permit me, gentlemen, to terminate this picture by a comparison which will appear to you perhaps a little venturesome, but which is none the less exact. In the two affections, with characters so different, which we have been studying, are personified in a certain way the different seasons of the year and the different ages of life. Eczema, with its changing physiognomy, lively and animated, with its warm and burning character, represents the spring and summer, childhood and youth. Psoriasis, with its aspect ever the same, cold, dull, and icy, recalls to me the autumn and winter, manhood and old age.

It is thus that, in nature, an attentive observation often reveals to us mysterious harmonies, unexpected relations and connections until then ignored, between objects the most distant and dissimilar.—*L'Union Médicale.*

It is now pretty generally known, at least among the New England members of the medical profession, that the new observatory of Yale College has undertaken to afford to physicians an accurate statement of the errors of clinical thermometers sent to the observatory for such purpose.

INFANTILE CONSTIPATION.

CLINIC OF PROF. JACOBI, APRIL 14, 1880.

How old is this child? "Three months." What is the trouble? "Its bowels move eight or ten times a day." Only a little at a time? "Yes, only a little bit." Are you sure its bowels move as often as that? "Yes, I think they do."

I show you here, in this napkin, a collection of these bits of fæces which the child is passing continually, the mother says as often as eight or ten times a day, but it is not probable that it is so frequent. You see that the colour of the fæces is about normal, but that they are deficient in moisture. They are dry and somewhat friable. If I break open a piece I shall find it a little white inside. No, it is very little changed in colour from the outside, only a little whitish within.

The passages of young babies are never normally like this. They are of about the same colour, but semi-solid. There is evidently here a lack of moisture, which may possibly arise from an insufficient secretion on the part of the intestinal glands. It may, however, arise from other causes. It was, I think, in 1869 that I alluded, in my writings (*Journal of Obstetrics*, Aug., 1869) to a peculiar anatomical condition occasionally existing in the bowels of new-born or young infants. It had been recognized before, by a few anatomists, that the intestinal tract is different in the young from what it is in the old. The colon is very much larger and longer, in proportion, in the child, than it is in the adult, and this peculiar condition often remains up to the age of five or six years. The child may have two or even three sigmoid flexures, or the real sigmoid flexure may not be found on the left side, but on the right. It has occurred that the colon has been on the right side and not on the left, in those cases of imperforate anus where the operation has failed to discover the sigmoid flexure on the left side. In the passages of the young, where the peristaltic action of the bowel is normal and the colon of the usual proportion, the passages will not dry out; but where the flexure is long, or where there are two or three of them, the fæces will dry out, as in the case before you.

In the fœtus and new-born the secretions of the intestines are very copious. There is a great deal of mucus and epithelium, which may become very hard and compressed—to such an amount, indeed, as to constitute actual obstruction. I remember one such case in my own practice, where constipation existed, accompanied by vomiting and other symptoms of complete obstruction. Water was injected in large quantities; air was blown into the intestine, and carbonic acid gas also, by means of an apparatus prepared for the purpose, but all to no avail. At last symptoms of regurgitation took place, peritonitis set in, and the child died. I made a post-mortem examination, and found that the condition was like this which I have mentioned. There were three sigmoid flexures, and in one of them an accumulation of epithelium, mucus, and fæces had taken place, which was so hard that my probe passed through the mass with difficulty. Not long after I was called to a similar case, and treated it in the same way, but without avail. I saw the case in consultation, and not liking to be caught in the same scrape again, was prepared to operate, when late one night my door bell rang, and the physician in charge of the case came in and said, "Doctor, the child has had a passage." The child had passed a mass of mucus and epithelium, and finally got well. There have occurred to me a number of cases like this in children, that cannot be explained in any other way than by the fact that there were two or three sigmoid flexures, one on top of the other, and impeding the free passage of the fæces.

When you are called to such a case, where you suspect such a state of things, you are to regulate the diet so that there may be an abundance of water in the food. In fact, it is always better to have too much water in an infant's food than too little. In the choice of food, do not give tapioca, rice, potatoes, or even barley, which is my favourite child's food, but give oatmeal in preference.

Purgatives ought not to be given except in very urgent cases; they will not act without great pain. You cannot do without injections, and from these you will derive great benefit. You may be compelled to use them for months and years. Remember that the constipation is

anatomical, and hence may not disappear until the cause has disappeared, and this peculiar condition may exist even up to the fifth year. You may give an enema every day, not of soap and water or salt and water, but simply wash out the intestine with pure warm water, and wait until nature restores to the intestinal canal its proper proportion. Not until then will the trouble disappear, for it is based on anatomical peculiarities. Oftentimes the accumulation of fæces in these flexures will give rise to dulness on percussion on that side. It is so in this case.

In a number of cases the constipation was so obstinate that I had to scoop out the rectum repeatedly. Have patience, inject day after day, and you will succeed when the time comes for a condition of the colon descendens, such as is met with in more advanced age.

Another cause of constipation like this may be that there is an insufficient physiological action of the muscular layer of the intestine. This may occur where it is not sufficiently developed, as in feeble children. In another class of children this constipation does not appear until from six months to one year after birth, and then from being perfectly regular they become obstinately constipated. In this class of children the muscles of voluntary motion, as well as of the intestine, become diminished in power; they are rachitic children. The symptoms of rachitis need not be developed at first in the bones. Rachitis is not always a disease of the bones primarily. It is a disease of the general system, and there are a number of children in whom the first symptom of rachitis is that of obstinate constipation; the worst cases are often those which commence with obstinate constipation. In these cases, where they occur as early as the second or third month, you will often find softening of the bones of the cranium, and the peculiar diaphragmatic groove. The child is often fat and vigorous looking up to the age of two or three months. Then, if obstinate constipation sets in, it is pretty safe to look for rachitis; and these cases are often, as I have before mentioned, the worst cases of rachitis, ending in effusion within the cranium, hydrocephalic symptoms, and sometimes death. You will not find these forms of constipation mentioned in the books; and should opportunity permit, I shall be glad to take the subject up again.—*Medical and Surgical Reporter.*

CALCIUM SALICYLATE IN THE SEROUS DIARRHŒAS OF INFANTS.

BY ALEXANDER HUTCHINS, M.D.,
Brooklyn, New York.

Dr. Hutchins reports the results of twenty-seven cases of serous diarrhœa in infants from two months to two and a-half years of age, treated with one drug only—calcium salicylate. Some of the cases were seen but once, many only twice, and none above four times, and in all the disease was promptly and permanently controlled.

The cases on which this memorandum is based are selected so far as to include all those with the more or less profuse watery alvine evacuations, with or without vomiting, and to exclude all others. The purport of this memorandum is to put on record the fact that these discharges were controlled by the calcium salicylate with a promptness and efficiency that the writer has never experienced by any other mode of treatment. The patients ranged in age from two months to two and a-half years. No discrimination was made as to diet, which, in some instances, was breast milk exclusively; in others, condensed milk, the patent foods, or a mixed diet. In no case was any modification of the previous diet called for, save in the matter of quantity. All the patients were in good social and hygienic surroundings. In two instances the infants were at their summer homes, and the telegraph and mail related the symptoms and conveyed the medicine. In all cases the dose was 3 to 5 grains from 2 to 4 hours. The total quantity consumed by each patient varied between 6 and 18 powders. In a few cases minute doses of aconite and veratrum were given during the stay of the high temperature, and in other few, small doses of quinine were followed up after the subsidence of the disease.

It was noted that the medicine seemed to have no influence in changing the secretions so as to modify the character of the evacuations. The discharges would be under control for a time, say from 2 to 12 hours, and the next movement would be a watery one, but there would be no further recurrence of the diarrhœa. There might be a return to normal movements, or there might be a change to a diarrhœa of

indigestion, or to a diarrhœa from irritation of the mucous surface, each of which would require some special interference. These sequelæ were exceptional, but in no case did the serous discharge occur.

It was noted, likewise, that this treatment necessitated very little interference with the usual diet of the child. It would be nearer the exact fact to say that no interference was required. In the majority of cases the discharges were so promptly checked that an indigestion did not occur.

It was further noted that the calcium salt had no appreciable effect on any one of the other forms of intestinal flux, whether lienteric or inflammatory. The serous diarrhœa alone seemed to be amenable to this drug. Each of the other forms required special treatment.

An additional fact was noted, that the vomiting accompanying these diarrhœas was controlled so soon as the medicine began to show its effect on the discharges.

The following prescriptions contain five-grain doses of the salicylates :—

℞.—Acid salicylic..... gr. xxx.
Cretæ precip. ..... gr. x.
Syrupi..... ..... ʒii.
Aquæ ..... ʒxiv.
M. Two teaspoonfuls every 2 to 4 hours.

℞.—Acid salicylic..... ..... gr. xxvi.
Bismuth teroxid..... gr. xiv.
Tr. hyoscyami..... ʒi.
Syrupi ..... ʒii.
Aquæ ..... ʒxiii.
M. Two teaspoonfuls every 2 to 4 hours.

The form in which I have used the calcium salt would be represented in a formal prescription thus :

℞.—Acid salicylic.. ..... gr. xxii.
Cretæ preparat. ..... gr. viii.
Misce accurate.

Divide in chart. No. vi. (gr. v.), vel. No. x. (gr. iii.)

Sig. one every 2 to 4 hours.

I found the calcium salt so effective that I abandoned the bismuth salt mainly to avoid the discolouration of the discharges due to the bismuth. I did not find that the bismuth acted any more effectually than the calcium in controlling the vomiting.—*Advance Sheets of King's County Proceedings.*

Surgery.

TREATMENT OF STRICTURES OF THE URETHRA—PERMANENT DILATATION.

BY M. GUYON.

[Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.]

The end which we propose to ourselves in the treatment of strictures of the urethra, is to re-establish the normal canal of the urethra. Now, we ought first to ask if we are able to obtain such a result. To this question I answer immediately, No. We can restore the normal calibre of the urethra only in a relative and temporary manner—we can never obtain a perfect and definitive cure. But this does not signify that we cannot render immense services.

The pathological tissue which constitutes the stricture is such that it is extremely retractile. Treatment does not exhaust this capital and pathological property of this tissue. This retractile tissue forms an integral part of the wall of the canal. This wall must be modified, then, and not destroyed, as is the object of certain treatments of strictures. What we ought to seek is to "modify" this wall. To arrive at this, and to restore to it its width, it has been sought to render the canal gradually extensible, or even it has been forcibly distended, either by tearing it or by incising it. We find, then, amongst the different methods, *dilatation, divulsion*, and *urethrotomy.*

You have already seen the considerable value of dilatation. It constitutes a method which allows us to arrive at the treatment of the stricture without destroying it—it is a method essentially modificatory, which by the fact that it neutralizes the retractile properties of the stricture, ought to be the base of the treatment of strictures.

This theoretical view is in fact confirmed by practice. It is by dilatation that we can cure the greatest number of urethral strictures. Divulsion would not be efficacious if we had not still to complete it by the benefits of dilatation, the sole method which modifies the tissue of the stricture and brings it back towards its normal condition.

Dilatation.—Dilatation is an operation whose object is to provoke in the tissue of the stricture

a physiological labour, destined to gradually modify the properties of the morbid tissue.

There are three great processes of dilatation: *permanent*, *temporary*, and *rapid* dilatation.

Permanent dilatation is not the treatment most in use, but it is that which throws most light upon the modificatory action of the instrument introduced into the urethra. This process is that also which in appearance gives the most brilliant results. It consists in the prolonged sojourn in the urethra of a dilating instrument. Note well what I say: in the urethra, and not in the stricture alone; for we may make use of permanent dilatation by leaving the instrument in contact with the entrance of the stricture, without having passed it, or with the whole extent of the stricture after having passed it.

To dilate strictures we make use of bougies and sounds. They ought to be olivary and conical. The bougies are particularly suitable in the cases in which we leave the extremity of the instrument supported against the entrance of the stricture. Though this should not be a process of choice—for when we can pass the stricture, we ought to profit by the resources of a first success—it must not, however, be disdained. More than once you will not be able to pass a stricture, and you ought to use this artifice.

To put in practice this *cathétérisme appuyé*, which does perfectly well in certain cases, and which at times gives a total or partial evacuation of the bladder in subjects who could not urinate before, there are two different methods. One leans on the anterior part of the stricture with pressure or without pressure. Hunter and Dupuytren first did the "*catheterisme appuyé*" with pressure; however, you ought always in my opinion to push only moderately, to avoid the ulcerations and the perforations of the canal too often produced by the catheterism according to the process of Hunter. Always in fixing the sound applied against the stricture, you will watch that the contact of the extremity of the sound with the entrance of the stricture is well established. It is necessary that this contact should be well assured, and that it be prolonged. Dupuytren most often left the sound twenty-four hours even when the sound was fixed in a pronounced tension. What we ought to seek is not a manœuvre of force, but a modificatory process. What takes place, in fact, when a bougie is in contact with the stricture that it cannot pass? This stricture often becomes easily passable after the *cathétérisme appuyé*; it even admits instruments relatively large. Many theories have been imagined to explain this phenomenon. Desault, Chopin, and then Dupuytren, have called this treatment by dilatation "*vital*," a process which did not act, according to them, on the whole canal, as in "mechanical" dilatation; but here, under the influence of contact, the spasm ceased and gave rise to a more or less abundant secretion of mucus and even of pus, which brought on a disengorgement of the walls of the urethra, and consequently the enlargement of the stricture.

To this theory it ought to be objected that in certain cases the *cathétérisme appuyé* acts very rapidly, and that we cannot invoke, in order to explain the result, a disengorgement which has not had time to operate. Dupuytren explained it, then, by the disappearance of the contraction.

Civiale, who has also made great use of the *cathétérisme appuyé* to prepare for the penetration of other instruments, thought the contact blunted the sensibility and caused the contractions and the spasm of the canal to cease.

All this is disputable, but the theory matters little to us. Let us hold to the clinical facts, to the consequences of a manœuvre well made and well conducted; later we will seek for an explanation of it. Remark always, that from this action of simple contact it results that often there is no need of a mechanical action upon the stricture to obtain its dilatation.

Let us now occupy ourselves with the mode of employment of this permanent dilatation. It is well recommended to place in the stricture a bougie which may not fit too close; it is necessary that it should almost play in the stricture. It ought scarcely to be in contact with the wall, though skimming over its surface. You will see every day, in fact, patients with strictures thus treated with a free bougie, draw from it great advantages; in two days days a stricture which allowed bougies to pass of only one or two millimetres, quickly admit

one of three or four millimetres in diameter, after a treatment of two to six days. Permanent dilatation then acts rapidly.

A slight difficulty may present itself: when we have introduced a bougie with a certain friction, always not exaggerated, you will feel it sometimes grasped very strongly, and even after some time, during the first hours, the stricture augments, and the patient cannot urinate on his bougie during a certain delay. It is, in fact, that in all, whatever may be the limit of time, the canal closes upon the bougie. But the same evening the bougie becomes clear again, and even "it is gay;" it plays in the canal; the patient has emptied more or less completely his bladder without your having done anything else than the introduction of the bougie, the urine being discharged between the bougie and the wall of the urethra.

To complete the result obtained, may we continue the permanent dilatation? We can, and do. When we have arrived at a certain degree of dilatation, we replace the bougie by a sound, No. 12 (about 4 millimetres); then some days after we introduce sounds of a larger calibre.

We have also tried to profit by the primitive dilatation—to pass successively in a single session a series of bougies. But this is no longer permanent dilatation. This was the process Dupuytren ordinarily employed. Now, if it gives results so rapid, why is it not employed daily? It is not without reason. This abanment is due to the fact that the results are not durable, but they are at times very useful. Thus, in a man who had a stricture, and in whom we had broken a sound in his bladder, I was able to pass quickly from a No. 11, to which he had been reduced for about twenty years, to No 21, which permitted me to introduce a lithotrite and extract the foreign body. I had engaged the patient to try and preserve this dilatation, but in a few days the canal returned to the calibre of No. 11, and remained there.

We also utilize this process to make a man urinate, who has retention, when we cannot introduce a sound.

Civiale remarked that nothing is more common than to see strictures treated by sounds *à demeure*, reproduce themselves in a very short time. That which has also caused permanent dilatation to be given up is the grave accidents which have sometimes accompanied it. At all times they are not imputable to the process itself, but to the manner in which it has been put in practice.

Dupuytren called "mechanical" the dilatation which we are going to study, that which acts especially on the canal; but he recognized that it was far from being absolutely mechanical; there is no necessity for filling the whole stricture. But is there a particular influence, a very peculiar work, which determines a true softening? When we introduce a sound *à demeure*, we feel the penile strictures form hard nuclei like the beads of a rosary. Now, after a very short sojourn of the sound *à demeure*, these hard neuclei spread themselves out, soften, and disappear. There is an abundant secretion. This disengorgement, is it the cause which has brought the softening? They are evidently inflammatory phenomena, analogous to those that we ordinarily observe in irritative and inflammatory actions; but there are some cases in which something else than these modifications of the tissue has been produced, and in which there has been effected a veritable destruction of the elements and ulceration, so that a certain mode of dilatation has been called ulcerative dilatation. This is what Hunter wished when he pushed with force upon the entrance of the stricture. This method is destructive rather than modificatory; for we have seen, in some unfortunate cases followed by death, that the stricture was really destroyed. We had then acted contrary to the spirit of the method. This ulceration has been able to give good results, but the limits have often been surpassed, and the *corpus spongiosum* itself been reached, as Voillemier cites three facts of it in which the opening of the *corpus cavernosum* was followed by mortal phlebitis.

It is this mechanical mode of dilatation which justifies all the evil which is spoken of dilatation. A person one day or another falls into the grave fault of forcing the dilatation; that is why the second portion of the treatment—the substitution of sounds for the bougies—has been abandoned. Wrong has been done in criticising too closely the sound *à demeure*; if it never leads

with force upon the walls of the stricture, it renders great services. The important point is not to distend the urethra to any degree.

In conclusion, permanent dilatation, in the two manœuvres, does not act in a mechanical manner. Whenever it becomes mechanical, and whenever it distends the walls, it becomes dangerous. We may then dilate a urethra in this manner, but it must be known that the return is in direct ratio with the rapidity of the result obtained.— *Gazette des Hôpitaux.*

ON THE TREATMENT OF LATERAL CURVATURE OF THE SPINE BY STEEL SUPPORTS, PLASTER-OF-PARIS JACKET, AND THE PORO-PLASTIC JACKET.

BY WM. ADAMS, F.R.C.S.

The author commenced by alluding to the great change in the treatment of curvatures of the spine, both angular and lateral, during the last three years, in consequence of the method introduced by Professor Sayre, of New York, i.e., the application of the principle of extension, by suspending the patient from the head and arms, and then applying a plaster-of-Paris jacket during suspension. The author did not propose to speak of angular curvature from Pott's disease, further than to say that it was in this class of cases that the advantages of the plaster-of-Paris jacket were most conspicuous; and his experience led him to confirm all that Professor Sayre had claimed for it; but in the treatment of lateral curvature, Mr. Adams differed from Dr. Sayre, and believed the plaster-of-Paris jacket to be as useless and injurious in this class of cases as it was useful in cases of angular curvature. For practical purposes, the author arranged cases of lateral curvature in three classes, viz., 1. Physiological curves; 2. Confirmed structural curves; 3. Commencing structural curves. In forming a diagnosis between these three classes, the importance of the stooping position as affording evidence of the existence of rotation of the bodies of the vertebræ was particularly insisted upon, attention being directed to the symmetrical relations or otherwise of the angles of the ribs in the dorsal region, and of the transverse processes in the lumbar region, rather than to the spinous processes, the apices of which might preserve their normally straight line in relation to one another, without any lateral deviation, whilst rotation of the bodies of the vertebræ might have taken place to a considerable extent, rendering the case incurable. This fact was illustrated by a specimen exhibited to the Society by Mr. Adams, and described in a paper published with illustrations in vol. xxxvii. of the *Transactions* of the Society. In the cases of commencing structural curve, in which probably the intervertebral cartilages only had suffered from unequal compression, arranged in the third class, and forming an intermediate group between the first and second classes, the spinal curvature was much more apparent in the standing than in the stooping position; although, in the stooping position, it did not completely disappear, as in the physiological curves. Some evidence of commencing rotation was afforded by a slight posterior projection of the angles of the ribs on one side, and depression on the other; and a similar deviation as regards the transverse processes in the lumbar region, when the patient was examined in the stooping position. With regard to treatment of cases in the first class, or physiological curves, no mechanical treatment by any form of spinal support should be given, but reliance should be placed entirely upon physiological means, such as gymnastic exercises, partial recumbency, and attention to the general health. In some cases, an elastic brace attached to stays might be used. In the second class, of confirmed structural curves, mechanical support of some kind must be resorted to, and continued during the growth, in the hope of preventing increase and obtaining some improvement in the curvature; but confirmed lateral curvature, whether slight or severe, with its adapted series of structural changes, was essentially incurable. The most efficient retentive spinal support was an instrument made with a pelvic belt and spring plates attached to vertical bars at the back, without any mechanism requiring alteration by the surgeon. In some favourable cases for improvement, the stronger spinal instrument, with steel plates attached to levers, and adjusted by rack-and-pinion movements, might be used with

advantage. Sayre's plaster-of-Paris jacket had been largely employed in these cases; but from what the author had observed in the practice of others, he condemned its application on the grounds that it failed as a curative agent, the gain in height by extension being quickly lost; that it weakened the spinal muscles by its constant use, and hindered gymnastic exercises; that it restrained respiratory movements, and prevented active exercise; and that it was an unnecessary restraint at night, and interfered with bathing and cleanliness. The poroplastic jacket, which, when softened by steam, was applied in the same way as the plaster-of-Paris jacket during suspension, was free from the disadvantages of the latter, as it could be removed at night, or at any time, for the purpose of gymnastic exercises, etc. It acted as an efficient and light retentive support in many cases of incurable curvature. Commencing structural curves formed the only curable cases of lateral curvature; and for these the author recommended a combination of mechanical support, gymnastic exercises, and partial recumbency. By this combination of physiological and mechanical means, the further progress of curvature would be arrested, and the best opportunity afforded for recovery from such slight structural damage as might have already occurred.

Mr. Bryant said that Mr. Adams's observations were consonant with what was felt by most surgeons. On one point, however, there might be difference of opinion, viz., as to the time when curvature ceased to be curable by physiological means, and passed into the incurable stage, requiring artificial supports. He would delay assuming the commencement of the incurable stage as long as possible. In many cases of lateral curvature, recovery took place in a remarkable degree. He approved of the means of diagnosis recommended by Mr Adams. He had been accustomed to examine the patients in the stooping position, with their hands on the back of a chair. He agreed that the plaster-of-Paris jacket was not fitted for lateral curvature; though in some rare instances, of which he had seen one, it was the only thing that would support the patients. He would even discard the iron apparatus. The poroplastic jacket was preferable to any other; and the addition of steel bars to it, as recommended by Mr. Adams, was no doubt an advantage.—Mr. Warrington Haward was glad to hear Mr. Adams say that many cases of lateral curvature did not need any apparatus. He thought that the prejudice of the public was rather in favour of artificial supports than against them. He agreed with the opinion that the application of supports should be delayed as long as possible. All spinal supports were necessary evils, for they interfered with respiration. In cases where the curvature was apparently only an indication of general debility, he would depend more on recumbency and exercise, both being judiciously regulated by the surgeon, and the general health being at the same time attended to, than on artificial supports. In such cases, the application of the plaster jacket tended only to still more weaken the spinal muscles. When the disease had become incurable, the object was to prevent it from becoming worse; and he would here use the poroplastic jacket, which could be fitted to every part of the body.—*British Medical Journal.*

On a Novel Method of Reducing Dislocation of the Shoulder.—I placed the patient in a chair. I then put my *right* foot (the injury, be it observed, being on the *left* side of the patient), on the edge of the chair, and drew the patient's forearm under my leg. I placed the wife (the only person available for my purpose) behind the chair, and, with both her hands over the patient's *right* shoulder, desired her to grasp his wrist firmly. I then held the head of the humerus with both hands, the thumb of each hand pressing against the point of the acromion process of the scapula, thus forming a fulcrum to a lever in the axilla, and at the same time fixing the scapula from following the humerus in the act of extension—a consideration on which the merits (if any belong to it) principally depend. By dropping my foot off the chair and pressing the arm downward with my leg, the head of the bone slipped into the glenoid cavity with the usual click, and with unusual ease.—*Mr. John Jones, in St. George's Hospital Reports, Vol. IX.*, 1877-8.—*N. Y. Medical Journal.*

TREATMENT OF SPRAINS BY MASSAGE.

[Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.]

Dr. Berenger-Ferand, an old army surgeon, in his study, tells us of four hundred sprains which he treated successfully with massage. He speaks as follows:

I think it necessary to tell in detail how, in my opinion, a person ought to proceed when he undertakes to treat a sprain by massage, for it is by indicating very clearly the manner of proceeding which has succeeded, that those who are beginners are put under the best conditions to obtain a success, at the first essay which they may make of the method. Let us suppose that we have a sprain of the foot. After we have arrived beside the wounded, and note, in beginning, that the nearer the massage is to the moment of the accident the shorter is the treatment, we make him sit upon a chair, if he was up; we seat ourselves in front of him, and make him put his injured foot upon our knees. If, on the contrary, the subject was lying down, it suffices to uncover him, and, if need be, to unbandage him in order to make a diagnosis. This diagnosis being established—that is to say, when we have found out that we have to do with a sprain, slight, medium, intense, or complicated—we proceed to the manipulations. We begin by making on the dorsal face of the foot, going from the root of the toes to the leg, following the direction of the extensor tendons, passes, as light as possible, with the pulp of the four last fingers, anointed from time to time with some fat body—olive oil, for example. These frictions, which ought always to be directed from the extremity towards the root of the limb, and never in a contrary direction, are extremely light; they begin quite far above the painful part, and are prolonged as far below. They ought not to be painful; and in the cases in which, in spite of their extreme slightness, the subject finds them too painful, it would be necessary to begin at some other region, leaving the dorsum of the foot to return to it when the sensibility will be a little blunted by the massage. Little by little the pressure is augmented, and at first the pulp of the four last fingers of both hands, then that of the two thumbs, intervene, according as the contact is less painful for the patient. A few minutes after beginning, in general, one may press very notably on a place which at first could not support the slightest friction without suffering. Soon after it is a veritable friction, quite strong, that we may practice, in taking care to have recourse to the fat body to protect the skin of the patient, which would not be slow to become excoriated if it was massied dry, and the pulp of the fingers feels a sort of peritendinous œdema which one makes mount upwards little by little above the ankle, as far as the fleshy portion of the extensors of the toes and of the anterior tibial.

According as the contacts are less painful, we cause slight movements to be executed upon the articulations in the neighbourhood of those which are injured, and one arrives thus little by little to those in which the sprain has spent most directly its effects. These movements are very gradual; imperceptible at first, they go on little by little increasing, until at the end of the *séance*, which it is necessary to prolong willingly, pain being always very carefully avoided, we cause the part to execute all its physiological movements in their greatest amplitude.

At certain moments we may feel under our fingers substances like small nodosities, more or less voluminous, large as a lentil—nodosities at first fixed, afterwards movable, of which the patient is conscious, and which give an impression of pain when pressed a little forcibly. It is necessary to pass the fingers with persistence over them, taking care to do so lightly enough not to make the patient suffer; and, moreover, must be mobilized little by little—at first to they chase them very gently, afterwards as far as the fleshy portions of the extensor muscles of the toe and the tibialis anterior.

At the end of a time which varies from one to five minutes, friction may be applied with greater and greater force, and soon strong pressure provokes no sensible pain. This is the moment to leave this portion of the foot to mass either the more external part or the internal part, by passing then along the border of the foot as far as the malleolus, which is turned in such a manner as to follow either the tract of the peroneal tendons or that of the muscles of

the posterior tibial region. We act upon each of these regions, as I have said previously, going from the lightest rubbing to vigorous friction, taking as a guide the impressions made upon the patient, and taking great care not to hurtle against an osseous eminence.

The *séance* ought to continue until all feeling of distress and pain have disappeared. When the operation is once terminated a retentive apparatus is applied.—*L'Union Méd. du Canada.*

Bloodless Operations on the Female Breast.—H. Leisrink (*Cbl. f. Chir.*, No. 30, 1880), in a case where tumours of the mamma, accompanied by continuous hæmorrhage, threatened the life of the patient, made use of a compression apparatus somewhat like that used in the operation for phimosis. Two parallel steel rods were arranged, by means of transverse extensions at either end of one running through holes in the ends of the other, and moved by the aid of nuts running on a thread cut in the transverse bars, so as to be approached with considerable force. They were then attached to the root of the mamma, which was pendulous, and, the nuts being turned, such compression was obtained that the vascular supply to the breast was entirely cut off and amputation performed without the loss of a drop of blood. Of course, in the case of plump, round breasts this apparatus could not be employed; but, inasmuch as tumours of the breast commonly occur at an age when the adipose tissue of the organ has to a considerable extent disappeared, it may be hoped that this apparatus will find extensive employment among surgeons.

Ozœna Cured by Iodoform.—Dr. George Letzel (*Allgem. Med. Central. Zeitung*, June 5th, 1880) was induced to use iodoform in ozœna by the favourable results which followed its use in otorrhœa. He used a powder consisting of 2 parts of iodoform and 10 parts of pulverized gum arabic. This is used as a snuff, being drawn into the nostrils from three to six times a day. In the six cases treated by this method the results were exceedingly favourable. Two cases, which had lasted for months, and in which every means which could be thought of had been tried without any benefit, were completely cured within ten or fourteen days. The other four cases, which were less severe, were cured in from six to eight days. Before using the powder, Dr. Letzel cleanses the nose as thoroughly as possible with the nasal douche, and removes all scabs by means of the ear-scoop, so as to allow the powder to come directly in contact with the mucous membrane. With reference to the unpleasant smell of the iodoform, he says that it is, at least, less disagreeable than the odour caused by the ozœna itself. This treatment commends itself for its simplicity; but it should be mentioned in using the nasal douche, that Dr. Roosa, of New York, and others have found that, unless very great precautions are observed, it is liable to lead to deafness. Dr. Lennox Brown, who is attached to a hospital where both throat and nasal and ear diseases are treated, states that he has frequently observed this result. Browne on *Diseases of the Throat*, pp. 65 and 166.—W. C. D., in *Virginia Med. Monthly.*

A New Idea about Recurring Gonorrhœa.—Dr. H. C. Howard, of Champaign, Illinois, has recently had a series of cases in which gonorrhœa had been communicated by the husband to the wife, and cured in both, but repeatedly returned in the case of the husband, although he had not been improperly exposed. Careful examination of the female showed that the disease had persisted in the little glands of the female urethra, first described by Dr. A. J. C. Skene, of Brooklyn (*American Journal of Obstetrics*, April, 1880), and fully noticed editorially in the *Chicago Medical Gazette*, May 5, 1880. Dr. Howard, believing that these little glands were continuing to pour out true gonorrhœal pus, although the patient presented no other evidence of the disease, and that this pus had produced recurrent gonorrhœa in the male, directed his treatment to them, which consisted in the application of carbolic acid crystals. In each case the discharge disappeared permanently under this treatment, and the disease in the male now having been cured, did not return. Dr. Skene, in his original paper, expresses the opinion that in the cases which he

had observed, the inflammation was caused by gonorrhœa, which persisted in the glands long after the original trace of the disease had disappeared. Dr. Howard seems to have been the first to note this condition as a cause of gonorrhœa recurring as often as cured in the male. His observatiom is important as showing that the female may communicate the disease long after it would previously have been pronounced cured.—*Chicago Med. Review.*

A NEW OPERATION IN PROLAPSUS OF THE RECTUM has been devised by Professor Kehrer, of Giessen, an account of which we find in the *Deutsche Medicinische Wochenschrift*, No. 33, 1880. Dissatisfied with the uncertainty of the present methods, the author has based an operation on a principle which he describes as follows: If a rubber ring has been stretched too far, its size may be again reduced by eliminating a piece of the ring by a knot. He compares the sphincter of the anus to such a ring, and proceeds to shorten it on the same plan. Opening the anus with a small Sims' speculum, he removes a slip of mucous membrane, preferably from the posterior side. This slip has the shape of a triangle, the apex of which is directed upwards, the base being the line where the mucous membrane and skin meet. On exerting traction with a tenaculum from the centre of the denuded portion of the sphincter, outward, the exposed portion of the muscle folds, and the ring is thereby shortened just so much. Sutures are now applied to keep the folded surfaces in apposition, and are only removed after union has occurred. But two cases are reported by the author; these, however, with good success. The operation was performed with antiseptic precautions, thorough irrigation with carbolic acid, and insertion of a plug of cotton saturated with a ten per cent. solution of carbolic acid and glycerine. The wound healed by first intention.—*Chicago Medical Review.*

ACETATE of lead, given from two to three grains in the twenty-four hours, acts perfectly in muco-purulent bronchial catarrh, diminishing in a rapid and effectual manner the exudation, and with it the cough, and its presence is not declared in the urine before it has already produced its salutary effects on the respiratory organs.—*Louisville Medical News.*

Midwifery.

THE ETIOLOGY AND TREATMENT OF LACERATIONS OF THE CERVIX UTERI.

BY MONTROSE A. PALLEN, M.D., LL.D., NEW YORK.

In this paper, Dr. Pallen first discussed the reason why so many women suffered from lacerations of the genital organs during parturition. He ascribed the laceration of the neck of the womb, which occurred in many cases, either to causes existing in the pelvis, or to neglect, or the use of instruments. Of about nine hundred patients treated in the gynæcological class of the University Medical College of New York during the last six years, more than two hundred had laceration of the cervix, which either interfered with the generative functions or produced more or less disease. As causes of laceration, Dr. Pallen referred especially to tedious labour, and the scleremic condition often following congestion or inflammation—the so-called hyperplasia cervicis; also to disproportion or deformity in the osseous structures, rendering the use of the forceps necessary. The injury could not be positively recognized until delivery was completed; but, if the pelvis were very roomy, it was to be suspected when the child's head and the mother's vulva became suddenly bathed with blood. Hæmorrhage was the chief symptom, and was sometimes fatal. If it persisted, its source should be ascertained. If, after the uterus had well contracted, the absence of laceration of the external parts had been ascertained by ocular inspection, and the parts had been well cleansed with carbolized water, blood continued to escape from the vagina, the deduction necessarily would be that it came from the cervix; and examination with the finger would detect the laceration. In such a case, Dr. Pallen would introduce a Sims' speculum, cleanse the vagina of clots, and see the point whence the blood issued. The use of the tampon was sometimes necessary to save the patient; and on several occasions he had employed silver wire sutures. In speaking of this he took occasion to recommend that the obstetrician should always go to a labour

provided for any emergency of the kind that might occur. If plugging were required, the accoucheur should first introduce a tampon of styptic cotton saturated with alum or with persulphate of iron, and then pack the cervix with as many layers of cotton as could be introduced into the vagina. The plugging must always be done by means of a Sims' speculum, with the woman in the semi-prone position; and each layer of cotton must be smoothly and accurately placed in position. After the removal of the tampon, frequent irrigations of carbolized or thymolized water must be made for two or three days, until all possibility of sepsis had been removed by the development of the granulation process. In describing the operation for closure of the lacerations, Dr. Pallen said that he had performed it at least fifty times during the last six years on hospital patients; and it had been done in many other cases since 1866. The proper time for performing the operation—which should be done in all cases, however slight the laceration—was four or five days after the cessation of the menstrual flow. In operating, the patient should be placed on the table in the left lateral semi-prone position, with the perinæum retracted by a Sims' speculum, or one of its modifications. Dr. Pallen had hitherto frequently operated without anæsthetics; otherwise he had used ether, but would in future employ nitrous oxide. The instruments used for paring the edges of the laceration were scissors, about seven inches in length, of a variety of curves. During the dissection, the cervix was steadied by a tenaculum as long as or longer than the scissors; the point being very hard and bent at an acute angle. An assistant sponged the bleeding surface rapidly and thoroughly with very small sponges. To control bleeding, Dr. Emmet had described a tourniquet; but Dr. Pallen found a very hot douche just prior to the operation generally sufficient. In general, the loss of blood did not exceed an ounce. Sometimes, however, very large vessels were cut, and. when these ramified in the dense cicatricial tissue, bleeding might continue until the edges were firmly approximated by the silver wires. If the cicatricial tissue were not all cut away, it might altogether interfere with healing, or its retraction during healing might give rise to secondary hæmorrhage. The sutures were applied by means of short, straight, well-tempered needles, with very sharp and hard points; sometimes, to pass the sutures through the upper angle, a needle shaped like a fish hook was necessary. Before twisting the wires, all clots should be sponged away, and the edges of the wound accurately approximated; the sutures must be bent on the flat and curved on the cervical tissue, and cut off about two lines from the wound.

The President referred to the value of the paper, and expressed a fear that, on this side of the Atlantic, there were few who were competent to discuss the matter from personal knowledge. He thought it possible that it might not be necessary in every case of lacerated cervix to sew it up.

Dr. Graily Hewitt, London, observed, in reference to the question that had been raised as to the frequency of laceration of the uterine cervix, that he had formerly not observed it particularly; but, since his attention had been drawn to the subject by Dr. Emmet's recent paper, he had met with the condition in several cases.

Dr. Marion Sims, New York, looked upon this operation as one of the most important additions to gynæcology in modern times. He had overlooked the condition until his attention was drawn to it by Dr. Emmet. As regarded the primary operation, he thought the laceration would not be diagnosed or operated on frequently, but the chronic condition every one could recognize, and it must now be treated. The operation was done with great frequency in New York, and did produce good results in cases which had resisted all other means of treatment. He thought it was now done sometimes where it was not necessary. It was only necessary when the mucous membrane was hypertrophied and ectropic.—*British Medical Journal.*

On Congestive Hypertrophy of the Mucous Lining of the Body of the Uterus.—By Graily Hewitt, M.D., F.R.C.P. (London).—The author related a case in which a lady, single, aged 42, was suffering from great

enlargement, congestion, and anteversion and flexion of the uterus, the result of an attack of severe sea-sickness four years ago. The symptoms were constant pain and hæmorrhage on exertion. Operation for removal of a growth from the interior of the uterus had been performed by Dr. Milner Moore, of Coventry, a year before, with temporary relief. There was now found to be a prominent, projecting, soft, tumour-like growth within the uterus. A second operation was contemplated, and a preparatory treatment of rest and daily reposition of uterus was carried out carefully by Dr. Brockwell, of Gipsy Hill, at the author's request. On proceeding to the operation, about ten days afterwards, it was found that the intra-uterine swelling had become enormously reduced; thereby showing that the swelling in question, which it had been feared was sarcomatous, was nothing more than the greatly hypertrophied and congested mucous membrane of the uterus. The uterus had been kept entirely in place, had become much reduced in size, and the hypertrophic mucous membrane to be removed was slight in amount. Nitric acid was applied to the surface. The patient did well. The case related demonstrated the extent to which mere congestion, produced by anteversion, might give rise to a tumour-like hypertrophy of the lining of the uterus. It also showed the effect of comparatively simple measures in reducing such hypertrophy.

New York Hospital.—Dr. Bulkley will give a fourth course of lectures on Diseases of the Skin in the Pathological Amphitheatre of the New York Hospital, 7 West 15th Street, Wednesday afternoons from 2:30 to 3:30 o'clock, commencing Wednesday, October 6th, 1880. The Lectures will be Didactic and Clinical in character, going over the entire subject of diseases of the skin (including syphilis), and will be freely illustrated by coloured plates, photographs, life-sized models, the blackboard, and abundant clinical material. The pathology, differential diagnosis, and treatment of diseases of the skin will be especially considered. The course will consist of twenty-four lectures, and will be free to practitioners of medicine and medical students.

Original Communications.

ON THE BENEFICENT AND TOXICAL EFFECTS OF THE VARIOUS SPECIES OF RHUS.

BY T. J. W. BURGESS, M.B.

Read before the Canada Medical Association, at Ottawa, September, 1880.

Mr. President and Gentlemen,—The paper that I have prepared for your consideration deals with a class of plants, which, whether considered with reference to their beneficent or toxic effects on the human race, should be known to every practitioner—I refer to the various species of rhus.

The most noteworthy example of this genus in our own country, and the one to which the greater part of my remarks will apply, is commonly called poison ivy. So far as my own knowledge extends, but little is known of this plant to the profession at large, except through cases of poisoning by it presented for treatment. Now, when we consider how common it is, and the number of persons liable to exposure to its noxious influence,—the labourer engaged in railway work and in clearing bush-land, the farmer working about his fences, one of its favourite lurking places, and the child so often employed in gathering the wild flowers with which our woods abound,—I cannot impress on you too strongly the necessity for a thorough knowledge of the various species, their appearance, and that of the plants with which they are most likely to be confounded, and their physiological effects, with the prevention and cure of these. Some of the varieties being used for domestic purposes and others in the practice of medicine, I will also draw your attention to their uses in the arts and their pathological effects, with the class of cases in which they have been found most beneficial when employed as medicines.

The only representative of the large order, *Anacardiaceae*, the Cashew family, in northern North America, is this genus Rhus, a name derived from the Greek verb ῥεω (reo) "to flow," so called because it was thought to be useful in stopping hemorrhages. And, truth to tell, the name was not inaptly applied by our forefathers, all the varieties being possessed of more or less astringent properties, some of them in a very marked degree. The genus, to the non-botanical commonly known as sumach or shumach, is composed of trees or shrubs having a resinous or milky acrid juice; alternate leaves; small, regular, greenish-white or yellowish flowers; and a fruit forming a sort of drv drupe.

No less than fourteen varieties of Rhus are, or have been used in the arts and sciences (the term including medicine), and these I shall, for

convenience of description, divide into two classes, native and foreign, dismissing the latter with but a brief mention of their uses.

Of the foreign species there are six :

Rhus Cotinus, sometimes cultivated in our gardens for ornamentation, under the names "smoke plant," "purple fringe-tree," and, from the curious appearance of its seed vessels, which look like a powdered wig, "perriwig-tree," is known in commerce as Venice sumach. It is a small tree with purplish-green flowers, supported on hairy peduncles, and is a native of Siberia, Austria, and Northern Italy. It is not used in medicine or pharmacy, but yields one variety of a wood known in trade as *fustic*, which has been largely employed for producing a yellow dye. A noticeable peculiarity about this species of Rhus is, that its leaves are simple, like those of the elm and maple, and not compounded, like the horse-chestnut and ash, as is the case with the rest of the genus.

Rhus Coriaria.—Of this, both the leaves and berries have been used as astringents and tonics, and the ground twigs as a dye-stuff. It is a native of the Ukräine, in Russia, and has been regarded by the inhabitants of that country, combined with a decoction of Genista Tinctoria leaves, as a preventive of hydrophobia. It is employed both internally and locally, and the peasantry have great faith in its curative virtues, but extended trials in other parts of Europe have shown it to be useless in this much-dreaded affection.

Rhus Succedanea is indigenous in Japan. From its berries is expressed a wax sometimes used in pharmacy, known as Japan wax. It is of medium quality, ranking between beeswax and the ordinary vegetable tallows.

Rhus Vernicifera, varnish or Japan sumach, inhabits India and Japan, where it is highly prized for its yielding, from incisions made in the stem, a gum from which is made one of the best of varnishes.

Rhus Metopium is found in the West Indies, chiefly Jamaica, and is said to be one of the sources of "hog-gum" so extensively used by bookbinders in the process of marbling paper. This peculiar, and certainly not euphonius, name is derived from the fact that hogs, when wounded, are reputed to rub themselves against this tree, so as to cover the wound with its juice, and form a protection against the irritation of insects.

Rhus Semi-alata, a native of China and Japan, yields a gall largely used, especially by the Chinese, in dyeing their celebrated yellow silks. It is also highly esteemed by them as an astringent medicine.

Of the native species of Rhus there are eight, and, not to afflict you with their scientific distinctions, I will classify them as poisonous and non-poisonous, chiefly confining my botanical descriptions to the poisonous class, it being most important, both in a diagnostic and prophylactic point of view, to be able clearly to distinguish these from certain non-poisonous plants resembling them. The eight species are equally divided, four being innocent and four highly noxious. And first, let me draw your attention to the non-poisonous varieties, meaning by this, non-poisonous by contact with the plant, for, if administered internally in large doses, even the innoxious ones act as irritants.

Rhus Aromatica — fragrant sumach — is a straggling bush with three foliate, hairy leaves; the pale yellow flowers, in clustered spikes like catkins, precede the leaves, which are sweet-scented when crushed. It extends from Lake Superior westward and southward, in dry rocky soil, a variety, the Rhus Trilobata of Nuttall, chiefly affecting the Rocky Mountains and Sierra Nevadas. This plant has, during the past two years, whether justly or not I cannot from my own experience say, obtained a high reputation as an astringent, and is at present being lauded in journals devoted to Materia Medica. In hæmaturia and chronic cystitis, where the ordinary remedies—ergot, gallic acid, and muriated tincture of iron—have failed, it is said to have been used with the happiest results. In phthisis, though not advanced as at all curative, it has a favourable effect in checking the hemorrhage, night sweats, and diarrhœa, often so exhausting and distressing. Five to twenty drops of the fluid extract may be given every hour in extreme cases of hemorrhage, and lessened as relief is obtained. For the diarrhœa fifteen drops may be given after each stool, while the night sweats are best treated with a dose of ten to twenty drops each night at bedtime. In the diarrhœa of children, where the stools are frequent, the pulse soft and feeble, the skin pale, the eyes sunken, and there is loss of flesh and general sense of lassitude, it is by some regarded as invaluable. Its use is also advocated in menorrhagia, dysentery, and diabetes insipidus, but it is in enuresis (incontinence of urine) that it has gained its highest reputation. Dr. Cooper, of Bellefontaine, Ohio, regards it almost as a specific in this complaint, and in the November, 1879, number of "*New Preparations*" records a number of cases cured by its use. From the strong testimony to its value, I would urge upon you, who are much more likely to see cases of this not uncommon affection than one engaged in Asylum practice, to give it a fair trial if you have not already done so. It is given in fifteen-drop doses four times a day, the last being administered just before retiring, till improvement takes place, when only the night dose is given, and continued until the habit is cured. At the same time, the patient

should strictly adhere to the rules of drinking but little during the evening, and voiding urine just before going to bed. The best form for use is the fluid extract, and a nice formula for its administration is:

℞ Fl. Ext. Rhus Aromatica.... ℥i.
Glycerine ..... ℥ss.
Aquæ. ad. ..... ℥iv. *M.*
Sig. ℥i four times daily.

Several medical friends, who have been using this drug in various affections, have furnished me with records of cases treated by it, which may be thus tabulated:

Disease.	No. of cases tr'ted	Result.
Chronic Cystitis	1	Much improved.
Phthisis.	5	In all, attacks of diarrhœa and night sweats were relieved.
Diarrhœa of Children	9	Six cured; three died.
Diarrhœa of Adults.	2	One cured; in the other the drug seemed to have no effect whatever.
Menorrhagia.	5	In all there was a wonderful effect in checking the discharge at the time. In three cases, after use at two menstrual periods the discharge was normal, and has since, now five months, continued so. The fourth case is improving, but the fifth shows no radical change.
Enuresis.	3	Two cured; one improved.

This record speaks strongly in favour of an extended trial of the remedy in the class of cases enumerated, though its greatest benefit would seem to be shown in menorrhagia and enuresis.

Rhus Glabra, variously known as sleek, smooth, Pennsylvania and upland sumach, officinal in the United States' Pharmacopœa, is found over the greater part of North America, south of the Arctic circle. It is a shrub two to twelve feet high, with straggling branches, covered with smooth, light gray or somewhat reddish bark. The compound leaves, consisting of eleven to thirty-one leaflets, whitened beneath, in autumn change to a beautiful red. Growing along fences, borders of woods, and in rocky fields, its flowers open about July, and the fruit, often eaten by the country people, ripens in early fall. Excrescences produced on the under surface of the leaves have been used as a substitute for the officinal galls obtained from the oak, *Quercus Infectoria*. Like galls, these excrescences are due to puncture of the young shoots by a hymenopterous insect to deposit its eggs. This irritates the part, and a tumor arises, the result of morbid growth. The eggs enlarge with this growth, and are converted into larvæ, which feed on the vegetable matter. Finally the larvæ become flies, and escape by eating their way out. For use, these excrescences should be collected when of full size, just before the eggs are hatched. All parts of this plant contain a large amount of gallo-tannic acid, and the bark is often used in tanning. The berries have a sour astringent taste, and owe their acidity to malic acid, which, according to Mr. Cossens, is not contained in the berries themselves, however, but in the pubescence which covers them. An infusion of the fruit has been used as a refrigerant drink in febrile complaints, and as a detergent astringent gargle in common and ulcerated sore throat. It has also been employed with great success in mercurial ptyalism, but for this, an infusion, or still better, a fluid extract of the inner bark of the root, is best adapted. The fluid extract also possesses tonic properties, and may be used in doses of ½–1℥.

Rhus Copallīna, dwarf sumach, mountain sumach, or the Gum Copal tree, is a shrub with running roots, one to seven feet high, inhabiting rocky hills. Its branches are downy, and the petioles between the leaflets are wing-margined. Gum copal, so largely employed in making varnishes, is the product of a number of different trees, one of which, according to some authorities, is the Rhus Copallīna. This plant possesses similar, but less strongly marked, medicinal properties to Rhus Glabra, and may be used as a substitute therefor.

Rhus Typhina, staghorn sumach, grows very commonly throughout Canada along railway tracks and on sterile hill-sides. It forms a tree ten to thirty feet high, with orange-coloured wood. The branches and stalks are densely, velvety hairy, with serrate leaflets, pale beneath. This, the fourth and last of the innoxious native species, also possesses properties similar to Rhus Glabra, and may be substituted when that plant cannot be had.

Of the four indigenous species which possess poisonous properties, one is an inhabitant of the southern States, and a second of California, while the third and fourth are common in all parts of North America, between the 35th and 60th parallels. Since their poisonous, and probably their therapeutic, effects are similar, I will first give a short description of each species, and devote the remainder of my remarks to the physiological and therapeutic actions of Rhus Toxicodendron, the common form of poison ivy in Canada.

Rhus Pumilum, growing only in the southern States, and very common in North Carolina, is a pubescent shrub, about a foot high, said to be the most poisonous of the Eastern varieties.

Its pinnate leaves, consisting of about eleven oblong, coarsely-toothed leaflets, are downy beneath. The three upper leaflets are often confluent, the terminal one, when distinct, being attenuate at the base. The flower panicles are nearly sessile, while the drupes are covered with a red, silky pubescence.

Rhus Diversiloba of Torrey and Gray, or Rhus Lobata of Hooker, approaches very nearly to Rhus Toxicodendron. It is generally a shrub, but sometimes a climber, and is said to be the most poisonous of all the Rhuses. It is chiefly a native of California, where it is known by the Spanish name of "Hiedra." Its leaves consist of three, rarely five, obtuse, lobed leaflets; its flower panicles are shorter than the petioles; and its fruit is white and pubescent. With her usual generosity, Nature, according to Dr. Canfield, provides an antidote to poisoning by this species, in the shape of another Californian plant, the Grindelia Hirsutula, of which either the bruised plant itself, or a decoction, is applied to the parts.

Rhus Venenāta, formerly called *Rhus Vernix*, is known by the different names of poison dogwood, poison elder, poison ash, poison sumach, swamp sumach, white sumach, and varnish tree. Affecting rich, swampy ground in shaded situations, it is a shrub or small tree usually growing from six to eighteen feet high, and one of the largest of our native species of Rhus. The trunk seldom exceeds three inches in diameter, and, branching at a height of three to five feet, usually makes a repeatedly two-forked ramification, the final twigs terminating in thick clusters of leaves. The smooth bark is dark gray on the trunk, lighter on the branches, and reddish on the twigs and petioles. The leaves, expanding in May, are at first dark yellow in colour, but become deep green with a paler under surface when mature, and finally, at the first touch of frost, assume a beautiful deep crimson hue, that can fairly vie with the maple for brilliancy of effect. The seven to thirteen leaflets forming the compound leaves are obovate oblong in shape, and entire. The small yellowish flowers are arranged in loose and slender axillary panicles, forming large masses of fragrant bloom, at the ends of the branches, which attract innumerable swarms of bees. Whether the honey derived from this source possesses any poisonous properties I am unable to say, but, as at various times there have been reports of poisoning by honey in particular localities, it would be a point well worthy of investigation whether this form of poison ivy does not also abound there. The berries, ripe in October, are whitish or dun-coloured, with striate stones, and look somewhat like bunches of small grapes—a similarity, however, which is immediately dissipated by the slightest glance at the leaves, in the grape *simple*, in the Rhus *compound*. Taken altogether, this tree makes one of the handsomest shrubs imaginable when in blossom, but is, unfortunately, one of the most deadly. Rhus Venenāta has been thought to be identical with the Rhus Vernicifera of Japan, and when incisions are made into its bark there is a copious flow of viscid fluid, yellowish at first, but soon changing to a deep black, which, when boiled, makes a fine varnish. The poisonous properties of this tree are said to be more powerful than those of Rhus Toxicodendron; persons exposed to its influence being more apt to suffer, and more severely. I have known several cases of poisoning due to this plant being mistaken for the common elder, an error which could never arise were the fact borne in mind that both varieties of elder, found in this country, have the margins of the leaves toothed, whereas in Rhus Venenāta they are entire. In addition, the elders have dense masses of flowers, and a fruit which, when ripe, is either red or black, while this form of poison ivy has slender, scattered bunches of flowers, and a fruit whitish in colour when mature.

Rhus Toxicodendron may be made to include Rhus Radicans, as botanists are now pretty well agreed that it is merely a variety of the former; its differing form and characters, viz., more entire leaflets and high climbing stem, being dependent on the circumstances of its *habitat*. Rhus Toxicodendron was first described in 1635 by Cornutus, in his works on Canadian plants, as a species of ivy. The Indians were well aware of its properties, and its effects were mentioned by Kalm and other travellers in North America. Poison oak, poison ivy, poison vine, poison creeper, and sometimes poison mercury, are names applied to it. It is found within the same range of territory as the Rhus Venenāta, and is by far the commonest form throughout Canada. It generally grows in fertile and low grounds, but will thrive in barren and elevated places, and attaches itself to any bodies in its vicinity by numerous thread-like rootlets given off from the stem. Sometimes it climbs spirally to the tops of our tallest trees, attaining a height of 40 or 50 feet, again, it is met with along the sides of fences which serve as a convenient support, or crawling over brush, or rocks, or along the ground, in which cases it never exceeds from one to three feet in height. This low form sends off many small branches, the pendulous extremities of which often give the plant a bushy appearance. The stems are from one-quarter to two inches in thickness, and covered with a grayish-brown bark. The leaves, which are said to be eaten by cattle with impunity, are trifoliate; the leaflets being

rhombic ovate, pointed, pubescent beneath, and variously notched, of a shining red when they first appear in the spring, but bright green at maturity. The flowers are small, greenish-white in colour, and disposed in simple axillary racemes. The fruit is a round dry berry, as large as a pea, of a pale green colour, ripe in October. Like Rhus Venenāta, from the bark, when wounded, exudes an acrid, milky juice, which, exposed to the air for a few hours, changes to an intense black, which will leave indelible stains on linen or cotton, not effaceable by any known chemical, and which has been used as a marking ink. According to Dr. Jos. Khittel, the principal chemical constituents of poison ivy are gallo-tannic acid and a volatile alkaloid, to which it owes its poisonous and medical properties. The later researches of Prof. Maisch, however, have proved that the acridity of the juice is due to the presence of a hitherto unknown volatile acid, analogous to, but distinct from, formic and acetic,—Toxicodendric acid, which, when isolated, is found to affect the skin, either by direct contact or by its vapour, exactly as the fresh plant itself does, proving beyond doubt that the poisonous properties of the plant are due to it. This principle is in great measure dissipated in the process of drying, and hence dried preparations of the plant are much less apt to act noxiously, though even these should be handled with great care by such as are susceptible to poisoning by it. The plants for which Rhus Toxicodendron is most often mistaken are, the Virginian Creeper or American Ivy (*Ampelopsis Quinquefolia*), with which the climbing variety often entwines itself, and the *Aralias*, *Nudicaulis* and *Quinquefolia*, commonly known as Wild Sarsaparilla and Guiseng, often found growing with the low form. These plants are very easily distinguished if one will take the trouble to remember a single simple distinctive mark, viz., five leaflets on a single leafstalk, whereas Rhus Toxicodendron has only three. Other distinguishing marks are, that the Aralias have regular serrate leaves, and in Nudicaulis the flower stem is separate from the leaf-bearing one.

Physiological Action.—The toxical effects of the poisonous species of Rhus are produced in various ways and degrees of severity, but in all cases they are due to absorption by the system of toxicodendric acid. They may be the result of direct contact with any part of the plant or any pharmaceutical preparation of it; of inoculation with the juice; of exposure to smoke from the burning wood; of inhaling the steam arising in making preparations of it; of internal use; and lastly, of emanations from the growing plant. The only one of these methods of poisoning specially noteworthy is that by exhalations from the living plant itself. According to Cazin, such exhalations are only given off when the plant is not exposed to the sun's rays (as when it grows in the shade and during the night), and consist of hydrocarburetted gas mixed with toxicodendric acid in a volatile state. That they will cause poisoning in those exposed to their influence, without actual contact with the plant, and even at considerable distances, is now well authenticated, though some, even noted scientists, would seem still to doubt this fact. Thus, Wyville Thompson, of the late *Challenger* exploring expedition, states, that among the blacks of the West Indies there is a *superstition* that some species of Rhus will poison without actual contact. Aboriginal traditions will rarely be found to exist without some foundation, and in this case, so strong a one that it should have prevented the report being called a superstition. I could cite a number of instances of poisoning without contact, both recorded and coming under my own notice, but one or two will suffice. "A lady of known susceptibility was attacked after being out driving, though she had never left the vehicle, which kept the centre of the road. Here the nearest distance of possible exposure would be that of plants growing, where they were afterwards discovered, along the fence, a distance of over twenty feet." A medical friend of mine experienced a severe attack after passing, at a distance of at least three feet, a thicket in which grew a mass of the plant; while a gentleman so noted in the scientific world as to vouch for the accuracy of his powers of observation, while engaged in geological researches, found to his cost the effect of passing some, though he had previously noted it, and was hence most scrupulous not to let it touch him. It seems to me too, that the discovery of this method of poisoning by Rhus is peculiarly interesting, as offering a plausible solution of what are generally regarded as fabulous stories of the deadly effects of the upas tree of Java, under which the wearied traveller laying himself down sinks into a sleep from which he never wakens. Is it not quite possible that there is a native Javanese tree possessing similar, perhaps stronger, noxious properties to the Rhus Toxicodendron, and thus capable of poisoning its surrounding atmosphere?

The poisonous effects are both local and constitutional, according to the idiosyncrasy of persons; acting upon some only locally, upon others only constitutionally, and upon yet another, and the most frequently met class, in both these ways. A certain constitutional predisposition is requisite for the occurrence of poisonous symptoms, many individuals being quite insusceptible. I myself am a case in point, having often rubbed the Rhuses Venenāta

and Toxicodendron and their juices over my hands and face, without suffering the slightest inconvenience thereafter. This is perhaps the more remarkable, as in summer I am subject to urticaria, and one would imagine that a constitutional predisposition to the one would be likely to predispose to the other. To illustrate the peculiar virulence of this plant toward some constitutions, I might state that the celebrated chemist Fontana, knowing himself to be easily poisoned by it, and wishing to examine into its properties, caused specimens to be got ready by another person, but accidentally touching one of the leaves, under some water into which it had dropped, in a short time began to suffer from its poisonous effects. This susceptibility varies greatly under certain conditions of animal and atmospheric temperature. In some persons a difference is observable when in a warm or cold climate, and some suffer only on very hot days; while with others, climate and season of the year seem to have very little influence. Children are much more liable to be poisoned than adults, and females than males. When the skin is moist the poison is more readily absorbed. A gentleman who had often handled the plant with the greatest impunity, experienced his first attack through rubbing against some of it while his skin was still undried after bathing, and though he has several times since rubbed the plant over the dry skin, has suffered no ill effect. For this reason also, persons perspiring, especially if fatigued, are more liable to be affected.

Instances are related in which a periodical return of the symptoms of poisoning, without fresh exposure, has occurred for a number of years. This is doubted by some, who ascribe the succeeding attacks to fresh exposures of the victims to the plant's emanations, without their own knowledge—a view strongly leaned to in an article published in the August, 1876, number of the *Canada Lancet*. In it the poisonous emanation is thus spoken of:—"Being volatile, it may be readily diffused, and, like malaria or the cause of hay-asthma, may act under favourable circumstances, as of aerial currents and susceptibility in the recipient, at a considerable distance from its source. Now it is well known that no protection is conferred by a prior attack, and hence it might reasonably happen, that a person having suffered from ivy poison one season, would also suffer the next by reason of susceptibility, even though scrupulous precautions should be taken to avoid direct exposure. In such a case the diffused emanations might be sufficient as an exciting cause to account for the recurring attack. It is to be noted that the so-called recurring cases always take place during the summer season, and at the period of the plant's poisonous activity, but never in the winter, which lends support to the supposition of the exciting cause being diffused in the atmosphere." The case I have before quoted, of the lady poisoned while out driving, is cited as a case of what would have been called a recurrent attack, had the source of the fresh exposure not been found along the fence side. These plausible arguments do not however, to my mind, clear up all the reported cases of recurrence. A gentleman was poisoned one year in this country and the next he went to Europe, where, at the same season of the year as that when he was first poisoned, most of the symptoms returned. Now, being in Europe, he could not be exposed to the noxious emanations of poison ivy, and the opponents of the recurrent theory would have to fall back on the far-fetched argument that he might have been exposed to noxious effects, resembling those of poison ivy, from some poisonous shrub of Europe. Further, in some cases the eruption is said to have returned annually for several years, and one can hardly imagine a person suffering a number of consecutive attacks without noting his fresh exposure in at least some of them. Whether recurrent or not however, one fact seems to be clearly established with regard to these attacks, viz., they are modified from those depending on direct exposure, the eruption, which partakes more of a papular than an erysipelatous character, spreads less and is accompanied by only very slight swelling, while the attack is difficult of cure and prone to run a chronic course.

The effects of Rhus are chiefly marked on the cutaneous, nervous, digestive, urinary, and muscular systems, and no matter how produced, are experienced soon after exposure, and, as a rule, begin to decline within a week. They are, violent itching, redness, burning, and erysipelatous swelling of the parts subjected to its influence. The face and hands are most apt to be affected, in some cases the swelling being so great as to obliterate the features, but any part of the body may present similar appearances. The itching, which is certainly the most distressing of the symptoms, is not confined to the patches of inflammation, but diffuses itself over the entire surface of the body, the hairy portions being specially affected. Subsequently there is vesication, followed by desquamation of cuticle. The induced condition is superficial, but prone to spread rapidly, and may involve large areas of the body. In very severe cases it may even extend to the mucous membranes, as indicated by redness and swelling of the throat and mouth, thirst, irritable cough, nausea, vomiting, and colicky pains in the abdomen. Diarrhœa frequently ensues, accompanied by tenesmus and bloody stools, and there

is sometimes retention of urine, or diuresis and hæmaturia. Rhus also induces rheumatic pains in the limbs, joints, and lumbar region, with sometimes numbness in the lower extremities. These pains are accompanied by a very slight swelling, and are intensified by rest and warmth, so that sleep is greatly disturbed. In ordinary cases the temperature is but very slightly raised, while in the most severe that I have noted I have never seen an increase of more than 2° Fahr. The fever which sometimes accompanies the effects of Rhus generally partakes of a typhoid character, but is sometimes intermittent, and then usually marked by profuse perspiration. The above effects are rarely all present, or present in a severe degree, and would appear to be very seldom, if ever, fatal. The treatment should be lowering, and should consist of rest, low diet, and laxatives. To allay the local itching, the great source of discomfort, weak alkaline solutions and saturated tincture of lobelia have been recommended, while Wood has used vinegar with happy results. Yellow wash, a decoction of white oak bark, and extracts of Grindelia robusta and squarrosa have been considered specifics, but the most recent authorities recommend a solution of carbolic acid of the strength ʒss to ʒij of glycerine. In my own practice I have had the treatment of a very large number of cases, and my usual course has been to put the patient to bed on low diet, keeping the bowels loose with Epsom salts, and apply locally, on lint covered with oiled silk, a solution of acetate of lead, ʒij to a pint of water. Under this treatment, the extreme duration of confinement in bed has never exceeded five days, though uncomfortable sensations in the skin have remained for some time after. In a few cases I have used the carbolic acid lotion, but the result has never been as satisfactory as when acetate of lead was employed.

For the modified recurrent form of poisoning, where papules replace the vesicles, I know no better treatment than to put the patient on iodide of potassium and paint the parts affected with tincture of iodine, care being taken when it seems indicated, to improve the general health by good food and the free use of tonics of quinine and iron.

Of poisoning by the internal use of Rhus there are two cases on record: in one, two children, aged respectively six and eight years, ate the berries; and in the other, three persons, a boy aged twelve, and two girls aged fifteen and seventeen, took an infusion of the root in mistake for one of sassafras. In a few hours there was drowsiness and stupor, followed by vomiting, convulsions, and delirium. The pupils were dilated, the pulse was frequent and feeble, respiration was hurried, and in some of the cases there was a vesicular eruption over the body. All these persons recovered after varying intervals. The antidotes recommended for poisoning by internal use are, strong coffee, camphor, and buttermilk, to which might be added as well worth a trial the fluid extract of Grindelia robusta or squarrosa. The stomach should be emptied before the use of antidotes by ipecac., and the bowels should be freely moved by enemas of soap and water. If there is a tendency to stupor, the patient should be kept moving about.

The prevention of poisoning by the Rhuses should be strongly impressed on the community at large. Every one should know the distinctions, which I have already given, between the various species and the plants with which they are most liable to be confounded. Being worthless, and of little value except medicinally, and even there probably much overrated, they should be extirpated by every thrifty farmer. A strong alkaline solution, used immediately after exposure, will often prevent the poisonous effects of the Rhus on those known to be susceptible, while anyone obliged to work near poison ivy should smear the face and hands freely with sweet oil, or some other form of grease, when no ill effects are likely to follow.

The *therapeutic action* of Rhus Toxicodendron is tetanic, stimulant, narcotic, diuretic, diaphoretic, laxative, and alterative. It was first introduced as a medicine by Du Fresney, a French physician, and lecturer on Botany, in 1788. The following anecdote, which may be new to some of you, is related by him as the means which first drew his attention to its medical virtues: "One day when lecturing on Rhus at the botanical garden of Valenciennes, a mischievous student said to a young florist who was present, that the professor's account of the noxious properties of Rhus was incorrect, as the plant, grown in France, was perfectly innocent. To convince him of this he plucked some leaves and rubbed them freely on his hands, as he knew by previous experience he could do with impunity. The florist, thus persuaded, followed his example, but in a short time had occasion to repent his imprudence. The next day, finding himself in trouble, he consulted the student, who gravely assured him he had caught the itch somewhere, and advised him to rub into his hands half an ounce of citrine ointment, and to purge himself freely with mercurial pills. This, as you may imagine, did not mend matters, and finally Du Fresney was made acquainted with the state of affairs. In about ten days the young man recovered from the effects of the Rhus, and to his great surprise found, that a chronic eczema of six years' standing, for which he had vainly sought relief, had disappeared at the same time." This led Du Fresney to experiment further, and

pemphigus, eczema, and other obstinate skin diseases were found to be benefited by its use. In erythema and erysipelas, especially when accompanied by vesicles and bullae, Rhus Toxicodendron is, according to Dr. Phillips, of Westminster Hospital, London, England, without question a very useful remedy. In some subacute and chronic rheumatic affections of the fibrous tissues it is a powerful therapeutic agent. The synovial membranes seem to be less amenable than the tendons, ligaments, and fascia outside of them. It should be applied externally, in the form of lotion, with compresses, and be given internally, in small doses, every two to four hours. In old cases of paralysis, dependent on a torpid condition of the nerves, it is said to have produced beneficial results, the first symptoms of improvement being a pricking and twitching in the paralyzed parts, followed by return of sensibility and motion. It has done good in some cases of amaurosis and other nervous affections of the eyes. A curious statement by Du Fresney and others, that persons not constitutionally susceptible to Rhus poisoning by external application, are not so likely to derive benefit from its internal use, must be accepted with caution. Dr. Piffard, Professor of Dermatology to Charity Hospital, New York, states that he has handled the poisonous varieties and daubed their juices on his skin with impunity, but has experienced decided physiological effects from their internal use in very small quantities.

Probably all parts of Rhus Toxicodendron are active, but only the dried leaves, Toxicodendri Folia, are used in pharmacy, and were included in the second edition of the United States' Pharmacopœa. They have a mawkish, acrid taste, yield their virtues to water, and are, when fresh, reasonably active. If long kept however, they become comparatively inert, owing to the volatility of the active principle, and cannot be depended on, and it may be owing to this fact that the drug has fallen into disuse. The dose of the powdered leaves is from ½ to 2 grains, cautiously increased until some obvious effect is produced. A tincture, made by macerating one part of fresh leaves in two parts of alcohol, furnishes a very active and efficient preparation in doses of a small fraction of a minim, but in the language of Professor Wood, "the risk of experiencing the poisonous effects of the plant on the system, will probably prevent its extensive employment as a remedy, unless it should prove much more useful than the weight of evidence hitherto adduced, gives us reason to expect."

There are now upwards of 3,000 coffee taverns in England. Temperance people would do well to encourage the establishing of these in Canada.

A CASE OF DISEASE OF THE ELBOW JOINT, WITH RESECTION.

BY W. CANNIFF, M.D., M.R.C.S., ENG.

M. L., a native of Ireland, aged 32, was admitted to the General Hospital, Toronto, on the 15th August, 1879, to be treated for a chronic disease of the right arm, involving the elbow joint. The history of the case as given by the patient was briefly as follows: He had always enjoyed excellent health, and never suffered from any disease whatever. In the early part of the summer of 1878, he accidently knocked the elbow of the right arm against the edge of a door, which caused some pain and swelling. The arm did not recover, the pain continued, the motion of the arm was impaired, and in pursuing his daily work he had to be careful how he moved the limb. On the 12th of April, 1879, he met with a more severe accident. While engaged in removing cord wood from a railway car he fell from the top to the deck of a steamboat, the weight of the body coming upon the affected elbow. This was followed by a good deal of pain and swelling which did not subside. A month later the swelling remained, and power to move the arm was mostly absent. He was at this time treated for rheumatism; but, seemingly, little or no attention was given to the arm itself Three months later an abscess had formed over the olecranon process, and had been allowed to break. He now came under the care of another doctor, who ordered poultices to the arm, which were continued for a month. No improvement in the condition of the arm followed this treatment, and the doctor then satisfied himself with advising the patient to keep the limb softened with fresh lard. It is to be noticed that no attention was given to *rest* or *position* of the limb. He received no further treatment until he entered the hospital.

When he came under my care the arm presented a very unpromising appearance. It was much swollen from the middle of the humerus to the finger ends. Several openings existed around the elbow, the tissues were indurated, and the skin presented a livid appearance, especially on the posterior part of

the joint. The motion was so limited that it could scarcely be discovered. The whole limb presented an unhealthy appearance such as arises from long-continued passive congestion. The forearm was pronated, and the power to rotate was lost. The wrist joint could be moved with some difficulty; but the fingers were more flexible. A probe passed along any one of the several sinuses, came in contact with denuded bone, which was sufficiently firm to beget the belief that necrosis had taken place. The joint was so out of its natural form, and the tissues so infiltrated with fibrinous matter that it was impossible to determine the condition of the joint; but there seemed good reason to believe that the head of the radius had perished, while the adjacent osseous structures were in a state of caries or softened, and presumably the tissues of the joint had become more or less disorganized.

The first step in the treatment was to restore the tissues of the forearm to a more healthy condition. The patient seemed to be perfectly healthy, and I at no time deemed it necessary to administer any medicine. The limb was placed in an elevated position, and pressure by bandages was gradually applied. This was continued for nearly two months, and as a result the arm gradually assumed a more healthy appearance. Meanwhile abscesses repeatedly formed around the elbow and upon the anterior and inner portion of the arm. At the elbow the enlargement and induration continued. The time had now arrived when it seemed proper to undertake some operation; but the uncertain state of the joint, and the condition of the soft parts did not offer much, if any encouragement for performing excision. Moreover, the contraction of the biceps did not have any effect upon the forearm; the tendon below the elbow was either destroyed or had become so attached to, and incorporated with the morbid structures, that the muscle was practically useless. In fact all the muscles of the forearm were seemingly useless, having become agglutinated together. Therefore should, in operating, the whole joint be removed there seemed little hope of having the function restored so as to give a useful limb. Under the circumstances it was decided to cut down upon the head of the radius, remove dead and disorganized bone, and then place the limb in the most useful position, and endeavour to secure anchylosis.

An incision through the soft parts revealed the fact that no dead bone existed, but there was an abundance of new osseous tissue in connection with the obecranon process. The head of the radius however was not found. A good deal of this bony material was gouged away, and the whole thickness of the bone was finally divided by the bone pliers. The limb was then fully flexed by using considerable force. The intention of retaining the limb in the flexed position had to be abandoned. Although there was little suppuration in the wound itself, after a few days severe inflammation took place in the forearm, and above the elbow on the front and inner parts of the limb. This was, doubtless, due to the breaking up of adhesions when the limb had been forcibly flexed. The abscesses were duly opened; but the limb could no longer be flexed on account of the great pain produced when it was attempted, and the limb gradually straightened out almost as much as before the operation. Attempts were made again and again to bring the forearm up, but the patient could not endure it. The cause of this will be explained hereafter. At the end of three months from the time of operating, the limb was pretty much in the same condition as before. At a consultation of the Hospital staff on the 21st of January, the propriety of resecting or amputating was considered. It was, however, decided that an attempt should again be made to bring the arm into a more useful position, without the use of the knife. The patient being under the influence of ether, the forearm was, with some effort, placed at right angles with the arm; but at the same moment it was found that the soft parts over the obecranon had given way, making a gap of about three inches by two, and exposing the interior of the diseased joint. Notwithstanding the unfavourable appearance of matters, I decided at once to make an effort still to save the arm, and proceeded to excise the ends of the bones. A vertical incision was made above and below the already divided tissue,

and the soft parts dissected from the underlying bone, which was somewhat hard, shapeless, and abundant. When I say that I removed the obecranon, the upper end of the shaft of the alvulna, and the lower end of the humerus with the condyles, I by no means express the quantity of bone taken away. Strangely, the head of the radius had not participated in the morbid action, but was natural in size, and softened to the consistence of cartilage. In the removal of these irregular masses of bone I found a condition very similar to what is presented in these morbid specimens which I now show to you. I may say that these specimens were taken from the amputated arm of a sailor who, having met with an accident while on a long voyage, was for many months without surgical treatment. It will be observed that the bony sprouts are numerous, and short as well as firm. It can readily be understood how great an amount of irritation and pain would be produced by any motion of the joint, and we can understand why the patient could not tolerate the efforts made to keep the arm flexed after the first operation. It was with some difficulty I succeeded in removing the bone with the numerous offshoots. When the operation was completed there was presented a very extensive opening—when the arm was flexed, probably five inches in diameter, while the soft parts around the wound were far from healthy. Notwithstanding, I did not despair of seeing the space fill up, and the forearm preserved as a useful member—more useful than any artificial limb. I need not fully detail the subsequent treatment. The patient suffered no constitutional disturbance. The limb, being placed at first in the straight position upon a well padded splint, was lightly covered with tow. After the wound had been well washed out on the completion of the operation with very warm water, nothing whatever entered it but air. This dry dressing continued to be the treatment for about a fortnight. Considering the extent of the wound, and the lacerations caused by the removal of the bony points, the discharge was very slight. For a few days bloody serum and detritus came away; but the suppuration was not at any time more than could be counted by drops. The wound was frequently uncovered to wash the surrounding skin, and to give ventilation to the wound. After a fortnight the arm was placed at right angles, which could now be done without pain; but further flexion caused pain, evidently due to bony points remaining upon the lower end of the humerus. The rapidity with which the healing proceeded was most gratifying. Looking into the wound the granulations could be seen in the process of developing into natural tissue, while the soft parts around were steadily growing over the wound. In time the arm was left free, and the patient instructed to use it, often resting it between times in a sling. He would with his other hand flex the limb, move it back and forth, and then allow it to straighten out itself. It had been decided to try to preserve the motion at the joint; and by persistent effort the patient brought into power the flexors of the arm, and this power steadily, but slowly, increased while he remained in the hospital. The forearm assumed a natural appearance, and the hand and fingers became quite supple so that he could write as well as ever with a pen. The patient left the hospital on the 16th July, with a comparatively useful arm. The wound in the integument had not entirely closed, there remaining an opening about three quarters of an inch in diameter. The patient was instructed that as the wound finally closed there would be an increased tendency to stiffness and diminished motion which he would have to counteract by increased diligence in using the joint. Since the foregoing was written I have received a letter from him, in which he says, "My arm is getting along nicely; it is healed up with the exception of a small space, which is healing from the inside."

The points of interest in this case which led me to think it might prove interesting and worthy of the consideration of this learned Association are:—

1st. The sad condition into which an injured limb may be brought by a disregard of those fundamental principles of surgical treatment—rest and position—and by a too long continued use of poultices.

2nd. That a chronic disease of bone, with destruction of the tissues of the joint and

agglutination of the muscles, may be materially benefitted by attention to position and pressure.

3. Although the muscles may have become useless from adhesions, or destruction of the tendinous attachments, by persevering attempts the function of the joint may be in a great measure restored.

4th. Extensive destruction of the soft parts does not necessarily prevent the restoration after resection.

5th. Notwithstanding the existence of a large gap in the soft parts and the bony structure, with a good deal of laceration of the parts around, dry dressing with cleanliness and ventilation of the wound is eminently favourable to healing and preventing suppuration; and that hot water, while it speedily arrests capillary bleeding, favours the work of commencing repair.

6th, and Lastly. That under the most unfavourable circumstances a comparatively useful joint may be obtained.

A Third Ovary.—A recent issue of the *Allgemeine Wiener Med. Zeitung* contains the account of an interesting case lately operated upon in a neighbouring village. The operation consisted in the extirparion of three ovaries and three tubes. The diagnosis previous to the operation was degeneration of the ovary on both sides. The operation confirmed this, but revealed also a third perfectly developed ovary with a corresponding tube. This case is of unusual anatomico-physiological, as well as surgical interest, because Rokitansky and Klob both state that a third ovary has never yet been found. A detailed description of the case will appear in an early number of this journal.—*Lancet and Clinic.*

Change in School Terms.—The College of Physicians and Surgeons and Bellevue Hospital Medical College, in response to the unmistakable demand for improvement in the curriculum, have lengthened their winter course; so that, at the former school, it begins on the 1st of October and ends about the last of April, and at Bellevue it began on September 15th, and will end about the middle of March. The preliminary fall course in both schools is now abolished.

Translations.

Virile Impotence Produced by Salicylate of Soda.

A little-known phenomenon of the action of salicylate of soda is temporary virile impotence. Dr. Dubrisay observed, in three gouty patients young enough to be good tests of the question, an absolute but temporary virile impotence, which seemed to depend upon three or four grammes (grs. xlv—ʒi) of salicylate of soda administered for 20 days.—*Gazzetta Medica Italiana, fr. Presse Méd. Belge.*

Premonitory Symptom of Uræmia in Cancerous Affections.

Dr. Ortille, of Lille, read (Académie de Médecine) a note upon a Premonitory Symptom of Uræmia. This symptom consists in a sudden and complete suspension of the cancer pains. This analgesia is so pronounced that in such patients M. Ortille has been able to discontinue the use of hypodermic injections of morphia, after being obliged to have recourse to them several times a day for months.—*L'Union Méd.*

Note on the Treatment of Infantile Diarrhœa by Powdered Charcoal Mixed with the Milk.

By M. Jules Guerin, Academie de Medicine.

For children belonging to families in easy circumstances, M. J. Guérin mixes a certain quantity of Belloc's powder of charcoal with each milk meal—half a teaspoonful only at each meal. For the children of the working classes, Belloc's powder, which is a little dear, is replaced by very finely-powdered, farina-like, ground bakers' charcoal. This powder mixes readily with milk, and children drink the mixture as though the milk were pure. In a very short time, sometimes on the first day, the stools change in consistence and odour, and instead of the green that they were, become blackish-yellow. At the same time that this addition is made, M. J. Guérin dilutes the milk with ⅓ or ½ of sweetened water, and the children take it without repugnance or vomiting. M. Guérin has frequently seen children run down by seven or eight days' uncontrollable diarrhœa, regain in two or three days the expression of health.—*L'Union Méd.*

A Few Words upon the Treatment of Diphtheria by the Benzoate of Soda.

BY A. KIEN.

Epitomized from the Gaz. Med. de Strasbourg.

In one series of twelve cases submitted to this treatment all recovered. In a second series of thirty-three cases there was only one death. He has never met with a case in a child under four months, and his oldest case was fifty-five years. M. Kien trusts largely to the temperature as taken in the rectum or vagina. Contrary to the opinion of some observers, he always finds the temperature above the normal, and this elevation and its duration he finds to be in direct ratio to the gravity of the case. In mild cases the temperature seldom mounts higher than 39° (102.2° F.), and after the third or fifth day falls again to normal. In severe cases it reaches 40° (104° F.) or more, and remains there unless some happy modification sets in. This happy change so rarely occurs spontaneously that it is not safe to trust to it. By the vigorous and continuous application of the benzoate the temperature remains stationary, then falls a little, and at the seventh or eighth day reaches the normal.

The benzoate being very soluble, easy of digestion, harmless to the stomach and nervous system, and quickly eliminated by the kidneys, may be administered in large and continuous doses. He has given 15 to 20 grammes (ʒiv to ʒv) for 8 or 15 days without any inconvenience, except, perhaps, profuse perspiration, copious urination, and at times some vesical irritation. The tissues should, as it were, be saturated. To do this 5 grammes (ʒi) in solution should be given in 24 hours to an infant 1 to 3 years of age; 10 grammes (ʒiiss) to one of 10 years; and 20 grammes (ʒv), on an average, to an adult. In addition, the throat should be continually and thoroughly washed with some antiseptic solution, such as carbolic acid, chlorate of potash, or, as he prefers, the benzoate in a 5% solution.

To sum up, in the past 15 months he has treated 45 cases of diphtheria, 28 of which were severe. Being guided by the rise and fall of the temperature, he is firmly convinced that the happy result is due in a large measure to the treatment adopted. He considers that although he may not always obtain such complete results in another series of cases, yet it appears demonstrated that in the benzoate of soda we have an appropriate and often a triumphant remedy.

Multiple Officinal Counterpoison.

M. J. Jeannel read a memoir before the Society of Legal Medicine, in which he proposes as an Officinal Multiple Counterpoison the following formula:

	Grms.
Solution of Ferric Sulphate, D 1.45	100
Common Water	800
Calcined Magnesia	80
Washed Animal Charcoal	40

Preserve separately, on the one hand the Solution of Ferric Sulphate, and on the other hand the Magnesia and the Animal Charcoal, in a flask with water. When required for use, pour into this flask the ferric solution; shake well.

This mixture should be administered *coup sur coup*, in doses of 50 to 100 grammes.

Employed in suitable proportions, it renders insoluble the preparations of arsenic, zinc, and digitaline; it does not render completely insoluble the oxide of copper; it leaves in solution appreciable quantities of morphine and strychnine. It does not decompose and does not precipitate the cyanide of mercury nor tartar emetic; it entirely saturates free iodine; it acts only partially upon solutions of the alcaline hypochlorites.

This counterpoison is of a perfect efficacity against the arsenical preparations, in the proportions of 120 grammes of counterpoison for 5 decigrammes of arseniate of soda.

It retards the toxic effects of sulphate of strychnine, and would perhaps gain time to administer salutary evacuants. It is shown efficacious against digitaline injected into the intestine of a dog in the dose of 1 decigramme.

This formula is preferable to the officinal hydrated peroxide of iron, since the latter undergoes, by the action of time, at a temperature higher than 15° cent., a molecular modification which renders it untrustworthy against the arsenical preparations.

This formula, like the peroxide of iron extemporaneously prepared, the hydrate of magnesia and animal charcoal, satisfies as a counterpoison a great many indications. It is, however, inefficacious against the mineral alkalies, phosphorus, the hypochlorites, the cyanides and tartar emetic.

The protosulphide of iron, prepared extemporaneously and associated with magnesia and sulphate of soda, is of an absolute chemical efficacity against the salts of copper, the bichloride and cyanide of mercury, and appears preferable to the extemporaneous hydrate of iron in presence of these toxic agents; but it is inefficacious against the arsenical preparations —tartar emetic, the sulphate of strychnine, and probably the other alkaloids.—*La France Méd.*

Laryngismus Stridulus.

Dr. A. Barèty (of Nice) read (before the first International Congress of Laryngology held at Milan, Sept., 1880) a paper upon the nature of Laryngismus Stridulus, the conclusions of which are appended:—

1. Laryngismus Stridulus, or false Croup, is an acute affection characterized by a motor disturbance of the glottis, and owning as a cause engorgement or rapid congestion of the tracheo-bronchial ganglions.

2. This affection is manifested by one or more attacks of sudden, sometimes frightful, dyspnœa, occurring most frequently at night, between midnight and 4 a.m., sometimes during the day, with acute, noisy, inspiratory whistling, and hoarseness of cough, whilst the voice is generally clear; congestion of the face, with or without febrile movement, and absence or rarety of expectoration.

3. It is usually preceded by a slight nasal, pharyngeal or laryngo-tracheal catarrh, consecutive to a rapid chilling. It is often followed by a little cough.

4. It affects children from one to seven years of age, and particularly lymphatic ones, born of lymphatic, scrofulous or tubercular parents. It is compatible with an apparently flourishing state of health.

5. Relapses are not rare. Sometimes the affection is limited to a single, more or less violent, attack; often the attack is repeated on the one or two following nights, sometimes in the same night. But the spasms which succeed the first during the same attack are progressively less and less violent. Other attacks may manifest themselves in the course of the same and succeeding years under the same etiological conditions. But with the increase of age the attacks diminish in violence, without, however, the essential cause (that is to say, the ganglionic engorgement of the mediastinum) being, on that account, the less pronounced. This appears to depend especially upon the size of the glottis, which, very small in early life, enlarges later on.

6. The prognosis may be very benign; but it may also be very grave, even up to the point of causing death by asphyxia in a relatively short space of time.

7. The commonest complications, when they occur at all, are: a more or less acute congestion of one of the apices, the apex precisely which corresponds to the side on which the adenopathy is most pronounced; a more or less intense bronchitis, with or without congestion of the bases, and these two complications are especially aggravated by the ganglionic engorgement in consequence of the obstruction which these hypertrophied glands import into the free circulation of the blood, and the nervous influx to the lungs, by compressing and morbidly exciting the nerves and vessels which environ them.

8. The laryngeal symptoms are produced through the medium of the inferior or recurrent laryngeal nerves, which are in direct relation in the thorax and along the trachea with the tracheo-bronchial glands.

9. The treatment is curative and prophylactic. It is necessary to treat the attack, and it is likewise necessary to treat the causes, known, at least nowadays, I trust, of the attacks —that is to say, the lymphatic temperament and greater or less constitutional weakness. Apart from the attacks, the treatment of which consists in emetics and cutaneous revulsives and in the administration of calmatives, the fundamental and prophylactic therapeusis is the anti-scrofulous treatment: Iodic preparations, cod liver oil, phosphatized milk seaside residence, &c.—*L'Union Médicale.*

Ergot in the Dysentery of Children.—Twenty-one cases of dysentery of children, reported by Dr. G. L. Magruder, of Washington,, were treated with fluid extract of ergot: five to twenty drops four or five times a day. Almost every case immediately responded to treatment, and was either entirely relieved or much improved.

Formularies.

Treatment of Chronic Eczema of the Palm of the Hand, by Lush.

Especially if there is a rheumatic condition, the following lotion is almost specific and very soothing:—

Bicarbonate of Soda	ʒii.
Bicarbonate of Potash	ʒi.
Glycerine	ʒi. to ʒv.
Tincture of Opium	ʒii.
Water	oi.

Lyon Médical.

Formulæ to Reduce Cutaneous Congestion in Erythema, Eczema, Urticaria, Acne, &c.

℞	Magnes Sulphat	ʒi.
	Ferri Sulphat	ʒi.
	Acid Sulphurici dil	ʒii.
	Tinct. Gent.	ʒi.
	Aquæ	ʒiii.

M. A teaspoonful after eating.

Treatment of Acne.

℞	Sulphur præcipitat	ʒi.
	Etheris Sulphurici	ʒiv.
	Spts. Vini Rect.	ʒiiiss.

M.

Also—

℞	Sulphur præcipit	ʒi.
	Tinct. Camphoræ	ʒii.
	Glycerine	ʒii.
	Aq. rosæ	ʒiiiss.

M.

Or—

℞	Potass Sulphuret	
	Zinci Sulphat āā	ʒi.
	Aq. rosæ	ʒiv.

M.

The ingredients are each dissolved in one-half the water, forming clear solutions; they are then mixed, and a white precipitate takes place. These lotions are to be well shaken and applied to the face at night, being allowed to dry on. We have used the following, taken from Niemeyer, with excellent results:—Mix sulphur with equal parts of glycerine, aquæ laurocerari and alcohol and sodæ carb. to make a thick paste, and apply as above. Dietetic and hygienic remedies and internal medication must always be used with the above local applications. The magnes. sulphat and iron mixture with sulphide of calcium pills in doses of $\frac{1}{4}$ grain four times a day is frequently indicated.

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, NOVEMBER, 1880.

"NEWSPAPER ADVERTISING AGAIN."

Under the above caption our city contemporary, in his last issue, in taking occasion to exercise his prerogative of censorship of professional morals, animadverts very unfairly upon the misfortunes of our chief surgeon, Dr. Aikins, whose deservedly high reputation attracts reporters of our secular press to his public operations in the theatre of the hospital, and occasionally leads to a notice in their respective papers of some, to them, very wonderful operations performed by him. We, of course, would desire to deprecate in the strongest terms such pandering to a prurient public curiosity in professional matters, and we are sure that in so doing we can safely number Dr. Aikins amongst our most strenuous supporters; and our objection to our contemporary's article, therefore, lies simply in the illiberal and unjust accusation levelled against Dr. Aikins—an accusation which he seeks to point by the statement that "Drs. Bethune, Ogden, Temple, Grasett, Canniff, Cassidy, and Fulton" are continually performing capital operations, "and yet no reporter has dared to make an improper use of their names." What are we to think, then, of the following announcement which appeared in the issue of the *Telegram* for the 20th ult., with reference to a private operation? "This afternoon Drs. Grasett, Temple, Bethune, and McDonald performed successfully the operation of removing stone from the bladder of Mr. J. W. Bridgland, of the Crown Lands Department. There were nine stones in all, varying in size from a large pea to a plum." Mr. Bridgland died in about

forty-eight hours after the operation. Surely our contemporary will not fail in this month's issue to fulminate his direst anathemas against the innocent or guilty occasion of this invasion of the sanctity of private life and professional decorum. Far be it from us to impute to the surgeons whose names the paragraph contains the most remote collusion with the ubiquitous reporter. We simply cite the passage to direct our contemporary's attention to the fact that, judged by his own criterion, his own colleagues could not be held immaculate, as he claims; and to suggest a little more charitable consideration in the future, since the decrees of fate are equal, and the misfortune which befalls one man to-day may be another's lot to-morrow.

PROPOSED PROVINCIAL MEDICAL ASSOCIATION.

As will be seen by the circular letter published below, there is a movement on foot to establish a Provincial Medical Association—a movement that seems likely to be successful. It has long been felt that the Canada Medical Association does not meet the requirements of the medical men either in the eastern or western parts of so large a country as our Dominion; and that when a meeting was held in one terminal part, very few members in the central or other portions could participate. Out of a professional body numbering something between three and four thousand, from fifty to a hundred were all that could be brought together at any one meeting. This fact, though to be regretted, has been in part due to the apathy of a large number who might have attended, but chiefly due to the expense, loss of time, and fatigue connected with a long journey. When a medical man attends an Association Meeting, he does so partly from duty, partly from pleasure, partly —and this should be the main reason—from an interest that all should take in the scientific progress of his profession. When one takes a holiday, one wants to leave the shop behind; and pleasant as it is to renew old associations and meet old friends, those that desire to do so are debarred from this even by the present state of affairs.

It has been urged as one reason why the Canada Medical Association should be better supported (and we have always regretted that it has not been), that local interests, especially in educational matters, should be done away with as not serving best the profession at large, and that by establishing a live Dominion Association, the greatest service would be done in that direction. This, we grant, would be desirable in every way if feasible; but time has shown that it is not so, and hence this project seems likely to accomplish, for Ontario at least, the desired end. Our columns will show that one or two County or Territorial Associations have been heard from favourably, and doubtless when others hold their meetings they will, as they ought, individually and collectively, enter heart and soul into the good work.

We are requested to call the attention of the profession to the matter; and Secretaries of Territorial or County Associations who have not received circulars will oblige by communicating with Dr. J. E. White, Carleton-Street, Toronto, as he has been unable to obtain the addresses of all. It is desirable, too, that where there are no such Associations, individuals should give expression to their opinions either through the medical journals or by communicating with the Chairman or Secretary of the Provincial Committee.

COMMUNICATION.

To the Secretary of the Medical Society.

DEAR SIR,—There appears to be a widespread desire among the members of the profession in this Province to establish a Provincial Medical Society.

It is hardly necessary to speak of the value and importance of such a Society from a scientific point of view, as that will immediately be recognized by all. But apart from that, it will be calculated to advance mutual interest, encourage unity and harmonious action, stimulate a free interchange of thought, develope increased desire for a knowledge of the professional literature of the present day, promote social and friendly feeling, and minimize that undesirable distrust and exclusiveness so commonly attributed to the profession, besides affording better opportunities than at present exist in having some place of meeting convenient to the majority.

It is a well-known fact that the State Medi-

cal Societies of the neighbouring Republic have contributed largely to the interest and success attending the meetings of the American Medical Association; in like manner it is reasonable to presume that a vigorous Provincial Society would greatly assist our Dominion Medical Association.

At a meeting of the profession of this city, on October 7th, the matter was relegated to a Committee, who will be pleased to have an expression of opinion from your Society in regard to this subject, as well as to receive any suggestion it may make.

In view of the importance of, and great advantages to be derived from, the proposed step, it would be desirable to bring the matter before your Society at once.

C. W. COVERNTON,
Chairman.
J. E. WHITE,
Secretary.

At the meeting of the Newcastle and Trent Medical Association, held at Peterborough, October 6th, 1880, it was moved by Dr. Day, seconded by Dr. McCrew, and carried unanimously, "That, in the opinion of this Medical Association, it is highly desirable that a Medical Association for the Province of Ontario be formed, and that this Association will give it a hearty support."

H. C. BURRITT, M.D.,
President.
J. T. V. HALLIDAY,
Secretary.

The following resolution, which was moved by Dr. Campbell, and seconded by Dr. Sloan, was carried unanimously: "That it is desirable that this Association lend its active support towards the formation of a Medical Association for the Province of Ontario."

One of the most ludicrous typographical errors lately reported was from the substitution of a "d" for the final "l" in chill. A gentleman on making a trip east left his wife in her usual good health, and was surprised in a few days at the receipt of a telegram announcing her serious illness. He telegraphed the family doctor for particulars, and received in reply the folowing: "Mrs. B. has had a child. If we can prevent her from having another to-day she will do well." The husband's mental condition was somewhat perturbed until he ascertained the exact state of affairs. —*Exchange.*

Book Notices.

Lacerations of the Neck of the Uterus. By A. REEVES JACKSON, A.M., M.D. Reprinted from the *American Practitioner.*

The Rise of American Dermatology; being the President's Address before the Third Annual Meeting of the American Dermatological Association, at New York, August, 1879. By LOUIS A. DUHRING, M. D.—A well-written address, well worthy of its celebrated author, and doing justice to the high esteem in which American Dermatologists are held and American Dermatology occupies at home and abroad.

Transactions of the State Medical Association of Missouri—23rd Session, held at Carthage, Mo., May 18, 19, *and* 20, 1880. These Transactions are neatly bound and clearly printed on good paper. They contain the minutes and proceedings of the meeting, the President's annual address, a number of interesting papers and the discussions thereon, and the reports of Committees on Medicine, Surgery, and Medical Education. The book is very creditable to the Association.

A New School Physiology. By RICHARD J. DUNGLISON, A.M., M.D., Editor of Dunglison's "Medical Dictionary," etc. Porter & Coates, Philadelphia.

This is a small book of about 300 pages, on Elementary Physiology. It is written in a plain, clear style, well printed in large type, and illustrated with over one hundred excellent engravings. The book is well suited for use in public schools, private classes, and in families. During the last few years people are becoming more alive to the importance of acquiring some knowledge of this subject. We rejoice in the fact, and gladly welcome this addition to the text-books on Physiology, which will be found useful to a large class of the public who have neither the time nor the inclination to study more comprehensive works.

Handbook of Physical Diagnosis. By DR. PAUL GUTTMAN, of Berlin. William Wood & Co., New York.

This is a valuable volume, and one of the

series printed by this publishing firm. These books are well got up, and wonderfully cheap for medical works. In the first part of it are well-executed colour plates of the urine, and throughout are clear woodcuts of the different instruments used in physical diagnosis. The chapters devoted to an examination of the organs of respiration and circulation indicate a thorough acquaintance with morbid and healthy sounds of the lungs and heart. The style is clear and epigrammatic—just such as a practitioner wants, who in his busy every-day work has not the time, and often not the inclination, to wade through the diffuse literature to be found on this subject. Of course, no books can teach to any one the normal and abnormal sounds of the chest. The ear and percussion must do this. The senses must be educated to this work, just as in childhood they teach us to rightly interpret the sounds of nature. The sounds in health are as necessary to be known as those in disease. We judge by comparison. The doctor's Shorter Catechism should be in every case as follows, viz.:—

1st. What is the matter?

2nd. What should be done?

3rd. How should it be done?

4th. When and in what order should it be done?

The most important is the first. If that is not clear in a practitioner's mind, it is evident he is only indulging in hap-hazards as to the rest.

A book on Diagnosis does much to assist the reader to correct methods of investigation, and gives the experiences of previous observers in this important field of research. The book before us is one of the best we have read on diagnosis, and shows us how clear-headed the author is when discussing this paramount branch of medical research.

The Art of Prolonging Life. By CHRISTOPHER WILLIAM HUFELAND. Edited by Erasmus Wilson, M.D. Lindsay & Blakiston, Philadelphia, 1880.

This little book, by Professor Hufeland, of the University of Jena, we are informed by the present editor, was translated into English in 1797, most probably by its author, but "has been less known than its merits deserve;" and, in consequence, Dr. Wilson undertook the present edition, "under the hope of being able to fill a vacant niche in popular literature." This is a very fair premonition, for the work is certainly quite as likely to interest the general reader as the members of the medical profession. It contains much information which may prove instructive and useful to those who desire a better knowledge of the grand secret of elongating life to its utmost attainable limits; and we presume this class is sufficiently numerous to warrant the expectation of a pretty general demand for the book. It is, however, a tolerably well-known fact, that the young and robust bestow but little thought on the subject of life economy. It is not until men have passed the meridian of life, and begin to feel those admonitions of physical declination which portend ulterior vital sunset, that they begin to think seriously of their prospect of protracted existence. The poet Young has most truly told us:

> "All men think all men mortal but themselves;"

and just as the soldier at the close of a battle, surrounded by the mangled bodies of hundreds of his morning companions, clings more strongly to the hope of his own immunity, so would it seem to be with those who, in their journey of peaceful life, have seen their early associates one by one drop off, and "pass over to the majority."

Were it not that we must all be conscious of the destiny of the like infirmity awaiting ourselves, we might often be tempted to smile at the tenacity with which the aged hang on to their attenuated thread of life, and at the manifold devices by which they flatter themselves they may be enabled to spin it out to its last possible, or impossible, fibre:

> "The tree of deepest root is found
> Least willing still to quit the ground."

If such be the allotment of humanity, who can regard extreme old age as the prelude to a true *euthanasia;* and who would devote his time to the study of "*the art of prolonging life*" until it has become a wearying burden to himself and to all around him?

Though it is not to be denied that the world has stood much indebted to some benefactors

who attained to very ripe years, it is equally true that no small proportion of those who have left enduring monuments of their genius and industry have been taken out of life in comparatively early years. The following list of distinguished men, showing the age attained by each, is given by the editor, and will be read with interest by those who are curious in such matters:

Tasso	51	Galileo	78
Virgil	52	Swift	78
Shakspeare	52	Roger Bacon	78
Moliere	53	Corneille	78
Dante	56	Thucydides	80
Pope	56	Juvenal	80
Ovid	57	Young	80
Horace	57	Plato	81
Racine	59	Buffon	81
Demosthenes	59	Goethe	82
Lavater	60	West	82
Galvani	61	Franklin	84
Boccacio	62	Metastasio	84
Fenelon	63	Herschell	84
Aristotle	63	Newton	85
Cuvier	64	Voltaire	85
Milton	66	Halley	86
Rousseau	66	Sophocles	90
Erasmus	69	Leuwenhoeck	91
Cervantes	69	Hans Sloan	93
Dryden	70	Whiston	95
Petrarch	70	Michael Angelo	96
Linnæus	71	Titian	96
Locke	73	Herodias	100
Reaumur	75	Fontenelle	100

If the measure of human life should be estimated, not by the number of years attained, but by the labours which have filled the years, and have been handed down as mental treasures to posterity, who that is gifted with a just appreciation of the products of poetic genius will not say that the first nine names are those of the longest lived in the preceding illustrious roll? It is almost a pity that we find Milton to have lived fourteen years longer than Shakespeare; and had Goethe died thirty years younger than he did, it is questionable whether his "Faust" would not have seen the light in even a more attractive form than that in which, near the close of life, he gave to fame this conception of his youth. We might well excuse a less masterly definition of the arch-fiend Mephistopheles, had the poet been more expansive in his delineation of the innocent Margaret. If he had to live to four score before giving the finishing touches to his picture of the Devil, the world would have been no loser by his earlier demise, and posterity would have adored him had his Margaret come down to us with that richness of colouring with which, beyond doubt, he had graced this simple child of nature, ere his ripened familiarity with human debasement enabled him to cope with the malignant devices of the "Father of Lies." But these sentimental aberrations are rather foreign to the purpose which should be had in view in drawing popular attention to the entertaining and instructive little book presented to us in so pleasing and simple a style as that in which it comes from the hands of its illustrious editor. The reader who will take it up with the desire and the expectation of being pleased with its varied contents, will have no reason to accuse himself of any waste of his time; and as it is divided into short chapters, which may be taken up in spare intervals without any danger of breaks of continuity, it will be found well suited to the requirements and the taste of those who desire to indulge in occasional brief mental regalements, which at once lighten the toils of every-day life and impart fresh invigoration to the mind.

INTERNATIONAL MEDICAL CONGRESS.—The seventh session of the International Medical Congress will be held in London, England, from August 3rd to August 9th, 1881. All communications respecting the Congress should be addressed to Wm. McCormac, Esq., Hon. Secretary-General, 13 Harley Street, London, W.

Births, Marriages, and Deaths.

BIRTH.

In Oshawa, on September 29th, the wife of Dr. W. Coburn, of a son.

MARRIED.

At Toronto, on September 28th, Frank S. Keele, M.B., of Gravenhurst, to Charlotte Grace, eldest daughter of B. W. Murray, Osgoode Hall, Toronto.

In Jefferson, Ohio, on September 30th, 1880, Dr. C. B. Healy, of Brantford, Ont., to Miss Emma Harris, of Jefferson.

On October 6th, at 112 Parliament Street, Toronto, J. M. Piper, M.D., of London, Ont., to Beckie, second daughter of Wm. Boddy, Esq., Toronto.

At Northwoodbank, in the village of Nixon, County of Norfolk, W. Tisdale, M.D., of Lynedoch, to Miss Addie L. Wood.

On September 28th, at the residence of the Hon. D. Morrison, St. Cloud, Minn., by the Rev. Thomas Riley, C. E. Stinson, M.D., to Annie, only daughter of E. R. Abell, Chief Engineer of the Hudson Bay Company.

DEATHS.

In Kingston, September 25th, Thomas B. Tracy, M.D., M.R.C.S.E., aged 38 years.

At No. 38 Gilmore Place, Edinburgh, Scotland, on 9th October, 1880, Euphemia, relict of the late Dr. Telfer, of this city, aged 77 years.