Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best 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.

Canadiana.org 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.
- ☐ Additional comments / Commentaires supplémentaires:

- ☐ 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.

THE

CANADA LANCET

A MONTHLY JOURNAL

—OF—

MEDICAL AND SURGICAL SCIENCE, CRITICISM AND NEWS.

EDITED BY

J. L. DAVISON, B.A., M.D., C.M., M.R.C.S., E.

CHARLES SHEARD, M.D., C.M., M.R.C.S., E.

VOL. XXVI.

TORONTO:
DUDLEY & BURNS, PRINTERS, 11 COLBORNE STREET.
1894.

LIST OF CONTRIBUTORS TO VOL. XXVI.

E. A. Spilsbury, M.D., Toronto.
C. W. Cutler, M.D., New York.
H. Arnot, M.D., London.
A. B. Judson, M.D., New York.
Thos. T. Harrison, M.D., Selkirk.
E. J. Boyes, M.D., Oakland, California.
D. Campbell Meyers, M.D., Toronto.
Peter H. Bryce, M.A., M.D., Toronto.
E. B. Shuttleworth, Toronto.
Beverley Z. Milner, M.D., C.M., Toronto.
Murray McFarlane, M.D., Toronto.
W. W. Bremner M.D., Toronto.
J. T. Duncan, M.D., Toronto.

Thos. E. Satterthwaite, M.D., New York.
J. T. Fotheringham, B.A., M.D., Toronto.
Constantine O'Gorman, M.D., Cobourg.
J. O'Dwyer, M.D., New York.
F. R. Sturges, M.D., New York.
D. B. St. John Roosa, M.D., New York.
W. B. DeGarmo, M.D., New York.
J. Algernon Temple, M.D., Toronto.
D. Bryant, M.D., New York.
G. T. Orton, M.D., Winnipeg, Man.
Jas. Newell, Ph.B., M.D., Watford.
Chas. G. Stockton, M.D., Buffalo.
Price-Brown, M.D., Toronto.

Index to Vol. XXVI.

THE CANADA LANCET.

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE, CRITICISM AND NEWS.

Original Communications.

DEFLECTION OF THE NASAL SEPTUM AND ITS SURGICAL TREATMENT.

BY DR. E. A. SPILSBURY,

Lecturer on Laryngology and Rhinology, Trinity Medical College, Surgeon to the Throat and Nose Department, Toronto General Hospital.

Deflections of the septum, either as a result of traumatism or inflammatory action, are probably the most frequent of the exciting causes of catarrhal inflammation in the nasal mucous membrane. Consequently it becomes a matter of considerable importance that we should thoroughly appreciate, not only their method of development, but also the nature of their action, upon the lining membrane of the nasal cavities, as well as their influence upon its respiratory functions. In health, we find the nasal septum presenting simply as a bony and cartilaginous wall, dividing the nasal passages into two symmetrical cavities. In diseased conditions, we find present in this structure certain abnormalities of contour, which undoubtedly have a marked influence in the production of an ordinary catarrhal inflammation. The earliest investigators attributed deflections to excessive growth of the septum, as a result of which it became too large to fit in its bony framework, thereby becoming warped. This theory may account for a certain amount of cases, but the great proportion of cases requiring surgical iuterference, that have come under my care, have had a clear traumatic history. Sir Morell Mackenzie in an examination of 2152 skulls, with the bony septum entire, in the museum of the Royal College of Surgeons, found 76 per cent. presenting more or less deviation. 38 per cent. to the left side, 28 per cent. to the right, while in the remainder it was irregular. When it is remembered that a large proportion of cases as seen in practice, present the deflection chiefly confined to the triangular cartilage, we see that the percentage must be even larger than that given by Mackenzie. Delavan has found among European races well marked deflection in 50 per cent. of several thousand crania examined. In cases of deflection the cartilaginous, or bony septum, or both portions, are simply bent to one side, the cartilaginous portion usually being the most involved. The deformity causes enlargement of one nasal chamber, at the expense of the other. In most instances of deflection of the septum there is also thickening, especially at the lower part of the convex surface. The deflections are sometimes double, the convexity of one bend presenting in front on the one side, and the convexity of the other bend presenting further back on the opposite side, thus forming a double deviation resembling in shape the letter S.

In cases of fracture I have found that the cartilage is the part of the septum most frequently broken. Next in order comes the perpendicular plate of the ethmoid, its articulation with the vomer being the usual seat of fracture. The vomer is very rarely influenced by the concussion, its anterior edge being posterior to the bones of the face, and the cartilage yielding to the force of the blow. The causes of this deformity are obscure, and various theories have been advanced to account for its occurrence. In regard to those deflections which are due to fracture of the septum, of course there can be no question, they are due to a direct blow upon the nose. When we undertake, however, to inquire into the causes of the S shaped or unilateral deviations from the middle line, a wide field for discussion is placed before us. Morgagni was the first to advance the view that these deflections are due to excessive development of the vomer. This theory was subsequently advocated by other investigators, and I think it would account for a great proportion of these cases. With every regard for the various theories, I think clinical observation teaches us that traumatism is by far the most frequent direct cause of septal deformities. Where the patient is conscious of obstruction in one side of the nose, the trouble is not infrequently dated from a severe blow or fall on the face. This, coupled with the fact that men are three or four times as frequently affected as women, and that boys are more liable to blows on the nose than girls, indicates very strongly the probability of a

traumatic element oftener than is usually supposed.

I have observed, moreover, that women relate more precisely the history of a bad blow or fall upon the face, as if, the event being comparatively rare among them, they took more notice of it, while with men, a frequent answer to the interrogation is that they had an average amount of knocking about the face at school. In these cases I consider it sufficient to assume a fracture of the septum to account for all the appearances.

When the deflection is great, the most prominent symptom is twisting the nose to one side, usually to the side opposite from that effected. This deformity is sometimes very marked from bending to the side of the anterior edge of the cartilage, even though there is but little deflection farther back. More or less difficulty in nasal respiration is experienced according to the amount of obstruction. Interference with the free passage of air through the obstructed side causes the secretion to collect behind the convex portion and in the naso-pharynx, giving rise to post-nasal catarrh, and I have frequently observed that pressure upon the external wall, especially when associated with exostosis, induces atrophy of the turbinated body of that side, while the inferior turbinated body of the other side is usually found to be hypertrophied, and thus it often happens that patients find respiration easier through the cavity which, upon inspection, seems most obstructed. Of course, as further consequences of the obstruction, the voice acquires a nasal twang, and mouth breathing becomes necessary, with all its attendant evils. There is no disease with which deflection of the septum is liable to be confounded if a careful rhinoscopic examination is made. Most of the evil results of the obstruction can be remedied by a suitable operation, and the external deformity may be largely removed if the nasal bones have not been crushed so as to cause depression of the bridge of the nose.

Now as to the kind of cases requiring surgical interference. It is undoubtedly bad surgery to hold that every deviation from the middle line in the position of the septum demands treatment, and it is probably equally faulty to assume that surgical means should always be adopted, even when one nasal fossa is almost completely occluded. I have found, by experience, that many individuals tolerate partial, and sometimes nearly complete, nasal obstruction on one side without any inconvenience whatever. It is only when actual symptoms are produced in consequence of pressure on contiguous surfaces or interference with nasal respiration that operation is demanded. Whenever, for instance, there is a chronic laryngitis, with enough nasal stenosis to cause even a partial buccal respiration; whenever there is paroxysmal sneezing or hay fever, even although there be but little interference with nasal breathing; whenever there is post-nasal catarrh or eustachian occlusion; whenever there is dry rhinitis of the open fossa, we may operate with perfect propriety and with the best hope of success. The essential feature of deflections of the nasal septum which demands treatment is the stenosis, as from this arises all the sequelæ and complications which accompany them. Where the deformity is the result of a fracture, this may be accomplished, either by removing the projecting portion of the deviation, or by restoring the fragments to their normal plane.

The earliest effort (1750) in this direction is the method of treatment by which the patient is advised to push the septum firmly over to the opposite side several times daily: but unfortunately this simple plan is seldom capable of accomplishing any good. About a century later (1845) Dieffenbach advised that the projections be sliced off with a knife, but this proved rather unsatisfactory. In 1851 Cassaignac recommended a form of treatment especially applicable to deviations, with thickening of the cartilaginous septum. This consisted in dissecting up the mucous membrane and paring off the superfluous tissue. It is not easy of accomplishment, but in certain cases no better operation, perhaps, could be devised. Blandin, of Paris, first advocated punching out a portion of the septum and establishing free connection between the two nares, but this operation rarely affords the desired relief and cannot be recommended.

An easy operation, and one which has given me great satisfaction in several cases of simple cartilaginous deflection, is an incision through the projection following its long axis. Considerable hæmorrhage takes place as soon as the incision is made, but it soon ceases. The end of the finger being introduced into the nostril, the septum is forcibly pushed beyond the centre and maintained

there by packing the previously obstructed nostril with carbolised oakum. The cut edges over-ride each other, and after a couple of weeks are firmly united. The oakum plugs should be changed daily and both cavities sprayed with Dobell's lotion or a solution of permanganate of potash, gr. i ℥ i. Dr. Roberts, of Philadelphia, devised an operation in which a long incision is made obliquely or horizontally, as required, through the septum from back to front along the line of deviation or projection. This is done with a knife introduced into the occluded nostril. If the bony septum is deflected, it it is divided by a chisel in the same direction. A long steel pin is then introduced into the normal nostril, and its point passed, with about two-thirds of its length, through the septal cartilage, a short distance above and in front of the incision. This brings the pin into the occluded nostril. Pressing the end of the nose and septum, according to the character of the case, into its proper position, the "head-end" of the pin is brought close to the anterior part of the septum, thus causing the "point-end" or portion in the occluded nostril, to lie across the incision and adapt itself lengthwise along the surface of the septum beyond the incision. The pin is then pushed in up to the head, and its point is thus deeply imbedded in the soft tissues of the septum, and upper and posterior part of the occluded nostril. It doesn't make much difference where the point is fastened so that it is firmly fixed and holds the incised septum straight. Sometimes two pins will be required to correct deformity. In such cases the second one is inserted, not from the mucous surface within the nostril, but from the cutaneous surface of the dorsum of the nose just below the nasal bone. The operation is of course, a bloody one, because of vascularity of the parts, and because it will be useless unless the incisions are very free, so as to take away all resiliency of the cartilage. The pins are left in position two weeks. I have operated in several cases, by this method with favorable results. The patient is subject to but little inconvenience, and the cavities can resume their functions at once, with no disfiguring apparatus apparent. A small square of court plaster will cover the end of the external pin, which should have a flat head. The other does not show, as its head lies within the nostril.

Another method of rectifying deflection of the septum is to forcibly return it to its normal position by means of heavy forceps, as devised by Adams, of London; but never having looked upon this instrument with favor, I have not given Adams' operation a trial. In those forms of comparatively slight deflection with considerable thickening of the prominence causing partial stenosis, the simplest method I have found, in dealing with such cases, is that devised by Bosworth, of New York. It consists in cutting off with a saw, specially constructed for the purpose, the protruding portion, together with its covering mucous membrane. The saws are two in number—one cutting downwards and the other upwards. The steel portion is about five inches long, the anterior half serrated and probe-pointed, while the other carries a large wooden handle at the proper nasal angle. By this means the hand is kept away from the field of vision during the operation. The mucous membrane having been well cocainized with a 20 per cent. solution soaked in a tampon of absorbent cotton, the saw is introduced either above or below the protrusion as may appear more convenient, and rapidly cut through, care being taken to make a straight cut without bending the instrument. The bleeding is sometimes very profuse, though it generally ceases as soon as the operation is completed. It is of great importance in removing these projections, that a thoroughly smooth surface should be left, for when a jagged uneven surface remains, the result is unsatisfactory, and the period of healing occupies an unnecessarily long time. Recently, I have adopted a new operation for the worst cases of deflected septum, whether cartilaginous only, or bony and cartilaginous combined, and with very favorable results. The operation is that of Delstanche, of Paris, and the set of instruments consists of strong, crushing and cutting stellate septum forceps, septum clamps, and handle or tightener. The clamps are three in number, each consisting of two blades lined with rubber, and sliding on a square bar. The handle is also used to separate the blades of the clamp when removal is required.

The patient being under the influence of chloroform the stellate blade is passed into the open nostril to the required position, and the flat blade passed into the obstructed nostril to a point opposite; the blades are then locked as with obstetric forceps and pressure exerted, thus crushing and

cutting the septum. This is repeated in two, three or more places, until all resiliency of the septum has been overcome, when the index finger can be easily passed up the occluded side, and the clamp then adjusted in position. In tightening the clamps, care should be taken not to exert too much pressure as it would interfere with the nutrition of the seat of operation and would probably give rise to sloughing. Frequent cleansing should be carried out, by means of a spray of Dobell's solution or other antiseptic wash. The clamp should remain in position for three or four days, after which I use plugs of carbolized oakum, as they are more cleanly than hard plugs of ivory or wood, and exert sufficient pressure to hold the part in the required position. They should be changed at least once daily. In some cases it will be sufficient to plug only the formerly obstructed side with the oakum, after removal of the clamp. The evening temperature may rise above 101° on the second and third days after operation, but soon subsides. The three following severe cases of deflected septum, all in male patients, and of traumatic origin, which I have recently operated upon by Delstanche's method, with the most favorable results, both as regards the nasal stenosis and the facial deformity, have satisfied me as to the efficiency and value of this operation.

CASE I.—A. W., æt. 21, consulted me, October 26th, 1892, for complete obstruction of the right nostril and catarrh, and expressed himself as desirous of undergoing any operation that would give him relief from the distress he experienced at not being able to breathe throught the right side of his nose. At about five or six years of age a severe fall upon the face had broken the nose, nothing having been done at the time to set it, so from that time he could not breath through the right nostril properly, and this difficulty increased in after years, until almost complete obstruction existed. Upon examination I found the right nasal chamber almost entirely occluded by deflection of the septum, in both its cartilaginous and bony portions, and of undoubted traumatic origin. The left inferior turbinated body was greatly enlarged by puffy hypertrophy, yielding easily to pressure of the probe, and it almost filled the large concavity caused by the deformity of the deflected septum. In this case, as there was so much inflammatory thickening of the projecting portion into the right nostril, I removed a piece about an eighth of an inch in thickness with the saw, in order to obtain space for the introduction of the flat blade of the forceps, as well as with the view of obtaining a better result after crushing. The blades of the forceps being placed in position in their respective nostrils, the anterior portion of the deflection was crushed and cut; this was repeated in two or three places back to the posterior part of the deviation, after which all resiliency was overcome, and the finger could be passed into the occluded nostril. The clamp was then placed in position, and firm but not tight pressure exerted. The temperature rose to 101-2° on the evening of the second day after operation, but soon fell to normal. On the morning of the fourth day I removed the clamp, and plugged both nares with carbolished oakum which was renewed daily. After two weeks' treatment the plugs were abandoned, firm union having taking place, and the patient could breathe freely through both nostrils. The facial deformity was also markedly reduced, the nose now being fairly straight. This patient returned by appointment in about a month from date of discharge when the relief of the stenosis was found to be permanent, and the catarrhal condition had nearly subsided. At this time the left inferior turbinated body was cauterized two or three times by galvano-cautery, and the patient has since remained free from any obstruction or inconvenience from catarrh.

CASE II.—F. M., æt. 30, consulted me, February 3rd, 1893, for almost complete obstruction of the left nostril, very marked facial deformity and catarrh. About seven years previously he had received a severe blow on the right side of the nose. Upon examination I found the left nasal chamber almost entirely occluded, and post-nasal catarrh existing. The deviation was both cartilaginous and bony, and of unmistakable traumatic origin. I operated by Delstanche's method with the result that in two weeks the patient was breathing as freely through the left nostril as the right, and upon inspection there was almost as much space. In this case also the deformity of the nose externally was decidedly improved, and now, in appearance, is comparatively straight.

CASE III.—G. H., æt. 17, consulted me, April 6th, 1893, for obstruction of the left nostril, which was causing him great discomfort. About five

months previously, he had received a heavy blow on the right side of the nose. Upon examination I found marked deflection of the cartilaginous portion of the septum to the left, causing partial stenosis, and there was also post-nasal catarrh. The facial disfigurement consisted of rather an abrupt turning of the tip of the nose to the right. I did Delstanche's operation in this case with the most satisfactory results in regard to both the nasal stenosis and the external deformity.

THE USE OF IODINE, CARBOLIC ACID AND CHLORAL IN DERMATOLOGY.

BY DR. C. W. CUTLER, NEW YORK.

Mr. Geo. L. F., aged 27, called at my office on July 20th, 1890, with the following history: About six months ago he noticed a little itching about the pubis. Having been once affected with crab-lice, he attributed this itching to a similar attack, and applied remedies which he had found previously beneficial. Instead of an improvement, however, the itching became worse, and the area of redness, which he attributed to the scratching, became increased in size. He then consulted a physician, who told him his trouble was eczema, and began a course of treatment for its cure. As the disease, instead of showing an improvement, continued steadily to increase, he consulted a specialist in skin diseases, who confirmed the diagnosis of eczema, and advised a different plan of treatment; but even this change of treatment resulted in no improvement, and the disease, which at first was limited to the pubic region, began to extend down the inner sides of the thighs, spreading from the centre toward the periphery by a well-marked, raised, circular margin; while new areas of the disease also developed on the inner sides of the thighs.

After being under treatment for several months and deriving no benefit, he consulted another specialist, who told him that the disease was often called eczema, but was really a form of ringworm which was very difficult to manage, always taking a long time to effect a cure.

Another method of treatment was inaugurated, and continued for two months without benefit, the disease still showing a tendency to spread, and without any signs of improvement. By the advice of his physician, he decided to try the benefit of a different climate, as the disease was beginning to affect his general health, so he came to New York and placed himself under my care. On examination, I found the skin of the pubis, lower portion of the abdomen, penis and inner sides of the thighs extending backward about the anus and buttocks, reddened and thickened, presenting a well-defined, marginate, raised border separating it from the normal integument. Around the borders of this patch were a few discrete, pin-head sized papules and papulo-pustules, some of which were perforated by a hair. The inflamed area of the skin was of a dark red color, boggy to the feel, scaly, and covered in places with yellowish crusts which could be quite easily removed, leaving a denuded surface that exuded a little serum, giving the general appearance of an eczema. The history of the disease, its method of extension, the well-defined, raised, marginate borders, and its rebelliousness to treatment, left no doubt in my mind that I had to deal with a well-marked case of eczema marginatum of Hebra, or tinea trichophytosis cruris, as we consider it to-day. The patient had worried very much about the disease, but otherwise than being slightly anæmic, I could not discover that his general health had in any way suffered. The itching, however, annoyed him terribly, kept him awake at night and made him very nervous and irritable. Recognizing that all the usual plans of treatment had been tried thoroughly, I decided to begin at once a somewhat different method of treatment than had been previously adopted in this case. The patient was ready to submit to any plan of treatment I could hold out to him with encouragement, no matter how painful or how closely it might confine him to the house. He was even willing to go to bed and remain there, if necessary, so that I met with no opposition or neglect to carry out my instructions to the letter, and to these facts was largely due the good result of the plan of treatment which I will now describe:

The affected region was first thoroughly shaven, and as the process was a painful one, owing to the severity of the inflammation, a lather was made with a 4 per cent. solution of cocaine, after which the process was accompanied with very little difficulty. The raised marginate edges and the papules and papulo-pustules surrounding were

then painted over with a solution of equal parts of tincture of iodine, chloral and pure carbolic acid. The pain resulting from this application was very severe, but was soon controlled by an ointment composed of twenty grains of cocaine and an ounce of the ointment of roses, which the patient was allowed to keep on until all pain subsided. An ointment consisting of one part of the ointment of carbolic acid, two parts of the ointment of liquid tar, and five parts of diachylon ointment was then ordered to be kept continually applied to the whole inflamed area, and changed night and morning. On the third day the diseased area was thoroughly cleansed with soap and hot water, to which was added some bicarbonate of soda. The result of treatment so far was very satisfactory. The disease had not spread at all, the borders were less elevated and less distinct, and the itching less pronounced. The same treatment was again resorted to, only this time the whole surface of the lesion was lightly gone over with this solution of chloral, iodine and carbolic acid, then the cocaine ointment, and afterward the ointment of carbolic acid, tar and diachylon was applied as before. At the end of the next three days the disease had very decidedly improved in appearance. The induration was very much lessened, and here and there the redness had nearly disappeared. The raised, marginate border had flattened down greatly, the skin was less boggy, the scales had entirely disappeared, and the itching was not complained of at all. At the end of ten days' treatment, the solution of carbolic acid, iodine and chloral being applied every third day, islands of normal skin made their appearance here and there throughout the affected area. The margin, which was no longer raised, was intercepted here and there by normal integument.

The strong application, used every third or fourth day, was now only made to the diseased area, and then but very lightly, but the tar ointment was still continued.

At the end of three weeks the patient returned to his home cured, a slight pigmentation being all that remained of his disease. As a precaution to prevent any further return of this disease, I gave him a wash of two grains of bichloride of mercury to the ounce of rose-water, which was to be applied to the affected area once or twice a day for a month.

It is now two years since this patient passed from under my care, but it was only a few weeks ago that I heard from him, stating that there had been no return of the trouble. Here, then, was a case of parasitic skin disease which had lasted for over six months, treated the greater part of the time in the most approved manner without benefit, yet yielding in three weeks to a plan of treatment which has since then proven very satisfactory in my hands, used either in the method just described or modified to suit the case.

The use of iodine, carbolic acid and chloral in dermatology is, I know, nothing new, for either alone or in combination with other agents they have been recommended in many diseases of the skin, and are used with benefit. Thus iodine was strongly recommended by Hebra in lupus, lentigo and chloasma, and in small-pox to prevent pitting, while as a remedy for erysipelas and ringworm it has been used for many years.

Perhaps there is no other drug which enters more frequently into prescriptions for diseases of the skin than carbolic acid, although after closely studying the literature on the subject I find it very infrequently used in its pure state, unless to ulcerated surfaces, lupus and condylomata; but in combination with other substances, thus reducing its strength, it is very frequently used in the parasitic skin affections, chronic eczema, pruritus, and, in fact, nearly all the diseases of the skin in which itching is a marked characteristic, for the purpose of relieving this troublesome symptom.

Chloral, although used much less frequently than either carbolic acid or iodine, finds its way very frequently into prescriptions, it having, like carbolic acid, marked antiseptic and antipruritic properties.

If we study the physiological effects of these agents on the skin we find that iodine is a rubefacient, staining the skin yellow, and coagulating the albuminous agents, thus being an antiseptic and showing a decided tendency to hasten the absorption of all inflammatory products.

Carbolic acid is a superficial escharotic, turning the skin a white color. It first produces a burning pain, which is quickly followed by marked anæsthesia of the part to which it is applied. It forms a chemical combination with fat and coagulates albumen, thus being a very strong antiseptic, rapidly destroying micro-organisms. It also

possesses, to a marked degree, the property of hastening the absorption of inflammatory products.

Chloral is also a rubefacient, producing some redness and heat in the skin, followed by marked anæsthesia, especially to subjective sensations. Its antiseptic properties are also well marked. When we combine these agents in equal parts we obtain a solution which is not a mere mixture but a complex chemical compound which acts as a rubefacient, staining the skin a light yellow. A slight, stinging pain is first produced, which is soon followed by a decided numbness of the skin over which the solution is painted. This solution possesses strong antiseptic, antiparasitic, antipruritic, antiphlogistic, analgesic, anæsthesic and absorption properties. It penetrates deeply into the tissues of the skin, not only hastening the absorption of inflammatory products, but being itself readily absorbed. Although it possesses these important therapeutical and physiological properties, it is not altogether free from evil effects which may result from its use. In a few cases, especially in children and blondes, the amount of pain and inflammation following its use is so extensive as to forbid its employment except much diluted, or over very limited areas. If applied to the face, scalp or hands it produces some staining, which, although lasting but a few days, is an objection to its use in some cases. There is always danger of the absorption of carbolic acid when this solution is painted over a large area, resulting in constitutional poisoning. This objection to its use should never be lost sight of when this agent is employed.

I was first tempted to use this combination of chloral, iodine and carbolic acid in certain cases of skin diseases, having employed it in my hospital days as an application to the cervix uteri, and noticing what a decided effect it had in lessening the congestion and thickening of the tissues. The little papillary growths so often found on the cervix were frequently destroyed, after a few applications of this mixture, without any inflammatory reaction. As the solution was also a powerful germicide, besides having such decided action on congested, indurated tissue, it seemed to me just the application to make in all parasitic affections of the skin accompanied by induration and thickening. Acting on these indications, I began its use in my dermatological practice with the case just recorded, and have continued its use with the best results in certain classes of cases ever since. Especially has the result of treatment been most satisfactory in *ringworm* of the scalp. Cases which had resisted other forms of treatment for months began to improve at once, and were practically cured in three or four weeks.

The plan of treatment employed in these cases consisted in extracting the hairs from the diseased area, which was done with ease and without much pain after thoroughly rubbing into the scalp a four per cent. cocaine ointment, then cleansing thoroughly with soap and hot water, after which an application of this solution was painted over the patch extending a little beyond its border. If the area is a large one, and especially if the child is young, I advise that no larger area than an inch square be treated at one time. It is not unusual to find that this application is followed by quite a severe dermatitis of the scalp. To relieve this inflammation a Lassar paste is ordered continually applied. Usually in three or four days the inflammatory action has so far subsided that another application can be made. In a large number of cases treated I have found but very few that required more than three or four such applications.

This plan of treatment not only acts well in the non-inflammatory forms of ringworm of the scalp, but especially so in the tinea kerion, the inflammatory condition present being no counter-indication for its use. In ringworm of the body and in *tinea versicolor* one or two applications of this solution will usually effect a cure. In the treatment of *tinea barbæ* I have perhaps met with the best success in the employment of this agent. The plan of treatment usually employed was as follows: If the disease had lasted but a short time its progress was usually checked by painting over the diseased surface every two or three days a solution of this iodine, chloral and carbolic acid, and in the meanwhile keeping some soothing application continually applied to relieve the subsequent inflammation. In chronic cases, and when the disease was extensive, it seemed much better to make this application over small areas at a time, thus taking perhaps a week to go over the whole surface, in the meantime keeping the beard cut very close and carefully extracting all hairs

having suppuration about their follicles. Before any application is made all crusts are removed by soap and hot water, or by poulticing. Every night and morning the patient should bathe the face for half an hour in very hot water, after which all the loose hairs and those with pus about their roots should be removed. A lotion of resorcin, fifteen grains, and bichloride of mercury two grains, to the ounce of rose-water, should then be applied, after which a small area should be painted over with this solution of carbolic acid, iodine and chloral. At night ammoniated mercury ointment containing fifteen grains of resorcin to the ounce may be kept continually applied.

It is my experience that this strong solution very much hastens recovery, for in cases where it was used on one side of the face only, the other treatment being the same over the whole affected area, recovery was much more rapid on the side to which this agent was applied. After each application the induration becomes less extensive and the disease shows no tendency to spread.

Noticing the marked tendency which this agent seemed to have in preventing the spread of skin diseases and lessening the inflammatory induration, I was tempted to use it in other diseases of the skin than those of a known parasitic nature.

In the superficial *paronychia* known as "run-around," I found that the disease could be entirely cured by one or two applications. The raised epidermis was first carefully dissected away, and the lesion then lightly painted over with this solution, being particular to get the edges thoroughly impregnated with it. The success derived in checking the suppuration in this variety of paronychia led me to use it in certain forms of skin diseases attended with the production of pus. Good results were obtained in *impetigo contagiosa*, not only in healing the lesions, but in preventing the spread of the disease by carefully removing the crusts, touching lightly the base of each lesion with this solution, and then dusting with aristol or applying a weak solution of ichthyol.

A few impetiginous and ecthymatous lesions were treated in like manner, and almost always with benefit. The good results in these cases, characterized by the formation of pus, was largely due to the antiseptic property of this solution. In a series of cases of *psoriasis* I have used it with considerable success. Especially has it been serviceable in cases where the patches have been large and covering a considerable extent of surface. I first tried painting this solution around the edges of the patch, and was gratified to find the area smaller after each application. Afterward I applied it to the whole patch, unless it covered too large an extent of surface, and have usually found the result more satisfactory than that obtained by any other plan of treatment which I have ever employed. Cases which have resisted other methods of treatment have yielded kindly to this. The method usually employed consisted in first removing the scales by applications of salicylated oil, after which the patch is thoroughly painted over with the solution. The pain, if at all severe, can be controlled by an ointment of cocaine, after which an ointment of one part of the ointment of carbolic acid, two parts of the ointment of tar and five parts of diachylon ointment is to be applied continually for three or four days; then, after carefully cleansing with soap and hot water, another application of the carbolic acid solution is to be made.

A marked improvement is usually noticed after the first treatment. The induration is less marked, the patch less elevated and the borders less distinct. After the second application the improvement still continues, and there will be found little islands of skin where the disease has nearly disappeared. This improvement continues until after a few applications the skin returns to its normal condition, a little redness and pigmentation being all that remains. There is also no tendency for any return of the disease in the same areas. Occasionally some dermatitis is set up, which, however, may be easily controlled by the application for a few days of Lassar's paste. In old, chronic cases of psoriasis, where the patches have lasted for years, the treatment of one patch by this method and other patches on the same body with chrysarobin or preparations of tar will show at once the advantage derived by the plan of treatment which I have just described. Especially well and satisfactory does this plan of treatment act in psoriasis of the scalp. *Squamous forms of eczema* occurring on limited portions of the body may be treated in a similar manner with splendid results. Cases having lasted for years I have seen cured in a few weeks, and without tendency to return. In all chronic cases of eczema where there is thickening

and induration of the skin, with persistent desquamation and annoying pruritus, cases in which emollient applications are utterly inefficacious, this solution will change the character of the eczema from a chronic to an acute form, a condition not only showing a natural tendency to recovery, but one which responds readily to treatment. The lesions of *papalo-squamous syphilis* may also be made to disappear very rapidly by the employment of this agent.

Two cases of *lupus erythematosus* of recent origin have been thoroughly cured by a number of applications of this agent, and now, after several months, show no signs of return. Other cases of lupus erythematosus in which I have used it show marked signs of improvement—much better in result than from the use of pure carbolic acid alone. The cases showing the most marked improvement are those in which applications of tar and diachylon ointment followed the use of this solution.

In several cases of *lichen planus*, where the disease has not been extensive, I have used this solution with good results. Not only does it allay the itching, but checks the spread of the disease and hastens resolution. My best results in this disease have been in cases where the application of this solution was followed by the ointment of tar, carbolic acid and diachylon.

In *molluscum contagiosum* I found no trouble in curing the disease in one or two treatments by puncturing each lesion with a platinum wire dipped in this solution. Pure carbolic acid or stick of nitrate of silver, and perhaps several other substances, may do the same, but the process is more painful and followed by more reaction, and the lesions heal less rapidly. After each lesion is punctured, I usually cover it with mercurial plaster, allowing it to remain on several days.

I know of no application which will prove as beneficial in hastening the return of the hair in patches of *alopecia areata* than this solution. The best results, in the few cases in which I have tried it, were obtained by making the application once in five to seven days. In five cases, four showed the beneficial effects of treatment in from four to six weeks. In these cases no other external treatment was employed. In one case there has been absolutely no result obtained from either this or any other plan of treatment. In another one of this series of cases not only did the hair return after treatment, but the neuralgic pains which were very severe at the site of the alopecia were very much relieved, after each application, for two or three days.

Noticing the power of absorption this solution seemed to possess, I was tempted to use it in a few cases of *chloasma*. The first case in which I tried it occurred in a young lady of society, living some distance from New York. There were three patches of chloasma on her face, which had existed for several months, and were so disfiguring that she worried over it very much. She had been treated without success in a number of different ways, and was willing to be experimented upon provided that any hope of success could be assured her. Three applications of this solution were made in my office a few days apart. Some slight inflammatory action was set up, which was relieved by applications of cold cream. After the third application the skin was stained a dark brown color, which, together with the inflammatory action, made the lesions look very much worse than they did before treatment was begun. I had prepared the patient, however, for this condition, so there were no protestations on her part. The patient was then told to return in a month, so that I could see the result. At the end of that time we were both much gratified to find a very marked improvement. There still remained some slight pigmentation, which seemed to me, however, to result more from the application than the original form of the disease. She was told that the staining would gradually grow less marked in time, and to report again for observation in a few months. She did so after six months, without showing any traces of her former disease. In other cases the result of treatment has not always been so satisfactory, but I am positive that the results obtained have been better than from the use of any other application to these lesions. Of course, as the disease is most frequently the result of some functional or organic derangement of an internal organ, new patches of the disease may make their appearance while the old ones are disappearing under treatment. If no result is obtained after three to five applications, it is not advisable to continue with this plan of treatment, as pigmentation of the skin may result from the frequent application of this irritant.

This fact led me to use it in certain cases of *leucoderma* with good results. To be of use, however, the solution must be applied every few days and continued for some time. A pigmentation may take place in the skin after a time which is often permanent, thus effecting a cure.

Since *erysipelas* has been known to be a germ disease, and since this germ—erysipelas coccus—has been found in large numbers about the edges of the affected area, dermatologists have been looking for some germicide which will destroy the micro-organism and prevent the spread of the disease without injury to the tissues. This agent, it has seemed to me, would fulfil these indications, so I have used it in a number of cases with benefit. My experience in treating this disease is so limited that I cannot speak with certainty as to its value as compared with other agents, especially ichthyol, but I can say that it has a tendency to prevent the spread of the disease. In the few cases in which I have used it the applications were made daily to the margin of the disease and about an inch beyond it, while a lead and opium wash was applied continually to the inflamed area. All of these cases but one did remarkably well, and I could not wish for better results. The one case which terminated fatally was in an old lady where the disease began on the nose and spread rapidly to the scalp and neck, resisting all efforts to check it.

"The Sensation of Itching," one of the best papers ever read before this Society, by Dr. Bronson, did more to place us on the right track to intelligently treat this symptom, when not the result of a skin lesion, than has ever been done before. In this paper Dr. Bronson states that scratching relieves the itching either by substituting for the pruritus painful or voluptuous sensations, or the active irritation of the skin by this form of counter-irritation, produces better conductivity in the nerves and thus removes one of the principal causes of this unpleasant sensation.

Now, if we can substitute for this scratching some application to the skin, which will produce the same result, only more lasting, we will certainly receive the blessings of our patients even though we may not cure them. Such an agent we have in this solution of carbolic acid, iodine and chloral. When the pruritus is limited to small areas it may be applied with perfect safety although there is some counter-indication for its use. Used about the anus and scrotum I have seen some dermatitis set up lasting for a few days, which although quite painful has always resulted in a marked amelioration of the itching, which not only lasted while the inflammation was present, but for some days and weeks afterward. Many other varieties of skin diseases have been treated by this solution, with various degrees of success, and although I do not want to convey the impression that we have in this remedy a panacea for all diseases to which the skin is heir, I do hope to emphasize that it is a valuable addition to the list of agents we now possess in treating skin affections.

There are some counter-indications for its use, some cases of skin diseases which would be made worse by the employment of any cauterizing agent no matter, if only superficial in its action. In most of the acute inflammatory conditions of the skin I should not recommend its use, especially when the skin is denuded of its epithelium, as in cases of acute eczema or acute dermatitis, nor can I recommend its use in the so-called glandular affections of the skin, or in any of the skin diseases covering a large extent of surface.

Remember that we not only have here a powerful agent, one that is capable of setting up severe inflammation of the skin which may be likened to that of a burn, but one that can be absorbed into the circulation, set up constitutional poisoning, and perhaps cause death. Therefore, care should be taken as to the extent of surface to which this application is made, also as to the age of the patient, remembering that the skin of young children is very easily affected by counter-irritation. Never allow your patients to apply this remedy themselves, but take the whole responsibility yourself, thereby insuring that it is done properly and at a right time. The success which I have derived from its use I believe to be entirely due to the personal attention I have given the patients under my care.

There is, perhaps, no branch of medicine which has made greater advancement in pathology and diagnosis than dermatology; but, alas, in what chaos do we find the treatment of many skin affections, especially chronic skin diseases which show no natural tendency toward recovery. When I see how few dermatologists agree upon any plan of treatment, how many patients go from one specialist to another, seeking relief without finding

it, I become more and more impressed with the remark which I heard a distinguished dermatologist make to his class when speaking of the treatment of skin diseases. He said :

"Gentlemen, the basis of all treatment for skin diseases is grease. It does not seem to make much difference, in a large number of cases, what kind of grease it is, but be sure, gentlemen, it is grease." That is just the trouble. We are too apt to use grease, too apt to use bland and soothing applications in skin diseases which demand strong counter-irritation. Never mind if an acute inflammation of the skin is set up ; it is easy to control, and by its action on the diseased tissue will frequently, as you can all testify in some forms of chronic eczema, prove most beneficial.

Fox and Taylor strongly advised the use of irritant application, in eczema squamosum to stimulate the skin and set up an acute or sub-acute process, which will take the place of the chronic inflammation and yield kindly to subsequent treatment.

Although I am thoroughly convined that this solution possesses, outside of its counter-irritant action, well-marked curative properties in many of the skin diseases, I have no doubt that a portion of the good results obtained was the direct result of substituting for the disease, to which the solution was applied, an acute inflammation of the skin, a condition not only responding readily to treatment, but one showing a natural tendency toward recovery.

After two years' experience in the use of this therapeutical agent, I believe the following conclusions can be safely drawn :

I. That we have in this combination of chloral, carbolic acid and tincture of iodine, in equal portions, a topical remedy of decided value for the treatment of certain affections of the skin.

II. That the combination of these agents produces better results, has a wider range of usefulness and possesses superior therapeutical advantages than are found in either of the remedies when employed alone.

III. That the physiological properties of this solution, upon which the therapeutical advantages of the remedy depend, are those of an antiseptic, antipruritic, antiparasitic, antiphlogistic, analgesic, anæsthetic, absorbent and counter-irritant nature.

IV. That the solution is a powerful agent, and should not be used indiscriminately or carelessly, as there is danger of producing severe dermatitis and constitutional poisoning.

V. That its chief therapeutical advantages are due to its penetrating action into the tissues of the skin, its rapid destruction of all forms of micro-organisms, and its wonderful power in hastening the absorption of inflammatory products.

VI. That it is, therefore, especially serviceable in parasitic skin affections and in all forms of chronic skin diseases characterized by thickening and induration of the skin, accompanied by scaling and itching.

VII. That it changes the form of some skin diseases, substituting for the original disease an acute dermatitis, which responds readily to treatment.

Selected Articles.

A BRIEF REVIEW OF SOME OF THE RECENT PRACTICAL ADVANCES IN MEDICINE AND THERAPEUTICS.

The function of the member of this Association who is called upon to deliver the annual address in medicine is not to give in detail the course and results of laborious laboratory investigation nor to weary his hearers with long reports of cases. It is rather his duty to present as far as lies in his power certain broad views of the present status of the non-surgical side of our work as doctors of medicine.

The consideration of one particular field of work is also out of place and I have therefore decided that a brief and necessarily imperfect discussion of the present status of therapeutics and diagnosis would enable me to fulfil, to some extent at least, the duty which has devolved upon me. The department of surgical therapeutics and diagnosis does not fall to my care and will be ably discussed by Dr. Mudd to-morrow.

By therapeutics I do not mean to indicate a subject already well worn, though new, namely, an enumeration of the new remedies which the manufacturing chemists are foisting upon us with an ardor beyond description and with a success, so far as numbers are concerned, which is appalling to many conservative members of our profession. These drugs have their proper place and form only part of the great line of advance which while it is broken now and again by the development of a weak spot is nevertheless moving forward, bringing with it much cause for congratulation and many promises for even more

beneficent results in the future. To regard our therapeutics of to-day as improved only because of the invention of such compounds is to ignore the whole cause for encouragement, namely the increasing tendency to place all our remedial measures on a rational basis.

Very closely associated with this improvement in therapeutics is the increased accuracy of diagnosis which modern research has placed in our hands, for the correct diagnosis of a case must always be an important preliminary to proper therapy. Not the least of these diagnostic gains is the ability which we possess to recognize the presence of tuberculosis when the signs of the disease are so indefinite that positive information of the condition of the patient can not be gained. Again in many instances where unusual and aberrant symptoms are present, microscopical examination of the blood may show the presence of various micro-organisms. Nor should we forget the valuable aid rendered us by the advances in the diagnosis of gastric affections by the use of the stomach tube and the microscopical and chemical examination of the gastric contents, more especially in regard to the absence of hydrochloric acid in cancer and its excess in cases of gastric ulcer. Finally, an important aid to diagnosis in gastric disorders was the introduction of salol by Ewald to determine the motility of the stomach and the question of dilatation or atrophy.

The day is past when there is any excuse for the physician dodging a diagnosis and treating a patient on the indefinite basis of "general principles," and the public have learned that the shotgun prescription of years ago is only a cover for the ignorance of the medical attendant who expects the various drugs to influence an area, the diseased state of which he is himself unable to discover.

The prescription of to-day is to be written only after careful examination and study of a case, and its constituents must be directed towards the condition they are to modify. It is necessary therefore that diagnosis should be well enough advanced to enable us to discover the exact stage of a malady and the precise condition of the patient's system in addition to the knowledge that a given disease is in existence in his body.

Fortunately the improvements in diagnosis and treatment have kept pace with one another although other branches of medical science have fallen to the rear. The advances have been rapidly yet gradually accomplished, not by startling leaps but by small and lasting accretions which have formed on the sides of our older views, either modifying their appearance or completely changing their aspect.

These gains have not been heralded to the profession and the world at large as have many of the newer surgical procedures which are often so brilliant at their inception that they dazzle the professional eye to such an extent as to blind it to the subsequent shrinkage which takes place in their practical importance. Sudden rushes are attractive and for this reason even the laity often chide the physician for failing to advance as rapidly as the surgeon. The very character of a surgical operation is destined to attract attention from the more humdrum, but none the less important, medical methods, yet it is the latter which require in many instances a greater amount of attention to the minute points of differential diagnosis. As I have pointed out elsewhere the relation of the knife to a diseased tissue must always be identical, while the relation of a drug to a disease process must constantly vary with the perverted function of the special protoplasm involved. The one carves the wood the other grafts upon its living cells impulses which alter its activity. In the one case the questions of shock and repair are the points to be considered; in the other, the ever changing vital processes still more varied by perverted function must be balanced and their importance weighed. For these reasons it is impossible for the physician to advance his methods by strides or bounds, and he can only remember the story of the hare and tortoise when accused of being dilatory.

Leaving these general views of the question of medical, in distinction from surgical advancement, let us if possible discover in what directions we have really made distinct advances. There are those who have seen method after method of diagnosis and treatment rise and fall, and who have in consequence become pessimistic as to the value of new ideas, partly perhaps because they have not employed them properly. There are others who are equally optimistic and excessive in the laudation of new or old methods of diagnosis or remedial measures. A careful survey of the field certainly shows that a gain commensurate with the amount of labor expended has been made, and the only loss or standstill that can be found is the tendency of the profession in general to rush after new things to the neglect of the old, which in many cases deserve more attention than is given them.

A very important part of this advance has been recognition of the fact that many conditions heretofore regarded as distinct individual maladies and treated accordingly, are in reality merely manifestations of functional disorder elsewhere. No more interesting example of this can be adduced than anæmia. But a few years ago we were taught that anæmia was a state in which the blood was impoverished, and these conditions of anæmia might be divided into those which were simple and essential—or in other words those which would respond to treatment and those that would not. We had this empirical information,

and we also knew by experience that while iron was useful in one form of simple anæmia independent of malignant disease, arsenic was more valuable in another. Later than this we came to regard anæmia chiefly as a manifestation of disease in certain blood making organs or an important symptom of many perverted functions, and finally the invention and employment of the hematocytometer and the hemoglobinometer has enabled us to separate anæmia into a condition in which there is a decrease in the number of corpuscles or a decrease in the amount of hemoglobin in each corpuscle. In other words, we now know that pallor may be due to too few corpuscles or too little hemoglobin, and this being known it is only a step to the understanding of the empiricism of years ago in regard to the use of iron and arsenic, namely: that in that form of anæmia due to a diminution in the number of blood cells arsenic did good because by its alterative powers it increased cell activity in blood cell-making organs, while where hemoglobin was lacking, iron came particularly into play. For these reasons we find that small doses of alteratives, such as corrosive sublimate and other mercurials, often overcome the anæmia due to deficient manufacture of cells, and we may explain why it is that arsenic usually fails to do good in chlorosis, an anæmia of deficient hemoglobin, and succeeds in pernicious anæmia, which is characterized by a deficient number of corpuscles but relatively increased hemoglobin.

It is unfortunately only too true that the entire subject of blood making and blood breaking is as yet very imperfectly understood, but our therapeutic facts rest on rational grounds now, if not before, and if the pathologist will give us more information upon these subjects, other remedial measures will be introduced or the empirical employment of others still further explained. Practically speaking, the therapeutist recognizes two very important points, the causes of which the pathologist must eventually solve, namely, that one class of anæmias is due to defective or deficient hemogenesis and another to excessive hemolysis. The former are generally believed to form the simple class and the latter the essential or pernicious class. It is in the deficient hemogenesis class that we fail. More than this, the causes of excessive hemolysis are so various that we can further divide them into movable and permanent; the movable being represented by the cases in which copræmia or auto-intoxication takes place, and the others by the true pernicious anæmia, about which we really know very little, save that most observers find evidence of profound hemolysis in the percentage of iron in the liver; while in the dark colored urine they believe a destructive agent exists which prior to its excretion has slaughtered many corpuscles. Unfortunately it is at present impossible for us to separate clinically the hemogenous anæmia from that of hemolytic excess unless we find evidence of great corpuscular disintergration in a copious elimination of hemoglobin in the urine, or a jaundice evidently hematogenous in character, or a large number of defective corpuscles which would perhaps indicate defective hemogenesis rather than that they were scarred veterans of a battle with a poison in the liver cells or elsewhere. Post-mortem signs often aid us in the differential diagnosis, but this is too late to do any good to the doctor or patient.

There is one point, however, about which there can scarcely be any doubt, and that is that in many cases iron is greatly abused, being given where there is no indication for it, or more frequently given in excessive doses. By excessive doses I refer to as much as six to twelve grains a day of reduced iron. The amount of iron in the human body is very small, and every study ever made of its absorption and elimination after absorption has shown that these processes are very slow. Hamburger recovered from the feces nearly all the iron administered, and Jacobi proved that even when the iron was injected into the veins 10 per cent. was at once eliminated by the bowels, liver and kidneys, and the remainder deposited in the liver, spleen and other tissues in the same manner as is any metallic substance. The researches of Gottlieb have also been in confirmatory lines. When we consider that there is in the human blood only about thirty-nine grains of iron all told, we can see that the use of twelve grains a day in the course of a little over three days places a double quantity of the metal in the economy which is not needed, and is either cast out or deposited at any convenient spot to lie undisturbed until it can be extruded.

Much of course depends upon the cause of the anæmia, but there is only one excuse for the use of the doses named, viz.: a condition of the digestive apparatus which results in the formation of a sulphide of iron in great quantity, so that only an infinitesimal amount escapes into the system. This explains the empirical fact that in some cases of chlorosis or intense anæmia iron has to be given in large doses to accomplish any good.

One of the best and most recent papers on this subject is that of Ralph Stockman, who gives a masterly summary of the subject of the absorption of iron in chlorosis. In this summary he points out that we have three chief theories as to the action of iron in anæmia. The first, the absorption theory, is based on the fact that as iron is taken into the body with the food, the iron of the hemoglobin must be obtained from this source, and therefore that medicinal iron given by the mouth must be absorbed. The second theory rests upon the belief that iron is not absorbed when given by the mouth, in addition to that in the food, but simply acts as a stim-

ulant to the mucous membrane of the alimentary canal, therefore increasing the digestion of food and so overcoming anæmia by the general improvement concident upon proper nutrition. The third theory is that of Bunge, namely : that in chlorotic conditions there exists an excess of sulphur or sulphretted hydrogen in the bowel, which changes the iron in the food into a sulphide of iron which he says cannot be absorbed. He believes that the inorganic iron which is given as a medicine saves the organic iron of the food by combining with the sulphur, and so indirectly cures the anæma by the protection afforded the food iron. It is important to remember that each of these theories has been supported by many careful experiments, but it is also well to bear in mind that both the hypotheses and the experiments supporting them may be erroneously based. Thus we have no right to imagine that the inorganic preparations of iron have a stimulating power over the alimentary mucous membrane, or even if they have, that this power is exerted in the peculiar line of aiding in the absorption of the organic iron of the food. Again, the researches of Hamburger, Damaskin, Gottlieb, Muller, Jacobi and Socin which show that after the internal use of inorganic iron there is no increase in the iron in the urine, are valueless so far as the conclusions drawn by them are concerned, namely : that as there is no increase in iron in the urine there is none in the blood, and therefore it is not aborbed. These conclusions are not justified, because they are based on the erroneous view that because iron is not in the urine it is not in the blood, and because it is not in the blood it is not absorbed. Every one knows that in this case of chronic lead poisoning when the body is saturated with the metal there is often no lead in the urine, the poison being deposited in the tissues, and if this is true of lead it may be of iron. Particularly is this to be remembered when we find Stockman quoting the researches of Mayer, Bidder, and Schmidt and a host of others who have proved that we are not to look to the kidneys as the path for the excretion of iron, but to the intestinal walls. Finally, Stockman has proved that when iron is used hypodermically it cures anæmia when it can not stimulate indigestion or counteract sulphides.

Leaving the interesting and intricate subject of anæmia and its diagnosis and treatment we find another condition now recognized as a symptom, though still often classed as a disease, namely asthma. In reality asthma is no more a distinct disease than is dropsy. It is a manifestation of disease or disorder in other organs which result to some extent in local pulmonary signs. I need only mention the fact that every case of this condition will present some evidence of reflex irritation or other extraneous cause if it is carefully sought for, such as metallic poisoning, hay fever, cardiac, or naso-pharyngeal disease. We have therefore made an advance to the gradual knocking away of the props holding asthma on the pinnacle of being a distinct disease, and in a given case must direct our diagnostic and therapeutic powers first to the discovery and removal of the cause and second to the relief of the local manifestation at the time of the attack, including too, in many instances, the treatment of the secondary conditions caused by the paroxysm. It will be remembered that at one time we had two schools of thought concerning the actual local cause of an asthmatic seizure : the one claiming that the obstruction to respiration was due to swelling and hyperæmia of the mucous membrane of the bronchial tubes ; the other that it was the result of a spasm of the muscular fibres of these tubes. Now we know that both conditions exist and that both are probably the result of irritation or perverted function of the vagus nerves, for the filaments of this nerve are not only supplied to the bronchial muscles but also the local vessels. Further than this, the peculiar relation of these important nerves to the cardiac, gastric and pulmonary area and to the recurrent and superior laryngeal nerves all tend to complete a chain of physiological evidence hard to equal, particularly when we remember that the vagus is the governing nerve of the respiratory function and that its origin is intimately associated with important vital centres and nerve roots in the medulla. Here, then, we have an improvement in etiological knowledge which enables us to discern a cause, and give an explanation of almost every empirical fact regarding the use of anti-asthmatic drugs, since nearly every one of these we now know depends upon its action upon the unstriped muscular fibres, the vagus nerve or on the depression of reflex activity, for its therapeutic power.

There is still another condition which is gradually passing from the list of diseases into the list of symptoms, namely diabetes mellitus. Its passage from the dignity of a disease in itself to the less important place of a manifestation of a disease process underlying it, is only delayed because the physiologist and pathologist have not succeeded in fully explaining the process of sugar manufacture in the body in health and disease. Even at the present time we scarcely appreciate the numerous causes which have already been discovered as capable of producing this symptom. Not only does injury to Bernard's center in the fourth ventricle result in hepatic hyperæmia, which in turn results in glycosuria, but section of the vaso-motor fibres in the spinal cord at such a point as to involve the nerves of the liver results in similar disorder according to Schiff. Pavy has proved that destruction of the superior and inferior cervical sympathetic has this effect and it has

been known to follow intense inflammation or irritation of such nerves as the sciatic and trigeminus and some have gone so far as to explain the glycosuria seen sometimes in those suffering from sciatica to the sciatic irritation.

Aside from these nervous factors governing glycosuria very much more recent studies have shown that the gradually growing recognition of diabetes as a symptom is founded on a sound basis, for we have now before us undeniable evidence that such a thing as pancreatic diabetes may occur. Years ago it was first noted as a physiological possibility, but the recent studies of Minkowiski and von Mering with several others have placed the entire question in a better light. Extirpation of this gland results in glycosuria but if one-fifth of it is left behind the sugar does not appear in the urine and this, with other facts, points to the pancreas having a power through a ferment rather than by its general secretion. Clinical cases are also now on record in which after death there has been fonnd a condition of fatty degeneration or atrophy of the gland, either as the result of some morbid process or indirectly through the impaction of calculi in the pancreatic duct which led to a fatty degeneration or a cirrhosis as in the cases recently recorded by Freyham. Therapeutics can do more for the diabetic than the pathologist can tell him of the cause of his disease, but the recollection that diabetes is a symptom of a number of conditions should lead the physician to the recognition of the fact that if a remedy successful in one case fails in another it is probably because he has failed to discover that the cause in each case is not identical.

The ability to apply observation to cases with resulting accurate diagnosis and still more accurate therapeutics can be admired in every instance where it is observed, but it would be difficult to name a more eminent illustration of the beneficent esults of such a trinity of good offices than is pictured by the work of Lauder Brunton on the nitrites. Brunton had noticed two facts, the one in the sick room, the other in the laboratory. By the bedside he found that in many cases of angina pectoris a condition of intense arterial tension existed which was manifested not only in the cord-like condition of the arteries but also by the pallor of the skin due to contraction of the peripheral capillaries. This condition often preceded the attack of pain. Instead of tossing this discovery aside with the dogmatic belief that it was a secondary result of severe pain, he looked further to see if there was a casual relationship between the two conditions. Remembering that the over-distension of any muscular cavity, such as the bladder or intestine, results in pain, it occurred to him that a spasm of the arterial system might result in such over-distention of the heart muscle, already feeble, as to cause the the typical pain of angina pectoris and this hypothesis was supported by a recollection of several facts, namely, that exercise always produces contraction of the blood vessels partly by the contraction of voluntary muscles on large areas of capillaries by the increased demands on the circulation, and finally that it is in gouty persons with irritable blood vessel walls that angina pectoris most frequently asserts itself.

In the laboratory Brunton had found that the nitrites all lowered arterial pressure and by so doing caused the heart to empty itself very readily of blood, partly by depressing the vagus nerves and so permitting increased cardiac action. Here then was, in theory at least, the very remedy which should meet the indications in heart-pang and the practical application of the hypothesis has given us the valuable method of treatment so universally employed.

The interesting relationship between physiological and chemical research and practical therapeutics when they are associated through logical deduction can also be readily studied in the production and use of a number of compounds, but in none other more satisfactorily than in the nitrites. Chemistry showed the various combinations which could be formed in this series and proved that some of them were more stable than others, the pharmacologist showed that those who had stability were more slowly decomposed in the animal organism, and in consequence that their action was not so sudden nor so fleeting, and the therapeutist recognizing that an unstable preparation, such as nitrite of amyl, could only be used for momentary effects at once found the stable compounds of peculiar value when continued action was desired. It is because of this stability and consequent comparative slowness of action that the nitrite of sodium, potassium and nitro-glycerin find favor and that the still more recently employed and more stable compound, cobalto-nitrite of potassium bids fair to come into general use.

I can not leave this subject without pausing for the moment to insist on the importance of this question of seeking always for the cause producing any symptom, in order that our therapeutic measures may be well applied. Many of us have doubtless experienced in boyhood "the pain in the side" about the heart which was such an annoying and incapacitating complication of foot races or the game of hare and hounds. For a number of years I wondered what the explanation of this pain was, and still more why it passed away as the boy gets "his second wind." The reason is now evident. The first effect of severe exercise is to cause a rise of arterial pressure by reason of increased circulatory activity; this is soon accentuated by the obstruction offered to the flow in the capillaries of contracted muscles which ordinarily are vast capillary areas, and finally the effort generates an increased amount of carbonic acid gas in the

blood which stimulates the vasomotor center and still further increases arterial resistance. As a result of these agents and the altered pulmonary circulation the heart becomes distended with blood and pain results. Almost at once, however, the natural demand made for blood made by all organs when inactivity causes secondary hyperæmia in the peripheral capillaries, the lungs are able to catch up to and eliminate the CO_2 and the heart is able to carry on its duty with ease, even though the excessive exercise be continued, or in other words the boy gets his "second wind." There are good reasons, therefore, in the custom which prevails among some athletes of taking strychine or caffeine or black coffee before a foot race on the ground that it saves their wind. By means of these powerful, cardiac and respiratory stimulants they enable the heart to overcome resistance and avoid distention of its cavities and also increase the ability of the nervous centres to discharge impulses which the nerve trunks may the more quickly carry to the more tributary muscles. Such a form of explanation underlies the pathology and treatment of "shock," a condition often wrongly treated because its *rationale* is not understood. All causes which give rise to great nerve impulses result in some degree or stage of shock, and these states are chiefly manifested in the heart and vaosmotor system. As has been well pointed out elsewhere, any frightened woman will exclaim "You frightened me so my heart stood still," and a second later will remark, "Just feel how fast my heart beats." The primary shock has so stimulated her inhibitory cardiac nerves that they at first inhibit the action of the heart muscle and then having acted excessively reaction sets in and they permit the heart to move on uncontrolled even to an ordinary degree.

This condition in a more or less modified form is found in all cases of "shock." It has been proved by experimentation on the lower animals that it is practically impossible to produce death by irritation of the vagus and we know that death rarely occurs in the first stage of shock unless there exist previously cardiac disease in the muscle or valves. We very rarely see shock in its first stage except in the man who has "his breath knocked out of him" by a blow, not over his lungs, but over the solar plexus which reflexly results in vagal irritation. It is the second stage of shock which we are called upon to treat. Here we have the entire vascular area in a condition of profound relaxation, a condition exceedingly dangerous to cardiac integrity. Nothing is more stimulating to a man in accomplishing a task than a moderate amount of opposition or number of difficulties, and nothing is more stimulating to the heart than the normal resistance offered by a blood pressure maintained by an intact vasomotor centre. The blood vessels relaxed the heart pumps, as it were, into vacancy or as impotent of result and as exhaustingly as the wheels of an engine on a slippery rail. The result is rapid failure of the cardiac muscle by reason of futile endeavor and because the coronary arteries are imperfectly filled. The great arterial relaxation also results in serious changes in nutrition and the profuse sweat weakens and chills the body. It is at this time that the employment of belladonna or atropine becomes valuable in the extreme. By its peculiar influence on the vasomotor centre it produces normal vascular tone, stops the leaking skin and steadies the circulation, simultaneously tending to raise bodily temperature. If at the same time hot coffee be given as a cardiac tonic containing heat, and strychnine is used, we have a fulfilment of every indication.

Elsewhere I have called attention to what seems a common error on the part of many practitioners, namely, an unnecessary dread of good sized doses of strychnine. We frequently see $\frac{1}{60}$ or $\frac{1}{30}$ grain given at a time when better results would be obtained if $\frac{1}{10}$ to $\frac{1}{5}$ grain was used hypodermically. Profound collapse or advanced shock enable the patient to withstand large doses of this drug, as does severe pain enable him to withstand full doses of opium, and full doses must be used if good results are to be expected. The question of the effect of mental shock or fright upon surgical shock is of great importance. Even animals when brought directly from the street to operating table, show these signs most markedly, and how often does the gynecologist try to get his patient away from the sight of the preparation for the operation, or away from the little children to whom the mother bids a tearful good-bye before going on the table for a severe operation.

A valuable illustration of advances made in our understanding of certain diseases is afforded by epilepsy. There is probably no one here to-day who does not remember the time when the seat of origin of the epileptic seizure was in dispute, some holding that it was due to disorder of the circulation at the base of the brain, and others that it arose from disturbance in the cerebral cortex. Thanks to the studies of Ferrier and a host of others in England and on the continent, we now know that true epileptic seizures have their origin in the cortex and practically nowhere else. This being known, the *rationale* of the employment of the bromides in this disease was speedily explained through the researches of Albertoni and of Seppilli, who found that these preparations so depressed the cerebral cortex in its motor area that far stronger currents were required to elicit muscular response when the animal was under the influence of bromides than when in his normal state or under the influence of the ordinary anæsthetics. At the same time that this depressant action of the bromides was discovered, its powerful influence as a depressant to reflex action became fully appreci-

ated, and its influence in a convulsive disorder, such as epilepsy, became the better understood. It is true that there is still a great deal to be done before we discover the cause of the epileptic attack, or in other words, the changes in the cerebral cells which permit of epileptic discharges, but even in so strange a disorder there is reason to hope that improved methods of research may eventually remove this blot on the fair fame of modern pathology. Nor is this hope without foundation for its accomplishment. Those of you who have had the opportunity to study the elaborate research of Hodges, of Madison, in this State, will already have reasoned that if the changes in the nerve cells produced by excessive exercise can be studied by means of staining and the microscope, that it is not impossible for the changes in epileptic cells to be noted by methods of a similar character, particularly as epilepsy is a disease which is seen in the lower animals as well as in man. While such studies as those which have just been mentioned show advances in the indications for and rational employment of drugs, instances are not lacking in which contra-indications to the use of some remedies, have been developed or the empirical knowledge of their contra-indication explained. Thus it had been a recognized fact in therapeutics that quinine when given in full doses always caused an increase in the number and severity of epileptic seizures in those who were subjcet to this malady, but it remained for the experimental therapeutist to show that quinine stimulated the cerebral cortex and so caused increased irritability of the motor area.

Again, the knowledge of the depressant action of chloral on the motor tract of the spinal cord and the same effect of bromides on the sensory tracts has placed in our hands the best antidotal treatment for strychnine poisoning, while the discovery that conium produces muscular quiet by depressing the motor nerves and not by acting on the spinal cord shows us that in spinal convulsions its employment is irrational because it only blocks the pathway to the muscles instead of preventing the discharge of impulses by acting on the parts directly at fault.

The discussion of this topic would not be complete did I not refer to one very familiar example of the value of physiological and pathological research in relation to disease, namely, the discovery of the malarial germ and the fact that quinine kills this organism. Only ten years ago we were taught that the use of quinine in malarial disease was purely empirical and to-day its rational employment is accepted universally all over the world.

In our pride over our advances made because of good sense we should not, however, sneer at some improvement equally valuable which are in our hands to-day rather because good luck than by logical deduction. Thus the scarcity of quinine and its consequent high price forced the chemist to seek for a method of producing this drug by synthesis, and the result has been not only the direct discovery of the value of salicylic acid in rheumatism, but indirectly the development of that invaluable class of remedies of which antipyrine is the chief. Nor does the value of acetanilide, phanacetine and antipyrine rest upon the action for which they were introduced into medicine, namely, the reduction of fever, but rather upon their power, accidentally discovered, to relieve pain.

The value of some of the compounds derived from the same sources is in several instances quite equal to that of the integral parts. Thus salol is a remedy which many of us would no more dispense with in intestinal diseases than we would give up opium, quinine and digitalis.

Of the prospective value of the treatment of infectious diseases by injections of serum from those who have been rendered immune, of the promises held out to us by the pathologist of a more clear understanding of many puzzling diseases and of the possibilities of drug therapeutics in the near future I shall not speak. Much might be said of them, but in their present condition they exist more in the future than in the present.

We are certainly passing through the golden age of medicine, and by the rational line of our advance are avoiding those theories which have misled our predecessors into beliefs since proved to be erroneous.—H. A. Hare, M.D,. in *Med. Jour of the Am. Med. Assoc.*

REPORT OF THREE CASES OF HYSTERICAL JOINTS.

I desire to direct the attention of this society for a few moments to a class of cases which, while not infrequent, are far from common. The textbooks upon surgery give but little prominence to this class of cases, and usually dismiss the subject with but a few lines. More than half a century ago Brodie established the existence of these cases, and proved that no pathological condition of the joint was present.

The border line between hysteria and simulation is an exceedingly indistinct one, but I think we must all recognize a difference between a malingerer and a hysterical subject. Without attempting to enter into a discussion of the pathology of hysteria, I desire to call your attention to the fact that, so far as we can ascertain, the affection in hysteria is a real one to the patient, while a malingerer has an inward consciousness that he is a fraud.

By far the larger number of hysterical cases of joint trouble are found located in the hip or knee,

but the cases I desire to report are peculiar in that the ankle was affected in two, while the hip was the affected joint in the third.

These cases assume great importance when we consider that these persons are very apt to feel it their duty to sue some surgeon for damages because he failed to secure a good result from the early treatment. In the three cases I report there was a history of a primary injury, and two of them were anxious to have me express a derogatory opinion of the previous treatment. This one point, the danger of suits for malpractice, should make each one of us very careful about expressing any opinion as to previous treatment. Two of these cases were anxious, and the friends were very anxious, to sue the physicians who had treated the original injury, and I doubt not that any ordinary jury would have been much impressed by the deformity presented.

The diagnosis of these cases sometimes presents great difficulties, the deformity being so apparent that we are misled. It must be regarded as certain that the concomitant symptoms are of the greatest importance in arriving at a conclusion. Fortunately for us, it rarely happens that the joint affection is the only hysterical manifestation present. Usually a careful examination will disclose tender spots over the spine, globus hystericus, hyperæsthesia, or other phenomena of a hysterical nature. By far the greatest difficulty in these cases is the establishment of a diagnosis, but, having once reached a conclusion, I believe that relief can almost always be obtained by the use of the proper method of treatment.

Just here I wish to call your attention to what I believe to be the most essential point in the treatment of this class of cases, and that is isolation from friends and sympathizers. It is wise, I believe, to decline attending all hysterical cases unless the patient and her friends agree to have the patient isolated. Upon several occasions I have undertaken cases of this sort at their own homes, but my efforts have always resulted in failure. Hence, as an almost invariable rule, insist upon having the patients removed to a hospital or elsewhere, and have them placed in charge of a nurse in whom you may place absolute reliance. The part of the nurse is a more difficult one than that of the physician, for the reason that she must remain constantly with the patient; hence it is absolutely necessary that she be firm, yet kind; gentle, yet determined; strong-willed, yet not domineering. The nurse should also be well versed in the art of massage, and know how to administer electricity.

From this description it will readily be seen that one of the most important, if not the *most* important point in the treatment is the proper sort of a nurse to assist you in the course of treatment to be pursued. See to it, therefore, that you select a competent nurse to assist you, or else your efforts will come to naught.

As a general rule, you will find these cases present a family history much marred by neurotic tendencies; hence the necessity for prolonged and constant care. In a sense it may truthfully be said that we must re-create these individuals.

One more point before passing to a report of the cases: It is extremely important to recognize these affections early, for, if unrecognized, the treatment which would be made use of in true organic disease of the joint would be the worst possible for cases of a hysterical nature. The constant care and attention necessary in the former class of cases would tend to aggravate the complaint, while the various mechanical devices, of so much benefit in true articular disease, might make mischief in even a normal joint, and thus cause the patient to become a permanent cripple.

CASE I.—Mrs. R., aged twenty-seven, married; a very large, fleshy woman. Both parents committed suicide. Is her husband's second wife. Soon after marriage her husband infected her with gonorrhœa. Has never had any children. Has leucorrhœa and tenderness in the ovarian region. The history, combined with physical examination, indicates the existence of a pus-tube on the right side.

Last January (1891) she suffered a very slight fall, following which she found that her right foot was raised at the heel, the toes pointing downward and rotated inward. A physician was called, who placed the limb in a plaster dressing; but when the dressing was removed the foot *immediately* assumed the position above described, and has remained so ever since. During the interval she has been treated by several physicians; has been put in plaster several times, had a special brace made, etc., but no benefit has been derived from all the treatment received.

Patient states that she had convulsions at each menstrual period. Says she is very nervous. Complains of long, persistent insomnia. She most earnestly affirms that she has absolutely no power over her ankle.

On December 1, 1891, the day of her admission to the surgical ward of Christ's Hospital, the following notes were made: Position of the foot as above described; the tendo-Achilles appears firmly contracted and the foot rigid; anæsthesia *above* the ankle; walks with two crutches; appetite poor; sleeps badly; tender spots over the spine; globus hystericus and clavus well marked; bowels constipated; emotional, mostly melancholic.

Appreciating the fact that we had, in all likelihood, to deal with a case of hysterical contracture, the patient was placed in a room alone. One nurse only was allowed access to her; all others except the masseuse were strictly forbidden entrance. Her husband and relatives were asked to

remain away from the institution. She was ordered a teacup of beef-tea every three hours, and general massage for fifteen minutes daily.

I have rarely seen a patient of this class more refractory to restraint than was she. Weeping, scolding, threatening suicide or death by starvation were some of the various means she took to work upon my sympathy.

By December 8 the patient began to think that death by starvation was too harsh a method, for she began to complain bitterly of hunger, so her dietary was enlarged by the addition of two eggs and a piece of toast for breakfast, and a small piece of beef-steak for dinner. In the meantime the cup of beef-tea was continued.

On December 8 a note on the history says that she begins to have some control over the foot, is able unaided to bring the foot into proper position. Mental condition much changed, is cheerful and pleasant. Has no complaints to make, but is extremely anxious to try walking without crutches.

By December 10 she had gotten her foot into proper position and retained it there. Believes she can walk all right. Her functions are now normally performed, and her complexion is indicative of good health.

After five more days' confinement to bed I allowed her the privilege of attempting to walk without crutches. Her foot was in normal position, and she experienced no difficulty in walking without any support.

On December 20 it was found to be absolutely necessary for her to sign some legal paper, so I had to relax the discipline and allow her to leave the hospital. She was able to wear her shoe and walk unaided, but her mental condition was still somewhat stormy.

I see this lady upon the streets quite frequently, and she walks as well as anybody. There has never been any return of the trouble.

CASE II.—Mary ——. Case seen with Dr. L. S. Colter, January 12, 1892. On the 6th of January patient slipped upon the sidewalk and fell, striking the outer side of the left foot against the curb-stone. She got up and walked half a square to a car, rode about two miles in the car and then walked two squares to a physian's office. He prescribed a liniment and a rubber bandage.

On January 9 the foot became extended, the toes pointing downward, the heel drawn up and the inner side of the foot drawn up. When seen by me on the 12th the condition above described was present. There was no discoloration. A tense, localized, fluid swelling was present over the point where the curb-stone struck the foot. Complained of excessive pain whenever the foot was touched. By diverting her attention it was extremely easy to put the foot into normal position and retain it there, but as soon as attention was called to this member the former condition would be brought about by muscular action.

I gave it as my opinion that we had to deal with a hysterical joint, and advised treatment for the condition. The case passed out from under my observation, but Dr. Colter assured me that the opinion I had expressed was fully borne out by the result of his treatment.

In this case there was not a distinct neurotic history, but she was extremely anxious to have us express an unfavorable opinion of the treatment of the first physician.

CASE III.—Grace E., aged twelve, only child, mother a widow, and devoted to her child. Mother neurotic and emotional.

About four years before the case came under my observation the right foot, after a trivial injury, suddenly turned in such a manner that the toes pointed directly outward and the heel toward the other foot. The foot has remained thus ever since. She has constantly complained of great pain in the hip. Several times within the past few years she has had fainting spells while at school. Has also complained of pain in the breasts, to relieve which frictions have been employed. She has been very headstrong, and has usually had her own way with her mother. The diagnosis of hip-joint disease had been made, and the mother advised to be very careful of her.

On December 10, 1892, the mother and child came to my office. After a cursory examination I advised sending her to Christ's Hospital in order that a careful examination could be made, and, if necessary, an anæsthetic employed. This was agreed to.

I was much struck by the fact that the patient was well nourished and had a good healthy appearance. She was unusually well developed for her age, and presented no signs of a cachexia. Her complexion was ruddy, that of a person in excellent health.

The condition of the breasts was first examined. I found nothing present beyond the beginning development of these organs. When I touched the breasts a seraphic smile overspread her countenance, which indicated something other than a painful sensation.

At this point in the examination I playfully remarked: "Grace, you are a fraud." This playful remark was met by a storm of indignation, her denials being very emphatic. To myself I whispered, "methinks she doth protest too much."

An examination of the leg failed to reveal any atrophy—in fact, it was as plump and well rounded as its fellow. There was no shortening or lengthening. When I touched the leg she almost screamed with pain. The lightest touch on any part of the leg apparently produced the most intense pain, and attemps at movement produced

groans and screams. By attracting her attention to other matters I demonstrated that the foot could be placed in the normal position without causing her the slightest unpleasantness.

By questioning the mother more closely I found that the young lady presented many other hysterical phenomena. The globus hystericus was apt to choke her whenever something unpleasant was required of her. Her fainting spells were prone to occur at such times as her lessons were illy prepared. I also found that severe and distressing symptoms would be dissipated very quickly when she was anxious to do something which pleased her fancy.

The diagnosis of hysterical joint being made, I advised the mother to allow her to remain in the hospital. She readily agreed to this, but her enthusiasm began "to ooze out like" when I told her that her daughter must be isolated, and could see nobody but the nurse and myself. After a hard struggle with the mother's feelings I succeeded in convincing her of the necessity for the method prescribed, and she consented to the arrangement.

The patient was then put into a room alone, undressed and put to bed. Daily massage and a milk diet were prescribed. The nurse was instructed to be firm with her, and pay no attention to her complaints. Absolute rest was ordered. She wanted books, but these were forbidden.

After she had gotten into bed and comfortably settled I went into her room and gave her an idea of what we intended to do; she became quite demonstrative, and told me she would never consent to the separation from her mother, and that she would cry constantly until allowed to see her. After a short but futile attempt to have the rules changed, I informed her that it was only two weeks before Christmas, and that her ability to celebrate that day depended entirely upon her strict adherence to the rules. As I was leaving I said: "Grace, I want that foot straight by the time I come to-morrow."

To abridge a lengthy narrative, I will say that the foot *was* straight the next morning, and has been so ever since. The discipline, however, was kept up for two weeks, with the result that all symptoms disappeared. Her appetite, which before the isolation had been capricious, had become excellent. I think I can safely say that she was mentally, morally and physically benefited by the treatment.

Under date of April 9, 1893, I have a letter from her mother saying: "I know her health is better than it has ever been."—J. C. Oliver, M.D., in *Lancet-Clinic*.

ABSOLUTE ALCOHOL is used by Alfred Smith for disinfecting cutting instruments in abdominal work.

PAINFUL MICTURITION IN WOMEN.

In an admirable lecture upon this subject, Herman (*Provincial Medical Journal,*) states that about one-half the patients who consult a specialist for diseases of women complain of pain in passing water; but it is only the diseases which cause severe pain which require special treatment, so far as the urethra and bladder are concerned. All these cases of severe pain depend upon local diseases, which can only be discovered by direct examination. There are three places in which disease may exist occasioning this suffering,—namely, the *meatus urinarius*, the uretha, and the bladder. Pain in the *meatus urinarius* may be caused by *urethral caruncle*, by chronic congestion or suppurating cyst of the urethra, by abscess of the urethro-vaginal septum, or by a tender, congested condition of the urethral mucous membrane.—Chronic congestion of the urethra is chiefly seen in pregnant women; the urethra is swollen and tender and feels like a thick cord. Not only the act of micturition, but sexual intercourse may occasion almost unbearable suffering.

The treatment for this condition is complete rest, cold sponging on the part, cold hip-baths, the use of vaginal astringent injections, one or two leeches applied by a glass leech-tube to the swollen and tender urethra, and gentle laxatives.

Chronic abscess of the urethra-vaginal septum is rare, and is characterized by a tense, hard, convex, bullous, very tender swelling between the urethra and vagina.

The treatment is evacuation. If there is a spot on the vaginal aspect of the swelling which is thin, and fluctuation is felt, the proper course would be to cut into this thin part. If there is no such spot the urethra should be dilated under an anæsthetic until the canal will admit the finger, and the purulent collection can be evacuated through the urethra.

Suppurating cysts of the urethra form a pouch communicating with this mucous canal by a narrow, somewhat valvular, opening: urine gets into the pouch, decomposes, and inflames the sac. On examination, a round, tender swelling is found in the urethro-vaginal septum, varying in size from that of a pea to that of a hen's egg. By pressure there will be voided either urine or urine and pus, sebaceous matter, or a calcareous deposit, depending upon the nature of the cyst. These cysts do not run the course of an abscess, which gradually close up once an opening has been made for the escape of pus, but they continue indefinitely in the same state, alternately filling with pus and urine, and being partially emptied by pressure.

The treatment is excision of the whole or greater part of the cyst-wall. This is best accomplished by first laying open the cyst freely from the vagina.

What is next to be done depends upon the skill of the operator. This cyst-wall should be dissected out and the raw surfaces brought in contact by means of either cat-gut or shotted sutures. If a portion of the cyst near the opening is left and the rest is closed, the object of the operation will nevertheless probably be obtained, for if the pouch is obliterated there will be no place in which the urine can be retained and decomposed, and therefore no inflammation. If the operator mistrusts his manipulative skill, it may be enough simply to open the cyst freely from the vagina, and then, by keeping the vaginal opening from closing by packing with lint or gauze, retention of fluid in the cyst will be prevented, the urethal opening may close, and then the cyst will be left with an opening only into the vagina. If no more urine gets into the cyst-cavity, inflammation will subside and no further symptoms will be exhibited.

If there be much inflammation of the cyst, of the urethra, or of the bladder, it may be well to make no attempt at closing the opening until such inflammation has been subdued by appropriate treatment. If the cyst is suppurative, or not open, or the urethral opening of an inflamed diverticulum has become closed, the condition cannot be distinguished from an abscess. When the pus-cavity has been opened, its cystic character will be inferred from its definite smooth fibrous wall. An abscess has not a thick fibrous wall. The inside of a diverticulum may be trabeculated, so that the origin of the pus cavity cannot always be surely made out from the feel of the interior. If the cavity be an abcess, it will quickly fill up; if it does not quickly become obliterated, it should be treated as a cyst. In some cases the patient will complain of severe burning, cutting pain at each act of micturition, but the meatus will be found to be healthy, nor on palpation through the vagina can any area of inflammation be felt. On urethroscopic examination of the mucous membrane it will be found a vivid red or deep purple, appearing in patches or involving the whole mucous surface. Passage of the catheter is extremely painful.

The treatment is to apply some alterative to the diseased mucous membrane; the best, in the author's opinion, is iodoform. The application is most conveniently made by putting into the urethra a bougie made of iodoform and cacao butter. A little wool put between the labia will prevent the bougie from slipping out. In recent cases the use of three or four bougies will cure the patient. In cases of very long standing more prolonged treatment will be required. Nitrate of silver is also serviceable in this condition. In some cases application of nitric acid to the tender part is followed by relief. Dilatation of the urethra is also to be recommended. In some cases both the meatus and urethra are healthy, but on passing a bougie great pain is experienced as it enters the bladder. In these cases a urethroscopic examination will show either hyperæmia or fissure of the vesical neck, the symptoms of extreme pain on micturition persisting afterwards; also great frequency, and difficulty in emptying the bladder. Sometimes a little blood escapes with the urine. The urine is clear, and there is tenderness about the vesical neck. Direct examination shows the fissure as a small grayish ulceration, with red, inflamed edges at the vesical neck.

The treatment consists in dilatation of urethra under anæsthesia; this is best accomplished by means of Hegar's dilatators until the urethra admits the finger. Temporary benefit always follows this procedure, and sometimes permanent cure. The objections to this treatment are that there is danger of septic infection of the bladder and of permanent loss of control over the sphincter. Inconvenience rarely results unless dilatation is carried beyond the point necessary to admit the finger. In case the dilatation is unsuccessful in relieving symptoms, vaginal cystotomy is indicated. To perform this operation a director should be introduced into the urethra and held exactly in the middle line. Open the bladder from the vagina by cutting upon the director. If the incision is exactly median, no important part can be wounded. To prevent this opening from closing, Greenhalgh's India-rubber stem may be employed, or the vesical mucous membrane may be sewed to the vagina on each side by a catgut stitch. All pain ceases at once, and if the artificial fistula is kept open long enough, the ulcer heals, and then the fistula can be closed and the patient remains well.

To minimize the discomfort of the artificial incontinence resulting from this operation, the patient should be kept upon a fracture-bed. The rest in bed is of itself beneficial. If nothing is done to prevent the healing of such an incision of the bladder, it soon either heals or contracts to a canal only large enough to admit a probe. As to how long this fistula should be kept open no rule can be given. If as the fistula heals symptoms return, the artificial opening should be again enlarged.

Baker's method of treating these cases is to keep the patients in bed for only a few days, then to fit them with a urinal, and allow them to get up and enjoy fresh air and exercise. The fistula is kept open for months, and is not closed until the interior of the bladder has ceased to be tender and, in case of cystitis, until all trace of pus or blood has disappeared from the urine. This, however, sacrifices the advantages of rest, and it has the discomfort of constant soiling of the clothing. —*Therapeutic Gaz.*

The prolonged and habitual use of opium in any form will cause organic renal disease.

TREATMENT OF ECLAMPSIA.—In a paper read before the Paris Academy of Medicine, M. Charpentier presented the following conclusions: (1) Every pregnant woman whose urine gives the slightest indication of albumin should be immediately put upon an exclusive milk diet. This regimen is the preventive treatment *par excellence* of eclampsia. (2) When a patient attacked by eclampsia is vigorous and cyanotic, bleeding, from four to five hundred centigrams is indicated, and should be followed by the administration of chloral. She should be put upon a milk diet as soon as possible. (3) When the patient is delicate, the cyanosis less marked, the convulsions less frequent, chloral alone may be sufficient. (4) Labor should be allowed to begin spontaneously, and to pursue its natural course whenever possible. (5) If the contractions are insufficient, delivery may be accomplished by version, or by the forceps, if the child is living; if dead, by cephalotripsy, basiotripsy, or cranioclasis. (6) Interference should be postponed until the parts are completely dilated, so that the operation may be performed without injury to the mother. (7) Labor should be induced in those cases only in which medical treatment has completely failed. (8) Cæsarean section, or incisions of the cervix for the purpose of inducing labor, should never be attempted.

In the discussion on the paper M. Guénot believes eclampsia to depend upon the association of two elements: toxæmia and hightened reflexes. Many cases in which reflex influences are the preponderating cause are relieved by delivery; others suffer from genuine toxæmia and die in spite of all treatment.

There is another class between these two in which treatment may be very efficacious. Unfortunately the symptoms are not easily differentiated. Chloroform is an important remedy when the convulsions are caused by reflex action, but its prolonged use may be dangerous when they are due to toxæmia. Light, noise, and cutaneous irritation should be avoided, and Guénot does not recommend blisters, leeches, or bleeding. M. Tarnier has injected blood serum taken from the patients suffering from eclampsia into the veins of a rabbit, thus detecting the presence of toxæmia. It requires ten grains of normal human serum per kilogram to kill a rabbit, and when less is sufficient toxæmia exists. If the animal succumbs to three grams we may be sure the patient will not recover; but if eight are required prognosis is favorable. M. Jaccoud recommended milk as a preventive, and as a curative when the danger of convulsions is not imminent. As soon as the presence of albumin is recognized, milk diet should be instituted and maintained until after delivery, even when the symptom does not persist. Albuminuria is but a danger signal, and the danger may remain after the signal disappears. Systematic inhalations of oxygen, regulated according to the composition of the urine, should supplement the milk regimen. If the only change in the blood consists in the presence of albumin, thirty liters of oxygen should be inhaled during the twenty-four hours; but if organic depuration be lowered below the physiological minimum, the quantity must be doubled or even tripled. The patient should not be permitted to take cold, especially after the sixth month. If this accident occurs we may expect all the consequences of renal obstruction, and general bleeding is the only means rapid enough to re-stablish permeability of the kidneys. Jaccoud prescribes as a preventive a mixed diet for all pregnant women, one liter and a half every twenty-four hours during the first six months, and two liters during the last three, gradually decreasing the quantity until its final abandonment, six weeks after delivery.—*Occidental Med. Jour.*

THE PERIOD OF INCUBATION OF THE INFECTIVE FEVERS.—The period of incubation of the various infective fevers has been a matter of great discussion, and one concerning which definite conclusions have not been reached. A report on this subject by a committee of the London Clinical Society will be received with much interest.

The material which the report contains was obtained in response to a circular letter issued in 1889 by a committee over which Dr. Broadbent presided. The large mass of documents received was digested by Dr. Dawson Williams, one of the honorary secretaries of the Committee. Dr. Williams was at the pains to go through the whole of the reports made by its medical inspectors to the Medical Department of the Local Government Board since 1878, which had been laid open to the inspection of the committee by Sir Geerge Buchanan, one of its members. Many important facts and observations, in respect especially to diphtheria, typhoid fever and scarlet fever were thus obtained.

The system upon which the summaries were prepared has been to take first those cases in which the exposure to the source of infection was for a short time—a few minutes or hours—at a known date. These have been made "the basis of the conclusions drawn as to the duration of incubation; while other histories, in which only the date of the commencement or cessatson of exposure to a source of infection was given, have been used for contributory evidence." The duration of infectiousness is also investigated by the light of the data supplied; and the length of time which a patient who has suffered from the disease should be isolated, the period during which a susceptible person exposed to infection should be quarantined, the liability to the retention of infection in clothes and to its dissemination by milk and water, are also considered.

The conclusions of a committee which has evidently gone over the subject so carefully are of much importance, and deserve to be presented here :

Diphtheria, two to seven days ; oftenest two.

Typhoid fever, eight to fourteen days ; sometimes twenty-three.

Influenza, one to four days ; oftenest three to four.

Measles, seven to eighteen days ; oftenest fourteen.

Mumps, two to three weeks ; oftenest three weeks.

Rubeola, two to three weeks.

Scarlet fever, one to seven days ; oftenest two to four.

Small-pox, nine to fifteen days ; oftenest twelve.

Further investigations were made with regard to the time and duration of the infective period.

Diphtheria was found to be infective during the period of incubation, attacks and convalescence.

Mumps and rubeola are also infective for three or four days before the onset of the parotiditis and appearance of the rash.

The contagiousness of measles speedily disappears and does not continue in disinfected persons for over three weeks.

Typhoid fever is infectious from the time of onset until two weeks after the fever has gone and convalescence set in.

As is well known, the contagiousness of scarlet fever varies greatly, but is generally continued a very long time—certainly until desquamation ceases, and sometimes as long as eight weeks.—*N. Y. Med. Record.*

Salicylates in the Treatment of Pleural Effusions. — Dr. George Dock, (*Therapeutic Gazette*), reviews the history of this subject, and draws the following conclusions :

1. Salicylic acid and its salts are among the most effectual agents in the treatment of pleurisy with effusion.

2. In effective doses the remedy is harmless, and with proper care in the selection of the preparation and its administration causes little or no discomfort to the patient.

3. Salicylates act most promptly in pleurisies with serous effusion of recent origin or of long standing, but they are efficient in simple dry pleurisy, and often act favorably in secondary pleurisy.

4. There is no evidence that they are useful in suppurative cases.

5. The drug acts as a diuretic, but may have an effect on the pathological process, or on the cause of the disease.

6. Salicylates have a more marked action on pleurisy than the diuretics commonly so-called.

7. The duration of treatment with salicylic preparations is less than with diuretics, common salt, or roborant medication.

8. The remedy can be used at the earliest period, and favorably affects all symptoms.

9. The drug may be given in the form of the acid or any of its salts, in doses of a drachm of the former, or one to two drachms of a salt daily. In ordinary cases it is not necessary to give the large doses, and sixty to ninety grains of sodium salicylate or of salol may be considered full beginning doses, to be diminished one-third, or one-half if the effect is manifest.

10. The ordinary precautions must be observed in giving the drugs, and during their administration the total amount of urine should be measured daily.

Rectal Injection of Saline Solution in a Case of Severe Hæmorrhage During Abortion.—I was lately called to see a woman, aged thirty, who had just aborted, the process being accompanied by very severe hæmorrhage, which had nearly ceased on my arrival. The patient was the mother of three children born alive ; all the labors had been accompanied by severe loss. So great had been the hæmorrhage in her last confinement that her medical attendant warned her against the risk of a further increase in her family. I found the patient in a deplorable condition from the acute anæmia. The pulse was 140 to 150, small, running and occasionally irregular ; the cardiac sounds were faint and the apex beat imperceptibly. She was extremely pallid and restless and could not get enough air. She complained of nausea, with constant retching and vomiting of small quantities of mucus. Every few minutes she became thirsty and then faint, and was unconscious at times. Notwithstanding treatment by raising the foot of the bed, bandaging the legs, hypodermic injection of brandy, etc., the faintness, sickness and feeble pulse continued, the patient becoming even more prostrate. I determined after an hour to try the effect of a chloride of sodium enema, one drachm to the pint of water, at the temperature of 100°. The patient having had severe diarrhœa I was afraid the injection would not be retained, but this was successfully accomplished by holding a pad over the anus for a few minutes. The effect was extremely beneficial, for within twenty minutes the pulse fell to 120, the color improved and the sickness and faintness almost entirely disappeared and she expressed herself as feeling much better and more comfortable. In half an hour she was able to take and keep down a small quantity of beef extract. Shortly after she had a little sleep. The patient made an excellent recovery and was able to be out and about a month later. I feel confident that the saline enema saved the patient's life.—Dr. Nicholson in *Lancet.*

THE CURABILITY OF LARYNGEAL PHTHISIS.—Laryngeal phthisis is generally looked upon, and with good reason, as a malady of very bad augury, so much so indeed that only specialists think it worth while to attempt any treatment of this distressful condition, and then only in a half-hearted away. At the last meeting of the British Laryngological Association, however, several cases were related which go to prove that laryngeal tuberculosis can, under certain circumstances, be cured, or perhaps we ought to say, will, under certain circumstances, get well. In other words, it is not the implacable disease that clinical lecturers teach and text-books figure. No one plan of treatment seems to ensure success, and this lends support to the contention that treatment has very little to do with the recovery. Certain it is that the local lesions in the throat oscillate according to the general condition of the patient. When the general condition improves then the local mischief displays a tendency to ameliorate, and this without any particular regard to the method of treatment adopted. The practical lesson to be drawn from this fact is that general treatment is of greater importance than local treatment, and cod liver oil applied to the stomach is of more benefit than lactic acid applied to the throat. This is only in accordance with what we know of tuberculous affections in other parts of the body, which, if they are recovered from, subside *pari passu*, with an improvement in the general health.—*Hosp. Gaz.*

THE ANATOMICAL RELATIONS OF THE TONSIL.—The tonsil is of all the organs in the body possibly the most completely isolated. It lies in a cavity between the anterior and posterior pillars of the fauces, which is itself lined by a fibrous expansion of the pharyhgeal aponeurosis, thus shutting off the tonsil from the deeper structures and facilitating its complete enucleation should this under any circumstances be deemed necessary. The basement membrane, however, is traversed by the lymphatics which run directly to the deep glands internal to the common carotid artery. These anatomical details are of great importance in respect of the occurrence of malignant disease in the tonsil, a by no means rare event. The absence of enlarged glands at the angle of the jaw affords no evidence of the glands being implicated, for the deep glands may be infected without there being any outward and visible sign of the fact. The only hope of life for the unhappy victims of malignant disease of the tonsils lies in early diagnosis and complete extirpation. This can be effected without any great difficulty by means of enucleation after microscopical examination of a portion of the diseased and enlarged tonsil.—*Hosp. Gaz.*

THE EMPLOYMENT OF SODIUM SALICYLATE BY ENEMA IN THE TREATMENT OF ARTICULAR RHEUMATISM.—As a result of the employment of sodium salicylate by enema in the treatment of fifteen cases of acute articular rheumatism, seven of chronic articular rheumatism, one of pneumonia, one of puerperal septicemia, and in a healthy individual, Erlanger (*Archiv für klin Medicin.*) recommends this method of medication in all cases in which the salicylates though indicated, cannot, for one reason or another, be taken by the mouth. It is essential, in order that absorption take place, that, if the bowels have not been spontaneously moved, a preparatory enema of water be given to clean out the lower bowel. The medicated enema should contain from a dram and a half to two drams of sodium salicylate, with half a dram of tincture of opium and three ounces of water. It should be warm and is best administered in one dose. The nozzle of the syringe should be introduced into the bowel for a distance of about eight inches. The patient is to be instructed that the enema is to be retained and not expelled.—*Med. News.*

A WARNING ABOUT THE FORCEPS.—In a clinical lecture, Prof. Goodell is stated to have said to his class: "Let me warn you, as young men, to resist the temptation of keeping the forceps on too long in your undue haste or excitement to deliver the woman. Make it your rule to take them off when the head is well down and the perineum begins to bulge, unless the pains have stopped, or the woman is in puerperal convulsions, or she is in any condition demanding prompt delivery. By observing this precept you will at least avoid the accusation that 'the doctor tore her with his instruments'; for it is indeed too true that the physician in his haste to deliver does often tear his patient, either by a too hasty delivery, or by pulling parallel with the long axis of the woman's body, instead of following the curve of Carus."—*Med. Summary.*

CLINICAL INVESTIGATIONS ON THE ACTION OF CHLOROFORM ON THE KIDNEYS.—Rindskoff has studied the urine chemically and microscopically. In 93 cases qualitative changes were noted 31 times, *i.e.*, every third case undergoing chloroform narcosis will produce a pathological urine. An analysis of the 31 cases shows: albuminuria alone six times, albuminuria and casts, six times, casts alone, 19 times. The albumin and casts usually disappear three days after the operation. The quantity of cholorform inhaled is an undoubted factor in engendering the pathological condition of the urine. Attention is directed to the extreme caution necessary in aggravating an existent nephritis by chloroform narcosis.—*Munchener med. Wochenschrift.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science, Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 12 Charles St., Toronto.

☞ *Advertisements inserted on the most liberal terms. All Letters and Remittances to be addressed to* DR. C. SHEARD, 320 Jarvis St., Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, SEPTEMBER, 1893.

The LANCET has the Largest Circulation of any Medical Journal in Canada.

SYMPHYSIOTOMY.

The recent report of a successful operation by two gentlemen in Toronto, for the relief of a woman suffering from an extreme contraction of the pelvis, draws our attention forcibly to the revival of the old operation of symphysiotomy for the relief of such cases where a great difference exists between the size of the presenting fœtal head and maternal passages.

In a recent number of the *Journal de Medecine de Chirurgie, et de Pharmocalogie*, of Brussels, there is an excellent paper on Antiseptic Symphysiotomy in Pelvic Contraction, by Dr. J. Cocq, who states that the operation is only permissible when performed with antiseptic procedures, for its real success depends upon the rigor with which they are observed.

It may be done by any practitioner with the simple instruments of an ordinary physicians outfit, and everyone should be as familiar with its details, as an operation of urgency, as with tracheotomy. By means of symphysiotomy a separation of the pubic bones for six centimetres may be obtained without danger. Such a separation would correspond to a lengthening of the antero-posterior diameter of from twenty to twenty-two millimetres, and to one of the sacro-pubic line of from thirteen to fifteen millimetres.

There is also a diminution of from six to eight millimetres in the bi-parietal diameter of the fœtus, in consequence of the engagement of one of the parietal eminences between the separated pubic bones.

The operation should not be performed at term, on a woman having a pelvis with a smaller diameter than six centimetres and seven-tenths, because the gain of twenty-two millimetres in a pelvis of that size would afford an antero-posterior diameter of only eight centimetres and nine-tenths. As the bi-parietal diameter (nine centimetres and a-half) of an infant at term may be diminished six millimetres in consequence of compression of the head, it is seen that an infant with a head of that size may, by means of symphysiotomy, be enabled to pass through the pelvic strait.

The operation is favorable to the child because recent statistics show a very insignificant fœtal mortality; and it is favorable to the mother, because the same statistics show neither death nor accident to her.

The sequences of the operation, from the standpoints of subsequent consolidation of the symphysis, of capability of standing erect, and of the power of walking, are excellent.

At term, after fruitless attempts to apply the forceps or to practice version, symphysiotomy should always be practised if the child is alive and the superior conjugate diameter is greater than six centimetres and seven-tenths. Before term the operation may be done when the diameter is less than this, not greater than four centimetres and a-half. It therefore renders artificial premature accouchment practicable, when formerly abortion was considered the sole resource to the graver procedure at the termination of pregnancy.

NEWSPAPER CORRESPONDENCE.

Under the above heading our contemporary, the *Ontario Medical Journal*, takes us to account for an editorial article that appeared in our July issue, in which we undertook to show that the Medical Council had acted unfairly towards th two old Ontario journals. We do not intend to go deeply into the matter again; for we have said what we had to say; moreover we issue the CANADA LANCET for our readers, and not in the interest of any body, corporate or otherwise, and as a very large number of our readers are not residents of Ontario, and have in consequence but little interest in matters pertaining purely to Ontario, we spare them.

Let us say at once, that we have no fault to find with Dr. Orr, the "managing editor," for getting all he could for his journal; that was business; dollars; and we all have a wholesome respect for dollars. It was the Council we criticized, not an individual member, who got the subsidy through for his own paper.

We have not had an official report of the proceedings at the late session of the Council, but, unless we are sadly misinformed, or unless the whole affair was cut and dried before the question of subsidy to the journal came up at all in committee, the offer of the *Practitioner* and LANCET was before the Council, previous to the passing of the subsidy. "The managing editor" of the subsidized journal has charge of the revising of such official report as goes to the country. He pays (we presume) the stenographer and the printer, and looks after the report entirely. We shall see what the official report has to say, regarding our offer, as to the time of its reception, when it was presented to the Council, and one or two other points in that connection. Note, that "the managing editor" of the subsidized journal is on record as saying, "O*n its* (the subsidy) *being awarded to us they changed the style of their offer, etc.*" Again "the managing editor" says he presumes our "thought (of cliquism in the Council) was brought forth by the fact of the subsidy being given to us instead of to it." What can he mean? We never asked for a subsidy. We never expected a subsidy. We are not a member of the Council. How could we expect to get a subsidy through?

"We can give a distinct denial to the statement that any member was appproached or canvassed for a vote for the subsidy to this paper."

"As a matter of fact, the only member with whom it was talked over at all, both spoke and voted against the granting of a subsidy to any one."

Will the "managing editor" read the above two sentences, written, we suppose, by him, and then explain? First he denies distinctly that "*any member was approached or canvassed, etc.,*" but in the next sentence, only a few words further on he says, "*the only member with whom it was talked over at all, etc.*" Why was this *one member* ap- "proached," "talked to," "canvassed," or whatever term may be applied to the process? Were the others all *solid?* If so, how did the "managing editor" know they were solid? Clarvoyance? Mesmerism? Hypmotism? Catalepsy? What was the mental state of the "managing editor" when he knew the *one member* with whom it was neccessary to talk over the matter of the subsidy?

Further comment is unnecessary. In the mean time we are anxious for an opportunity to look over the report of the late meeting of the Council.

ORGANIC EXTRACTS IN THE TREATMENT OF DISEASE.

The alleged beneficial results, arising from the hypodermic injection of certain organic extracts, in the treatment of various disorders, mainly of the nervous system, have not, on further trial, materialized. Dr. Hammond's *cerebrine*, of which mention has previously been made in this journal, does not in the hands of other observers, give the same results which the discoverer succeeded in getting.

The use of the hypodermic syringe, to enable the material to get directly into the blood, without having to run the gauntlet of the alimentary tract, with all its reducing agents, makes the idea more conceivable than that which supposes good can come by *feeding* the patient upon certain organic substances. But the extracts in order to be safely used hypodermically, have to be sterilized, a process which must, we think, simulate the action of the digestive ferments upon animal products.

Now, it seems antagonistic to all physiological understanding that these organic materials can pass through the digestive tract without being so entirely changed that, the substance desired to be selected by the organism for the reconstruction of the special debilitated or broken down tissue no longer exists.

More recent investigations and clinical experience go to show, however, that there is something in the theory of a selective power by the organism, of just the pabulum necessary for the reconstruction of incapacitated organs or tissues. Thus there is ample evidence that myxœdema has been successfully treated with the juice of thyroid glands. Success has also been noted in the treatment of diabetes mellitus with pancreatic juice.

Dr. Mackenzie, writing in the *British Medical Journal*, found that during its administeration the

patients lost their feeling of lassitude and felt better in every way. Thirst was distinctly diminished, the daily amount of fluid drunk falling from an average of twelve pints to six pints; the urine was also diminished, but the relative amount of sugar passed was not affected. Very careful observations were made in the case of two patients under the care of Dr. White. In one case he found the amount of sugar distinctly lessened under the use of the raw pancreas by the mouth. The hypodermic injections of the liquor pancreaticus had much less influence. In summing up the results of his experiments, he says that the patients took the raw pancreas quite easily, but in a few it seemed to induce an erythema of the skin. In all it produced an increase in body weight and a distinct feeling of strength; but the treatment had almost no action on the quaiity of the urine, on its specific garvity, and on the amount of urea contained in it.

Here then we see that a thoroughly scientific observer obtained better results when the pancrease was given by the mouth, than when it was given *scientifically* by the hypodermic syringe!

Brown-Sequard has not weakened in any particular, as to the good effects produced by his mode of treatment. At a late meeting of the French Academy of Sciences, he announced that although the testicular fluid possesses no direct curative influence upon the different morbid conditions of the system, it can by subcutaneous injections cure, or considerably ameliorate, the most varid, states, organic or otherwise, or at least cause a disappearance of their effects, and that these actions of the fluid are due to two different influences. By the one, the nervous system gaining in force becomes capable of improving the dynamic or organic condition of the affected parts. By the other, which depends on the entrance into the blood of certain new materials, the fluid contributes to the cure of morbid conditions by the formation of new cells or other anatomical elements.

It is to be hoped that this method of treatment may yet be placed upon a scientific basis. So far it is largely empirical, but with the best of educated observers now in the field, order most come out of chaos, the chaff must be separated from the wheat, and something like a rational explanation of the therapeusis of organic extracts will be given us.

CANADIAN MEDICAL ASSOCIATION.

The twenty-sixth annual meeting of the Canadian Medical Association will be held in London, on Wednesday and Thursday, 20th and 21st September, under the presidency of Dr. Sheard, Toronto. It is to be hoped that the interest hitherto shown in the meetings of the Association will be increased this year; and judging from the number of communications received, and the papers promised, the success of the meeting is already assured.

Any member desirous of contributing a paper, will kindly communicate with the General Secretary, D. Birkett, Montreal, as to title of paper, as soon as possible.

The following papers have already been promised:—"Address in Surgery," Dr. Hingston, Montreal; "Cases in Practice," D. Campbell, Seaforth; "Treatment of Chronic Endometritis," Dr. Conerty, Smith's Falls; "Sanitary Science, Some of its Features," Dr. Canniff, Toronto; "Angioma of Eyebrow," Dr. King, Toronto; "The General Practitioner and the Insane," Dr. Anglin, Verden; "Some Recent Changes in British Law, Affecting Coroners' Inquests," Dr. Johnston, Montreal; "Is Alcohol in all Doses and in all Cases a Sedative and Depressant," Dr. Harrison, Selkirk; "Displacement of the Kidney," Dr. Eccles, London; "Thyrotomy for Large Sub-Cordal Spindle-celled Sarcoma, with Presentation of Case," Dr. Birkett, Montreal.

APERIENT PILL OF SUMBUL.—Sumbul, or musk-root, is an excellent antispasmodic and nervous tonic. Its action resembles that of musk and valerian. In small doses it stimulates appetite and improves digestion. It allays irregular nervous action and is beneficial in depressed or excitable condition of the nervous system. Sumbul may be very advantageously employed in the treatment of hysteria, neurasthenia, neuralgia, functional irregularity of the heart, restlessness, the insomnia of chronic alcoholism, and nervous dyspepsia. The extract is given in the dose of $\frac{1}{4}$ to 1 grain. It is essential that it be made from a pure specimen. As most of these disorders occur in neurotic individuals—especially women—with impaired nutrition, a morbidly sensitive

organization, dyspeptic difficulties, and sluggish movement of the bowels. I have advantageously, in many instances, associated it with nervine and laxative remedies. The following combination which I (Shoemaker in *Med. Bull.*) have devised is now put up on a large scale by the well-known manufacturing pharmaceutists, Messrs. William R. Warner & Co. Each pill contains:

℞—Ext. Sumbul, ... gr. i.
Asafœtida, ... gr. i.
Ext. Cascar. Sagrad., . . gr. ss.
Aloin, ... gr. 1-10.
Ext. Nucis Vom., . . . gr. $\frac{1}{8}$.
Gingerine, ... gr. $\frac{1}{4}$

M.—The dose is 1 or 2 pills.

From a long list of cases in which the above pill proved of value, a few examples are selected:

A light complexioned, florid young woman became subject to spasms of hysterical chorea. There were twitching and jerking of the muscles of the forearm and face. Two pills were administered thrice daily, with excellent results. The paroxyims gradually became less frequent and at length ceased.

A woman was subject to aching pain in the loins, radiating to the pelvis and groin. Attacks of intercostal neuralgia also occurred; she was weak, and often had palpitation of the heart. The patient made a complete recovery.

The same treatment was of marked benefit in the case of a woman who, consecutive to her first confinement, had suffered for nearly a year from palpitation, dyspepsia, constipation, mastodynia, headache and giddiness. The action of the heart was rapid and irritable, but there was no organic disease.

A lady, about five weeks pregnant, suffered from an almost constant headache, and could not sleep well; was nervous, depressed, weak, dyspeptic and constipated. The pills corrected the state of the digestive apparatus, banished the pains and nervousness, and the patient progressed without special difficulty to the end of her term.

THINGS WORTH REMEMBERING.—(*Mass. Med. Jour.*) It is authoritatively stated that headache almost always yields to the simultaneous application of hot water to the feet and back of the neck.

Ordinarily, one woman in eight is sterile, but among women who have fibroids one in three is sterile. (Parvin.)

In facial erysipelas, where you cannot conveniently apply ordinary means, paint the part with a 10-per-cent. iodoform collodion. (Prof. Gross.)

In posterior difplacements of the uterus, always replace the organ before introducing a pessary; the frequent failure of its use is generally due to this cause. (Parvin.)

Where there is a collection of foreign matter, as pus, in the antrum of Higmore, extract the first molar tooth (or more, if necessary), and drain the cavity in this way. (Sajous.)

For specific vaginitis, Prof Parvin ordered mucilaginous injections and warm hip-baths in the acute stage, followed by injections of 1 : 100 corrosive solutions and tampons of boracic acid and glycerine.

Gelsemium will often do more good in irritable bladder than any other remedy. It is especially adapted to those women of hysterical type troubled by irritability at the neck of the bladder, calling for constant urination.

Without exception, the first symptom of pregnancy is an increased frequency of the desire to micturate.

Rhus aromatica, or the fragrant sumach, which grows all through the Northern States, is strongly recommended for incontinence of urine in atonic states of the bladder. From 10 to 15 drops of the tincture are given three times a day.

Salicylic acid is highly recommended as an application to ringworm. It may be used as an ointment, but is much better as a saturated solution in collodion. One application is often all that is necessary to effect a cure, but it may be repeated if necessary. The pain caused is not usually severe.

Boro-tartrate of potassium is the first remedy for calculus in pelvis of kidney; a weak solution must be used, and for a long time, a strong being detrimental. (Bartholow.)

Drop into urine in a test tube a few drops of the tincture of guaiac, heat it about 100°, and if it turns pale blue, pus is present in the urine.

Houghton, of Dublin, says that two hours of severe mental labor abstract as much vital strength from the system as a whole day of physical labor.

Unna treats "red nose" with zinc-and-sulphur ointment externally and ichthyol internally.

A saturated solution of carbonate of soda applied four or five times a day, is said to remove warts speedily and without pain or soreness.

Salicylate of sodium is claimed to have about thirteen times the excretive power of salicin, in the elimination of uric acid.

EXAMINATION OF CASES FOR ROTARY LATERAL CURVATURE OF THE SPINE.—When a mother brings a little child to you, Sayre, in *N. Y. Med. Jour.*, and asks if there is anything the matter with its spine, don't glance at it in a hurried kind of a way and say, "There is nothing the matter with it; she will grow out of that," but strip the child to the hips, and let her stand in her own natural, easy attitude, giving her time to accustom herself to the surroundings and allow her muscles to relax. In a few moments you will begin to notice a drooping of one shoulder, and that the space between the body and the arms is not the same on both sides. When first in the presence of the physician, very often these children hold themselves quite erect for a few moments; but after the first feeling of strangeness has worn off and their muscles grow a little fatigued, they will allow themselves to drop into the position which they habitually assume at home. And then and not until then, is the slight deformity apparent.

Let the child then stand in front of you. Hold its legs between your knees, and while its knees are straight, let it bend forward and try to touch the ground with its fingers. In this position the scapulæ fall forward and the contour of the back becomes visible. And slight degrees of rotation is often more to be felt with the hand than to be observed by the eye. In a certain number of cases you will find that the starting-point of a lateral curvature is a deformity of the last lumbar and first sacral vertebræ, and sacral junction.

At times the the deformity is more apparent in front than in the back. You will notice a prominence of one hip, the flesh at times sinking in quite sharply above the iliac crest, although the deformity in the back is scarcely discernible.

Among the earliest evidences of rotation you will find the inequality which almost always exists from the umbilicus to the two nipples. This is frequently to be observed before any marked change in the back has taken place. You will also usually find that the breast on the side of the convexity is smaller than on the side of the concavity.

I have seen so many cases of bad lateral curvature, where the mothers told me they noticed an inequality on the two sides of the child when it was still young, but that on consulting a physician they were told that the child would "grow out of it," that I feel that I cannot too strongly impress upon you the necessity of observing these cases closely, the importance of taking measures to straighten these incipient curves, and of being sure that, if the child has a slight curve, it will not "grow out of it" as it grows older but rather grow into it, and when she comes to puberty have so decided a change in the ribs and vertebræ that it will be impossible ever to wholly rectify the deformity.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.—The William F. Jenks Memorial Prize. The third triennial prize of five hundred dollars, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "Infant Mortality During Labor, and its Prevention." The conditions annexed by the founder of this prize are, that the "prize or award must always be for some subject connected with Obstetrics, or the Diseases of Women, or the Diseases of Children;" and that "the trustees, under this deed for the time being, can, in their discretion, publish the successful essay, or any paper written upon any subject for which they may offer a reward, provided the income in their hands may, in their judgment, be sufficient for the purpose, and the essay or paper be considered by them worthy of publication. If published, the distribution of said essay shall be entirely under the control of said trustees. In case they do not publish the said essay or paper, it shall be the property of the College of Physicians of Philadelphia." The prize is open for competition to the whole world, but the essay must be the production of a single person. The essay, which must be written in the English language, or if in a foreign language, accompanied by an English translation, should be sent to the College of Physicians of Philadelphia, Pennsylvania, U. S. A., before January 1, 1895, addressed to Horace Y. Evans, M.D., Chairman of the Wil-

liam F. Jenks Prize Committee. Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. The committee reserve the right not to make an award if no essay submitted is considered worthy of the prize.

JAMES V. INGHAM,
Sec. of the Trustees.

INTERNAL USE OF ARSENIC IN EPITHELIOMA.—Prof. Lassar recently reported, *Deut. Med. Zeit.*, *Internat. Jour. Surg.*, a number of cases of cutaneous cancer before the Berlin Medical Society, in which he obtained excellent results from the internal use of Fowler's solution. Owing to the fact that the arsenic treatment is usually resorted to at a time when operative measures are no longer indicated, he determined to employ this method in the earlier stages of the disease. His cases were as follows: A woman, aged 70, came under treatment October, 1892, for a tumor of the size of half a walnut, which had attained this size in six to eight months. Its surface was intact with the exception of a small ulceration, and microscopic examination of an excised portion, revealed typical epitheliomatous tissue. Patient was given thrice daily eight drops of a mixture of Fowler's solution and aq. menthol, equal parts; and at the beginning of December the tumor had cicatrized. The cure has persisted. In a second case of rodent ulcer, cicatrization progressed during the arsenic treatment, and no recurrence has taken place in four months. In the case of a man, aged 66, a spherical tumor had three months previously appeared on the left ala nasi, which was constantly growing. It had a firm consistency, with depressed centre. Specific treatment proved ineffective. In March, 1893, the tumor, which at this time measured 5½ centimetres, was treated by injections of arsenic, but later Fowler's solution alone was given internally in increasing doses. Since then complete involution and cicatrization has occurred. The epitheliomatous character of this case was demonstrated by microscopical examination of excised pieces. If it be remembered that the further growth of the neoplasms was checked as soon as the arsenic treatment was instituted, the objection that the cure was of spontaneous origin loses its force.

HYDRASTININE IN UTERINE HÆMORRHAGE.—Gottschalk, *Brooklyn Med. Jour.*, says hydrastinine may be employed:

1. First of all, in those uterine hæmorrhages which are traceable to a pronounced congestion of the uterus. To these belong, above all, the often very profuse memorrhagias of spinsters, in whom their is no pathological change in the condition of the genitals. In some of these cases it is possible to obtain a permanent result, so that even after discontinuing the remedy the menstrual flow remains smaller.

2. Also in hæmorrhages which have their path ological and anatomical cause in endometritis, hydrastinine will lessen the quantity of blood; but here, according to Gottschalk's experience, the action is only palliative, not being sufficient alone to cure the local cause of the trouble.

3. For prophylactic or intermenstrual use, hydrastinine is useful before or during the first returning profuse menstruation after an abrasion of the uterine mucosa. It is well known that this menstruation, usually occurring after six weeks, is often very profuse. In the very cases where there was great loss of blood before the operation, it is of great importance to prevent further profuse hæmorrhage. This is possible if the treatment with hydrastinine is begun several days before the expected menstruation, and if necessary, continued during the duration of the menstruation.

4. Menorrhagias caused by retroflexio uteri are best treated by correction of the malposition; but for cases of fixed retroflexion, where the reposition is not yet possible, hydrastinine is a commendable remedy.

5. Secondly uterine hæmorrhages—*i.e.*, those caused by a change of the adnexa and their surroundings—offer a large field for the successful use of hydrastinine. To these belong the menorrhagia and metrorrhagia with pyosalpinx, öophoritis, ovarian tumors, and exudations. Of course, the cause of the trouble is not influenced by the remedy.

6. Climacteric menorrhagias are much diminished by a faithfully carried out hydrastinine treatment.

THE USE OF CREOSOTE IN DETERMINING THE GRAVITY OF TUBERCULOSIS.—C. Burlureaux *Gaz. Hebdom. de Med. et de Chir.; Med. Times*, has studied the above subject with the object: First, of warning practitioners against the use of uniform doses of the drug in tuberculosis patients; and, second, of calling attention to the fact that the degree of tolerance of the medicament reveals, in a precise manner, the gravity of the disorder. The subject has been studied under four categories; under the first category are included those patients that tolerate the drug in a most perfect manner; for under the influence of the drug no untoward symptoms are exhibited, but, on the contrary, there is a marked improvement in the appetite and the general strength of the patient, the bodily weight is increased, and the tubercular lesions, both general and local, are manifestly stayed in their progress. Under the second category are placed those patients whose tolerance for the medicament is none the less marked, but in whom, although there is produced a general improvement, the local lesions are not influenced for the better. Patients of the third category have, at first, a tolerance for creosote, but in them, as in the case of those of the second category, the lesions continue in their development; suddenly, and without apparent cause, a marked intolerance comes on, and from this moment the prognosis becomes necessarily bad. A patient that exhibits this secondary intolerance for the drug, may be considered as a hopeless case. Under the fourth category are considered those patients who, from the very beginning of the treatment, cannot at all tolerate the remedy in question; in such patients the prognosis is similarly bad. The author illustrates, with the details of interesting cases, the points which characterize each one of the categories pointed out, and insists that, in general, creosote has, in tubercular disease, as much valve from a prognostic, as Koch's remedy from a diagnostic point of view.

WHEN MAY SYPHILITICS MARRY?—The question which forms the subject matter of this pamphlet, *Hosp. Gaz.*, is one which the medical attendant is frequently called upon to answer, and any work which will assist him to arrive at sound conclusions will, we are sure, receive a hearty welcome. Dr. Schuster, the author, who is regarded in Germany as an authority on syphilis, in this pamphlet has collected the opinions of the principal European and American writers on the subject, who are all practically unanimous in laying down the rule that at least two years should elapse from the date of infection before marriage is permissible, and then only in cases which have been, during the whole time, under careful and systematic treatment and are apparently free from all manifestations of the disease. Dr. Schuster says he is in the habit of sanctioning marriage, "if after careful examination no symptom of the disease can be discovered, and two efficient courses of twenty-five to forty-eight months' duration have been taken." He adds that he has never had reason to regret giving such advice; nevertheless we should hesitate to endorse it. Indeed the author himself admits "that even after two courses recovery may occasionally not be absolute, hence if a person intending to marry is willing to take additional precaution by waiting four whole years he should be encouraged to do so.

SURG.-LIEUT.-COLONEL LAWRIE publishes in the *Lancet; Hosp. Gaz.*, an experiment (illustrated by a tracing) on the effect of choloroform on the blood-pressure. It is a cross-circulation experiment done on two "pariah" dogs. The "fed" dog was given one grain of phosphorus daily for three days before the experiment to artificially induce weakness of the heart. Cross-circulation was established from the right common carotid artery of the feeder to the left common carotid of the fed, and from the right and left external jugular vein of the fed to the right external jugular veins of the feeder. The experiment shows that when chloroform is sent to the brain alone it produces lowering of the blood-pressure with (1) anæsthesia, (2) stoppage of the respiration, and (3) (?) death, and when it is sent to the heart alone it produces no effect whatever.

HEPATIC MASSAGE IN CATARRHAL JAUNDICE.—In the *Vratch*, Dr. I. Ch. Wechsler, of Berislavel, warmly recommends the treatment of ordinary catarrhal icterus by massage of the liver performed after the following simple method. The operator places his or her patient on the hepatic region and proceeds to rhythmically compress the liver during expirations, in the same

manner as in the case of so-called "thorax gymnastics," for ten minutes. The *séances* should be repeated thrice daily. The procedure may be easily practised by the patient himself or herself in a sitting posture. In four successive cases a rapid cure was obtained by the writer from the massage alone, no medicaments whatever being employed during the treatment.

TREATMENT OF ACUTE RHEUMATISM—

℞—Salicylic acid, Lanoline, Ess. turpentine, āā . . . ʒijss.
Axunge, ... ʒijss.

Applied to the articulations, *Med. Press*, this ointment possesses many advantages. In the first place, it suppresses the pain in the space of a few hours; by it the swelling of the joint diminishes on the second day, and the fever falls completely between the third and the fifth day. Besides, *internal treatment is unnecessary*, which is of great importance, as every one knows what repugnance patients have to salicylate of soda; and, finally, it is economical.

"THE DOMINION MEDICAL MONTHLY."—This is the name of a new medical journal published in Toronto, under the management of Dr. W. H. B. Aikins and W. B. Nesbitt. It is a bright little journal; proposes to be independent, and to look after the interests of the profession generally. We extend the hand of fellowship and wish it every success.

PERSONAL.—Last week Prof. Dr. Adam Politzer, the distinguished aural surgeon of Vienna, Austria, visited Dr. L. L. Palmer, Toronto, who gave a very interesting evening to a number of medical men, invited to meet his guest. During the evening Prof. Politzer gave a demonstration on the ear, and exhibited preparations showing the condition existing in certain forms of deafness and how to recognize them.

URTICARIA.—Sodium salicylate, in doses of three grains every two hours, is said (*Med. Rec.*) to be very efficacious in relieving urticaria. Three or four doses usually suffice for a cure of the most obstinate case.

Dr. L. L. Palmer, Toronto, has been made a Life Member of the Ophthalmological Society of the United Kingdom of Great Britain.

PROF. KEEN says a good point to bear in mind in diagnosing a case of *Chancre* is that you will never find chancres on the walls of the vagina, as they always appear on its outlet.

T. H. J. PRYCE, M.D., etc., No. 4 Lorne Villas, Clevedon, Somerset, England, May 23rd, 1891, writes: "I take pleasure in giving the following notes on Bromidia. A patient, age 28, suffering from pneumonia and typhoid blood poisoning (the latter was contracted when in the convalescent stage), complained of insomnia, and I put him on Bromidia. Even when in good health he suffered more or less from insomnia, but after having taken Bromidia he slept without difficulty and very naturally, and no headache or constipation followed its use, as was the case when other narcotics were administered. I was very pleased with the results, and prescribe Bromidia often now."

Books and Pamphlets.

DISEASE IN CHILDREN, a Manual. for Students and Practitioners. By James Carmichael, M.D., F.R.C.P. Ed., Physician Royal Hospital for Sick Children; University Lecturer on Disease in Children, Edinburgh. Illustrated with thirty-one charts. New York: D. Appleton & Co. Toronto: Carveth & Co. 1893, pp. 591.

This is an excellent work. The writer avoids padding, and speaks like a thoroughly practical man and a teacher. He aims constantly at showing how the anatomical and physiological characteristics of the period of infancy and childhood tend to modify in many ways the features and clinical relation of diseases in children.

LESSONS ON PHYSICAL DIAGNOSIS. By Alfred L. Loomis, M.D., L.L.D., Professor of the Practice of Medicine and Pathology in the University of New York. Tenth edition, revised and enlarged. New York: William Wood & Co. Toronto: Carveth & Co. 1893.

Dr. Loomis' work is so well known that we need only mention that in the present edition he has thoroughly revised the whole text, and made such corrections as seemed necessary to make it a more complete guide to the student of physical diagnosis. The section on the "Physiological Action of the Heart," and the lesson on the "Examination of Urine," have been entirely re-written. A new lesson on "Clinical Microscopy" had been added.