

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:

Continuous pagination.

- 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.

Original Communications.

THE WEIGHT OF THE BODY IN ITS RELATION TO THE PATHOLOGY AND TREATMENT OF CLUB-FOOT.*

BY A. B. JUDSON, M.D.

Orthopaedic Surgeon to the Out-Patient Department of
the New York Hospital.

I desire to present a few thoughts, of an extremely practical kind, relating to the treatment of talipes equino-varus. Beginning with congenital club-foot, it is well to bear in mind that there is a vast difference between a child recumbent and a child walking. While the child is in arms the case is yet free from the complications and difficulties caused by the falling of the weight of the body on the deformed foot. These twelve months, more or less, are the most important year in the history of the case, because, in this period, the foot is to be changed so that, when the child begins to walk, the use of a slight walking-brace, exerting only a moderate degree of force, will convert the weight of the body from a deforming to a correcting agent. During these months of recumbency, with the weight of the body out of the way, with all the tissues soft and formative, and the foot more than doubling in size with the growth of the child, there is every reason to expect to succeed in what we undertake, provided time enough be given to the case, and faithful attention to the details.

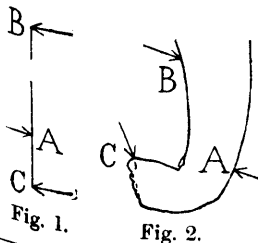


Fig. 1.

Fig. 2.

The apparatus which I have conveniently used to effect this reduction, before the child learns to stand, is a simple retentive splint which acts as a lever, making pressure on the outer side of the

foot and ankle, at A, in Figs. 1 to 4, inclusive, and counter-pressure at two points, one on the inner side of the leg, at B, and the other at the inner border of the foot, at C. It is advisable to keep in mind that this simple instrument is a lever, because, if we know that we are using a lever, with its three well-defined points of pressure, we can make the apparatus more efficient than if we view it, in a more general way, as an apparatus for giving a better shape to the foot.

I use a little brace made of sheet brass, doing the work with a few simple tools. An advantage of doing the work one's self is that there is no room for doubt as to where the blame lies if the apparatus does not work well. Two curved disks, B & C, Figs. 3 and 4, are riveted to a shank, D, and

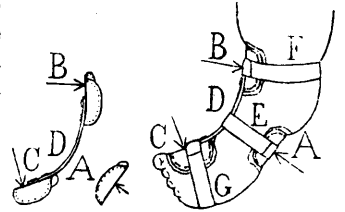


Fig. 3.

Fig. 4.

thus is formed that part of the brace which applies the two points of counter-pressure, while, on the other hand, the point of pressure is brought into action by a third disk, or shield, A, which is drawn tightly against the outer side of the foot and ankle, and held in place by a strip of adhesive plaster, E, which includes the limb and the piece which connects the two disks, B and C. The disks are lined with two or three thicknesses of blanket, easily renewed, when necessary, with a needle and thread. These braces are so cheap and easily knocked together that it is nothing to apply new and larger ones, using heavier material for the shank as the child grows. In general, three sizes will be enough, the shanks being 12 gage $\frac{3}{8}$ in. wide, 14 gage $\frac{1}{2}$ in. wide, and 16 gage $\frac{5}{8}$ in. wide. The disks are conveniently made from 22 gage $1\frac{1}{4}$ in. wide. The rivets are copper belt rivets No. 13. A lip turned on the edges of the disks, with the flat pliers, gives stiffness to the thin brass and protects the skin from the rough edge. If more easily obtained, tin disks, light bars of iron or steel, and ordinary iron rivets, would doubtless answer.

The brace is applied with three strips of adhesive plaster. The upper and lower pieces, F and G, Fig. 4, are simply to keep the apparatus in place, which they do effectively if ordinary gum plaster is used, while, by drawing the middle strip,

*Read before the American Orthopaedic Association, New York, September 21st, 1892.

E, tightly over the shield, and straightening the brace from time to time, the deformity is gradually and gently reduced. At each re-application the brace is made a little straighter than the foot at that stage. This may readily be done by the hands, and then the adhesive strip is to be tightened over the shield, till the shape of the foot agrees with that of the brace. After a few days,

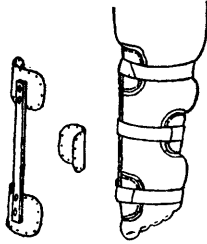


Fig. 5. Fig. 6.

the brace is to be made still straighter, and again re-applied, and made tight till another point of improvement is gained. The brace is applied very crooked at the beginning of treatment, as in Figs. 3 and 4, and is straightened from time to time, and a longer brace applied as the deformity is reduced and the patient grows. It should be removed every week, or two weeks, and an interval of a few days allowed for freedom from the brace, when the mother is advised to manipulate the foot constantly, using as much force as she will in the direction of symmetry. Manipulating the foot during these intervals is of great importance, as cases have occurred in which varus and equinus have been entirely overcome by the mother's hand alone.

By this simple and prosy treatment, carried out systematically and without haste, or violence, or pain, the foot, unless it is a frightful exception, may, with certainty, be changed from varus to valgus. At the same time, the tendo-achillis is lengthened till the position of the foot is near the norme, or at right angles with the leg, as the result of manipulation and giving the brace from time to time

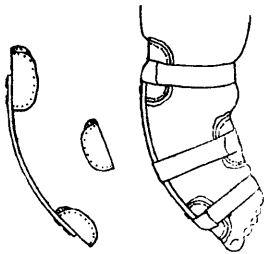


Fig. 7. Fig. 8.

a partly antero-posterior action. Figs. 3 and 4 show approximately the shape of the brace at the beginning of treatment, Figs. 5 and 6 when the varus is reduced, and Figs. 7 and 8 when valgus has taken the place of varus. The foot, in this latter stage, may not hold itself valgus, when left to itself, but, with almost no force, and with one finger, it may be pushed into valgus; and in this condition it must

be when the child begins to walk, and then another stage of treatment begins.

When the patient begins to walk we have a new difficulty. It is now seen that the weight of the body, falling on the tender and ill-formed foot, will, if not properly directed, defeat all our efforts. Let us, for a moment, consider the mechanical environment of the human foot. In the first place, the corporal weight, which the quadruped distributes among four pedal extremities, falls, in man, upon two. Again, the small floor area covered by the feet and their slight structure, seem unequal to the task of supporting the towering frame above them, which in some cases almost resembles a pyramid resting on its apex. And when we observe the effect of active locomotion we see weight and momentum combine in an apparent effort to crush and destroy. And, furthermore, when extraneous weights are added and the strain is prolonged, as in the case of the burden-bearer among savage tribes, or the infantry soldier on a forced march, the endurance of the foot excites wonder. It is not strange that the feet are subject to ailments: to blisters, bunions, ingrowing nails, hallux valgus, hammer toes, loss of the arch, weak ankles, painful affections of the metatarsus, perforating ulcers, osteitis, and the varieties of talipes. The wonder is that they are not permanently disabled soon after walking is begun, and certainly when the adipose tissue of the body takes on the development which accompanies age and good living. The gourmand, Savarin, said that, among the works of creation, the design of the human foot was a conspicuous failure. Considering the immense weight carried by the foot, it is evident, however, that only the most perfect natural adaptation of mechanics has enabled this insignificant member to perform its superlative functions, and that great caution should attend all procedures having for their object its artificial re-construction.

It is also sufficiently evident that the correction of club-foot by mechanical means, while the patient continues walking, is a problem beset with difficulty. We have, however, a luminous ray of hope and encouragement in the observation that, in talipes varus, there is an important boundary line between deformity and the norme. If the foot is held in some way, now to be considered, on the right side of this boundary line, each step forces

it in the direction of valgus, and the increasing weight of the child is a powerful force acting in the right direction, or away from varus, so long as the foot is held, though never so little, looking toward symmetry. It may be said that the child stamps his foot straight. If, on the other hand, the foot is held, or allowed to fall, on the wrong side of this line, though never so little, each foot-step is a blow, driving the foot more and more into the varous position.

This point may be illustrated by the hand placed with its ulnar border on the table. If considerable pressure be made on the table, by the hand so placed, it becomes evident that there is a boundary line between pronation and supination. If the hand is pronated, never so little, additional pressure will force the palm into pronation, which represents valgus in the foot, and if the hand be supinated in the slightest degree, additional pressure will force the palm into complete supination, which represents varus in the foot.

By the application of this idea, the weight of the body may be made a beneficent, instead of a harmful, factor in the progress of a case of talipes varus, and the walking brace should be constructed with this in view. It should be made of steel, and by an instrument maker. One of its functions is to act as a lever, but the leverage is applied not

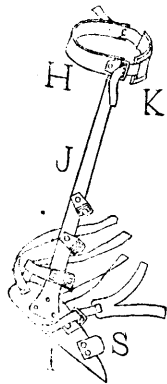


Fig. 9.

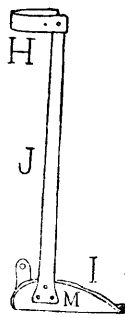


Fig. 10.

without general or local inconvenience.

The walking brace consists, as usual, of leg-band, H, Figs. 9 and 10, foot-piece, I, and upright, J, riveted firmly together. A movable joint at the ankle should be discarded, as it undermines the lever by introducing an element of instability, and in this brace, serves no good purpose. Mild steel alone should be used, to facilitate alterations in

shape, as point after point of improvement is gained, and to make easy the shifting of buckles and straps, as may be required, all of which may be done by the use of a few simple tools. The upright is to be on the inner side of the leg, as in Fig. 14. The upper part of the brace makes counter-pressure on the inner side of the leg, but it has another important function, in previously neglected cases, which is secured by the steel band passing across the back of the leg, to which are fastened two buckles for the attachment of piece

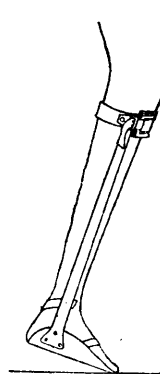


Fig. 11.



Fig. 12.

of webbing, K, in Fig. 9, which passes across the front of the leg. The steel band should make no pressure on the limb, as its use is simply to furnish attachment to the buckles. A piece of webbing spanning the front of the leg in this manner, and carrying a pad, performs an important service in cases, like the one shown in Fig. 12, in which, from previous neglect, the varus has not been reduced before walking begins. It transfers a part of the weight of the body from the anterior part of the sole of the foot, where it interferes with the correction of the varus, to the upper part of the anterior surface of the leg, where it is powerless to interfere with the treatment. That the weight-pressure thus transferred is considerable, is shown by the callus and bursa, which appear where the padded strap crosses the leg near the tubercle of the tibia. This mechanical effect is similar to that of the brace, shown in Fig. 11, used in the treatment of paralysis of the muscles of the calf, resulting in talipes calcaneus.

The upper part of the brace is also to be considered in another light, as follows: In previously neglected cases it is well to incline the upright 15° or 20°, or more, backward from the vertical of the foot-piece, as is shown in Fig. 9. Although correction of the equinus is postponed by this inclination of the upright, we are thus enabled to apply a better leverage against the varus, and when the varus is reduced, and the time arrives

when the equinus is to be corrected, this backward inclination of the upright is to be lessened from time to time, till the vertical is reached, as in Fig. 10, or till the upright has an inclination forward, allowing the corporal weight to fall more and more on the anterior part of the sole of the foot, and gradually lengthen the tendo achillis. The vertical upright, Fig. 10, is to be applied at once to patients in whom the deformity has been corrected before walking begins.

We will now pass to a consideration of the other end of the brace, the foot-piece, which is to be made of sheet steel, ranging from 18 gage, for a child learning to walk, to 13 gage for an adult. It has the usual tread, L, Fig. 13, and riser, M, Fig. 10. The heel-cup is formed by a piece of webbing, N, Fig. 13, passing behind the heel, from the lower part of the upright to a spur, O, Fig. 13, which projects upward from the back part of the outer border of the tread. Viewing the apparatus

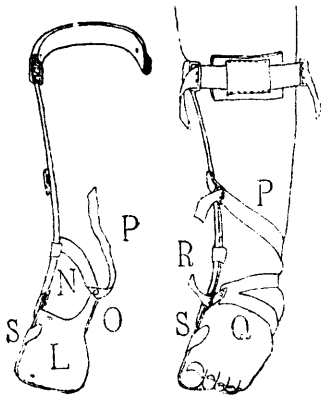


Fig. 13.

Fig. 14.

again as a lever, for the forcible reduction of varus in a previously neglected case, counter-pressure is made along the inner border of the foot, and on the upper part of the inner side of the leg while pressure is made by one strap or more than one, riveted and buckled

to the foot-piece and the upright. But one strap is shown, P, in Figs. 13 and 14. This will be sufficient in the case of a child whose varus has been corrected before walking begins, but in a previously neglected patient, in whom the varus has yet to be reduced while the child is active on his feet, two, three, or more straps may be added, as shown in Fig. 9, partly encircling the foot, ankle and leg, the positions of the buckles and the straps being where they will assist most efficiently in opposing the varus, and holding the foot in the best position to receive the weight of the body. These parts of the apparatus may be shifted many times, with advantage, in the treatment of a given case of unusual difficulty, and, in addition, a most efficient agent for applying continuous pressure is

found in a strip of adhesive plaster, Q, Fig. 14, sewed to a piece of webbing, R, the plaster partly encircling the foot and ankle, with a single tail, or two tails, as may be required, and the webbing being drawn tightly and buckled to the inner side of the riser. This device does more than simply to increase the amount of pressure; it also keeps the heel down on the tread of the foot-piece, and, more important still, it gives the foot a rotation outward, and thus directs the sole of the foot forcibly toward the ground, in the best position for making the weight of the body a corrective instead of a deforming force. The riser of the foot piece may also, in previously neglected and difficult cases, carry an ear, S, Figs. 9, 13 and 14,

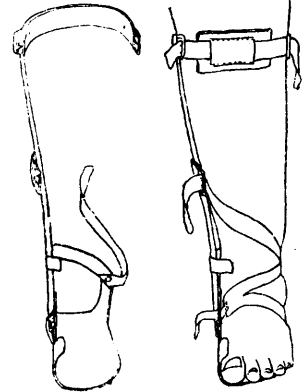


Fig. 15.

Fig. 16.

made of sheet brass, which is to be bent downward over the first metatarso-phalangeal joint, to prevent the inner border of the foot from overriding the edge of the riser. The foot-piece is to be lined with adhesive plaster, in several thicknesses if necessary, to prevent rust, and with a piece of leather fastened to the tread and spur with copper rivets, as shown in Fig. 10. In practice the details demand as much attention as the principles of treatment. The brace is to be applied over the stocking, the strap, R, passing through a hole cut in the stocking, and is hidden by the patient's trousers and shoe.

We will now consider the upright of the brace. It is a flat, tapering bar of mild steel, and when first applied to a previously neglected case, such as is shown in Fig. 12, should have a curve resembling that of the varus foot. The bar, though sharply curved, as in Fig. 13, should, however, be somewhat straighter than the foot, when the latter is forced manually into its best position. The multiple straps, shown in Fig. 9, should then be buckled and tightened daily till the continuous leverage has partly reduced the varus. The upright bar should then be somewhat straightened, and another point of improvement be gained, the patient in the meantime following his ordinary

pursuits without interruption. In due time the upright bar, and the foot itself, will both be straight, as seen in Figs. 15 and 16, in other words, the varus will be reduced. The upright should then be bent, from time to time, in the direction of valgus, as seen in Fig. 17, and the persistent and gradual effort resumed until the foot has been pushed, or pulled, or pried, over the boundary line, into the domain of valgus, as seen in Fig. 18. These efforts would not be necessary if the varus had been converted into valgus before the child had learned to stand. In very badly neglected cases, the interference of the weight of the body

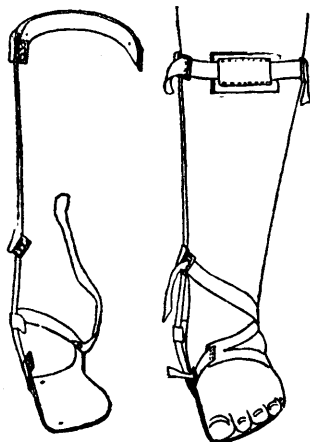


Fig. 17.

Fig. 18.

with the treatment may be prevented by the recumbent position, or the use of a high sole on the well foot, and the ischiatic or axillary crutch, until the varus has been materially reduced. In all cases, when the child is old enough to be docile, domestic instruction and drill in eversion of the foot, and in the proper management of the foot in locomotion, should be a part of the education.

As soon as the foot has reached the valgus shape, whether it be at the moment of learning to walk, or only after prolonged effort, in a neglected case, a curious effect will be observed. It will be seen that the outer border of the tread of the foot-piece is raised from the ground, as seen in Figs. 19 and 20, and that we have secured, in a convenient manner, the effect which is sometimes sought by building up the outer border of the sole of the patient's shoe. This is a welcome and powerful ally in our attempts to hold the foot in a favorable relation with the weight of the body and the ground.

The walking-brace has been above described as though its chief use were to reduce varus, which has become more or less confined by the habit of walking on the outer border of the foot. Strictly speaking, such cases should never occur. They

are, however, too common, and always indicate that the child has been neglected from the period of recumbent infancy, when deformity of this kind is the most easily overcome. If the varus were always corrected before the child learns to stand, then the only use of the walking-brace would be, as shown in Figs. 19 and 20, to gently hold the foot in valgus, so that the weight of the body shall be sufficient to lead the child to grow up with a foot practically normal. As such a child outgrows the brace, a larger one is to be made, and, when three or four years old, the foot will, without the help of the brace, strike the ground so fairly that, for two or three years, all

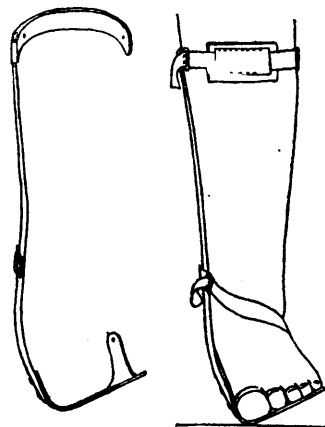


Fig. 19.

Fig. 20.

treatment may be suspended. The patient is to be observed from time to time, however, and, as the foot grows in its original inclination to varus, it will, after the lapse of two or three more years, have to be kept in proper position, under the rapidly increasing weight of the body, by a walking-brace adapted to its needs, for another period of two or three years. When the foot is full-grown it will be shapely in appearance and practically perfect in its ability to perform all the duty of a foot congenitally normal.

Although congenital club-foot has been chiefly kept in mind in the above pages, the views expressed in regard to the influence of the weight of the body are applicable also to talipes varus of paralytic origin. In this affection, at an early stage, and before the foot has lost its flexibility, a simple walking brace is needed, as in Figs. 19 and 20, to properly direct the action of the weight of the body on the paralyzed foot. At a later period, if this measure has been neglected, and the foot has been allowed to become varus, and more or less inflexible, the case will require more attention and probably prolonged effort, with multiple straps and adhesive plaster, to carry the foot across the line between deformity and the norm, to the position in which the weight of the body shall be a correcting and not a deforming force.

A CASE OF ACUTE SUPPURATIVE PLEURISY.

BY H. S. CLARKE, M.D., LUCAN, ONT.

W. C., aged 24, white, a farmer's son, of strong muscular build and first-class family history, spent the 27th of last Nov. doing the ordinary chores about the farm buildings. He said he felt tired and dull. He went to bed early, and was awakened from sleep by a dull pain in his left side. I saw him early the next day, Saturday, the 28th Nov. His temperature was 102° , pulse 116, and respiration 40. He had pain in the left side, which was increased by cough and deep respiration. He was constipated, and had the usual accompaniments of fever. Physical examination revealed friction and slight dulness at lower part of left thorax.

In three days the temperature was $102\frac{1}{2}^{\circ}$, pulse 120, and respiration about forty. There was an increase of two inches in the measurement of the left side, the ribs were widely separated, there was flatness on percussion, and absence of vocal sounds over the lower lobe, with friction and subcrepitant sounds at upper chest. The impulse of the heart's apex showed itself to the right of the xiphoid notch. The 4th day the temperature was down 1° , and he felt somewhat better.

On the 10th day of the disease, the temperature was $99\frac{1}{2}^{\circ}$, pulse 80, and respiration 30. In a couple of days, his temperature began to go up again. His pulse and respiration became more frequent, and he began to sweat profusely. Day and night he was covered with perspiration. When he fell asleep, which was seldom, he would sweat even more. A constant diarrhoea, which would not yield to any of the usual drugs, took the place of the former constipation; a grain of opium every three hours, day and night, had only a slight appreciable effect upon it. As I have intimated he spent sleepless nights. His respiration was rapid, and the cough was troublesome, but he never spat up anything but white frothy mucus—no blood—no pus from first to last. The side was quite œdematous and bulging, with not much motion. The œdema was very marked from about 3rd rib to crest of ilium, attaining its great

est degree over the 7th and 8th ribs, in the axillary line.

I allowed this to run along for seven days, when with the temperature at $102\frac{1}{2}^{\circ}$, and pulse at 120, respiration 40, and no amelioration of the symptoms, I determined to aspirate. On the 19th day of the disease, I passed the aspirator needle in at three different places, and got only about 3i, of what the microscope proved to be pus.

I could not understand why I could not obtain more, so I asked for a consultation. Next day, Dr. Lange, of Granton, met me at the patient's home. We passed a large aspirator needle, and got over a pint of pus, when the flow stopped. We could get no more. This did not mend matters much, so we made a free opening next day, in the following way. At the upper border of the 8th rib in the posterior axillary line I made an incision through the skin $2\frac{1}{2}$ in. long. By using a director and incising the underlying tissues separately, I was able to avoid a vessel that exposed itself between the intercostals, and which otherwise I must have severed. When I reached the pleura, I passed the aspirator needle to make sure I was not opening too low. Having found the incision was in good position, I nipped the pleura, as in hernia operation, and with a blunt-pointed bistoury, completed the incision. The pus flew in all directions. The Dr. assisting me clapped his hand on the opening to steady the flow. It squirted through his fingers into the basin, out on the floor, and fairly deluged the bed, so that the patient sat in a pool of pus. It was now evident from the many large-sized flocculi which escaped with the pus, *what stopped* our aspirator needles.

When two or three quarts had been allowed to come away, we put on an antiseptic pad and bandage, and left it till next day, when I found the pleural surfaces united. However, they were easily separated, and the remaining pus was allowed to escape. Two rubber tubes, one large and one small, were inserted. The small one for inlet, in case the cavity would require washing out, and the large one to act as an outlet tube. The former was left long and fastened at its end, while the latter was left open at the surface of the skin. From the first, antiseptic precautions were taken. The dressings were always made under carbolic spray. A large perchloride gauze pad was put over the tubes, over this cotton and a bandage.

*Read before the Ontario Medical Association, June, 1892.

In two days the temperature and pulse were normal, the diarrhoea had ceased, and the sweating nearly so. The œdema had disappeared, and the patient felt better. The respirations were still hurried. The inlet tube was now withdrawn. In a week the temperature was sub-normal, while the pulse had gone to 114. There was at no time any offensive smell to the pus. The father was shown how to dress it, with instructions to let me know if pus became fœtid. I saw him once or twice a week. He was up and about the house, and continued to do well in every respect until 9th Jan., when the father met me, as I was going out of my office in the morning, with the expression that "the blamed thing had broken off and gone in." I hurried to the patient's house, some five miles away, and found it as the father had said, the drainage tube had broken off close to the shield and had fallen or been sucked into the pleural cavity.

I dilated the ribs, which had fallen together, with a uterine dilator, and tried to grasp the tube with forceps, but could not do so.

The next day, Dr. Lange, of Granton, met me again, and having put the patient under chloroform, assisted me in the resection of $2\frac{3}{8}$ in. of the 8th rib in the line of the old incision, then, while the patient was turned over on his side so as to allow the tube to fall towards the opening, I felt it drop upon my finger, placed in the pleural cavity. I was able to grasp it with a pair of curved forceps and withdraw it. I might say that at that period, 21 days after the pleurotomy, there still remained a vast cavity in the chest, as I could make out with the examining finger.

Having washed out the cavity with sterilized water, another drainage tube with the rubber shield was inserted, a few stitches closed the wound, and the same dressing as before completed the second operation.

For three or four days the temperature and pulse went up. 101° and 108 respectively was the highest attained. He had night sweats, and greatly lost flesh for a week. After that time the pain wore away, his sweating ceased, he was able to sit up, his appetite improved, he gained in flesh, and made an uninterrupted recovery.

I withdrew the tube on the 19th Jan., and allowed the opening to close under a light dress-

ing of gauze and oil silk. From that time he has been allowed his freedom.

Since allowing it to close, expansion of the lung has taken place to such an extent that whereas there was two in. difference in the two sides when the tube was withdrawn, now there is but one, that is the left side which had fallen in two in., has now expanded one in.

Now as to the cause:—This young man was a favorite with the girls, and spent nearly every night of the week attending sprints on neighboring farms. He would go long distances to attend them, and get home often at daylight. His father kept him engaged well during the daytime in order to break his night work.

A couple of days before his pleural trouble he had been out all night, and got home just as his family were getting around in the morning. He was not allowed to go to bed, but spent the day in a drafty position attending a threshing machine. Thus I account for the fact that what in most persons would have been fibro-serous, was in him purulent, because of his depressed and over-worked condition of body and nerve, resulting in some vitiation of the blood.

Selected Articles.

IPECACUANHA IN DYSENTERY.

The following interesting case, illustrating the magical effect of ipecacuanha in large doses in the treatment of dysentery, has lately been brought under my notice whilst acting as physician to the French Hospital, Suez.

M. S—, a native of Austria, has resided for the last nine years at Ismailia. This town is notorious for malarial fever, and for three months in each year—July, August and September—she has suffered from intermittent fever. The paroxysm of fever came on about 11 A.M., terminating about 3 P.M. Towards the latter part of July of the present year she had a very severe attack of fever accompanied by acute dysentery. The diarrhoea was very troublesome, the bowels being moved as many as fifteen times in the course of the day, and the action being accompanied by much tenesmus. The character of the stools was typical of dysentery—at first yellow, then mucoid and slimy, with a very offensive odor. At the commencement of the attack retention of urine occurred for three days, and there have been subsequent attacks of dysuria. For days after the commencement of the fever severe pain was felt

in the right side, causing difficulty of breathing and accompanied by vomiting, of a bilious character. On Thursday morning, Aug. 12th, I first saw M. S.— in the consulting-room of the Suez Hospital. She had just arrived from Ismailia with her husband, and was supposed to be in an almost dying condition. On admission her condition was as follows: State of great prostration, with intense irritability and restlessness. Temperature 38°; abdominal tympanites and tenderness; hepatic fulness and intense sensitiveness, dysuria and diarrhoea. The stools were said by the nurse to be of the usual slimy dysenteric character, with a very offensive odor. The patient was placed in a cool ward by herself and absolute quiet enjoined. Twenty minims of tincture of opium were at once administered in a little water, followed in half an hour by half a drachm of ipecacuanha powder. Turpentine stupes were applied to the abdomen and the opium enema of the B. P. given. In the afternoon half a gramme of quinine was given in a cachet. The treatment was so immediately successful in stopping diarrhoea and easing pain that at night fifteen minims of laudanum, followed by a gramme of ipecacuanha, was again given, with another opium enema. For the first day the patient was allowed nothing but hot milk to drink. Aug. 12th: Patient has had four stools in the twenty-four hours, the temperature being 38.6°C. The ipecacuanha caused a good deal of vomiting, but almost stopped diarrhoea, greatly easing the pain in the side. The following powder was prescribed: Two grains of salicylate of bismuth, one grain of sulphate of quinine, one grain of naphthol, one-third of a grain of opium powder. This powder was divided into four cachets, one being taken every three hours. The opium enemata and turpentine stupes were continued. Milk and soda-water, or barley-water, was all that was allowed for diet. 13th: Temperature 38°C. The patient was very comfortable; slept well. Bowels moved three times in twenty-four hours. No abdominal pain. Allowed milk, bread and bouillon. Medicine to be repeated. 14th: Temperature 38°C. One motion in twenty-four hours. 15th: Temperature 37.8°C, the patient passing natural stools. Gets up during afternoon and takes more solid food. Ordered a gramme of quinine and carbonate of ammonia instead of the bismuth preparation. 16th: Temperature 38°C. The patient progressed satisfactorily. 17th: A slight return of diarrhoea, which was effectually stopped by ten grains of Dover's powder. 18th: All unfavorable signs having passed away, at her own request the patient left for her native home in Austria, with the remark that she would have died had she stayed in Ismailia.

The specific action of ipecacuanha in dysentery is due to its dual *modus operandi* on the intestines,

as (a) muscular sedative, and (b) secretory stimulant. The most characteristic symptom of dysentery is tenesmus (Dr. Woodward). There is such exaggerated peristaltic contraction of the rectum and lower portion of the colon that the patient goes to stool from thirty to two hundred times in the course of the twenty-four hours, or sits there for half an hour at a time, straining violently, but passing little or nothing (Dr. Hilton Fagge). The patient is under the delusion that he will pass something that will do him good. The fault does not lie in the irritant to be expelled, but in the irritability of the intestinal muscles. According to Heubner the average quantity of evacuation passed by each patient was found to be only from twenty-eight ounces to forty-two ounces. The great difficulty we have to deal with, then, in dysentery is exalted peristalsis. Ipecacuanha meets the difficulty by acting as an intestinal muscular sedative. A large dose of ipecacuanha stops tenesmus quite suddenly and smaller subsequent doses prevent its return. With a return of the muscular coat to its normal condition the other coats lose their irritability and the accompanying inflammation coincidentally subsides. The mucous membrane is then in a suitable condition for the second action of ipecacuanha to come into play—namely, secretory stimulation. We have now to deal with an enteritis, and here ipecacuanha acts in the same way as in bronchitis. Stimulation of the mucous membrane with secretion of mucus is effected by direct action on the peripheral endings of the gland nerves or minute ganglia (Dr. Whitla). Ipecacuanha has the same beneficial effect in dysentery therefore as it has in bronchitis. The action of ipecacuanha on the liver is that of a powerful stimulant. In dysentery the hepatic functions are in abeyance and bile is absent from the stools. Ipecacuanha directly stimulates the hepatic cells, so that very shortly after its exhibition the colorless slimy stools become feculent. In the words of Dr. Ewart, "Ipecacuanha is a non-spoliative antiphlogistic, a certain cholagogue and unirritating purgative, a powerful sudorific and a harmless sedative to the heart and muscular fibres of the intestines." According to this lucid and comprehensive description ipecacuanha is a perfect remedy for dysentery. In a certain proportion of cases ipecacuanha undoubtedly fails. Dr. Maclean says: "Where it fails it is because it has been given too late, when structural changes incompatible with life have taken place in the affected intestine, or from structural diseases of the spleen, liver and kidneys, or the combined ravages of the malarial and scorbutic cachexias." In those cases where ipecacuanha fails when success ought apparently to attend its administration the fault probably is to be found in the diet. For three hours after the first dose of ipecacuanha only a little ice should be

sucked and after that a little iced soda-water and milk. Beef-tea or bread, or very light foods, are fatal to the successful administration of ipecacuanha; and to this cause a great many of the failures of ipecacuanha are doubtless to be attributed. On the second day the ipecacuanha can be reduced in quantity and supplemented by salicylate of bismuth, quinine, naphthol and opium. Milk should still form the staple article of diet. Later on farinaceous foods and soups may be carefully given, but a return to solid meat should be deferred as long as possible. Mr. Chowdhovry remarks "that the large doses of ipecacuanha, which have been found to be of great use in treating the dysentery in India, are often inadmissible by reason of the nausea thereby invoked preventing the patient from taking a sufficient amount of nourishment." Considering that the success of the treatment by large doses of ipecacuanha depends upon the condition of the patient in not taking any nourishment during the period of its administration, the failure in Mr. Chowdhovry's cases was evidently due to the fact that his patients were trying to take a "sufficient amount of nourishment," thereby actually causing nausea and preventing a cure. There are cases where ipecacuanha fails when administered by the mouth which may be very successfully dealt with by ipecacuanha and opium enemata.—Arthur H. Hart, M.B., etc., in *Lancet*.

A SUMMARY OF WHAT CAN BE ACCOMPLISHED IN THE TREATMENT OF CHRONIC BRIGHT'S DISEASE.

Before considering what may be hoped for or accomplished in the treatment of chronic Bright's disease, it is indispensable to state with precision what pathological conditions are to be considered as coming under the name of Bright's disease, or Bright's diseases. The cases described by Bright himself were characterized by œdema or dropsy, albuminous urine, uræmic symptoms, and extensive renal changes. Yet perhaps even the greater part of the cases which are loosely called "Bright's disease," present none of these conditions except that of mild albuminuria. That physiological or normal albuminuria exists, I do not believe. I think the thorough consideration and argument presented by Lecorché and Salamon upon this vexed question, show that it does not, and in the edition recently published of my own work on Bright's disease, I have devoted considerable space to this important subject. Thus far, none of my arguments have been refuted.

For the purposes of this paper I shall exclude the cases of simple, mild, chronic albuminuria, such, for instance, in which the urine does not

contain more than three centigrammes (about one-thirtieth of one per cent.) to the litre, which are unaccompanied by renal epithelia or casts, where there is no diminution in the amount of solids excreted, the functions of the kidneys are not deranged, and the general health does not seem to be impaired. And such cases are extremely common. I desire to state what has been and what may be the result of treatment in those cases in which organic changes in the kidney have brought about more or less grave disturbances of the health.

In advanced cirrhosis, where the interstitial tissue is contracted, and the cortex retracted and hardened, so many of the tubules must, of necessity, be obliterated or narrowed, that there would be a great loss or destruction of their investiture of epithelia, and there would not be left enough of these to enable the kidney to perform its formative functions, namely, the formation from the blood of the capillaries which surround the tubules (and often many of the capillaries are inflamed and sclerosed) of the solids which are excreted in the urine. The result of these conditions would be the excretion of the aqueous principles of the urine, containing but little solid matter in solution, and the retention in the blood of elements, which, perhaps, by their decomposition, contribute to the poisoning of the system and the irritation of the nervous centres, and, finally, the dire catalogue of the symptoms met with in advanced cirrhosis. In such cases we can ordinarily hope to accomplish nothing more than to palliate symptoms, and perhaps prolong life. Recovery or a cure is not to be looked for.

Likewise, where the kidneys have undergone considerable fatty change; in the amyloid kidney and in the large white kidney; where there is a daily loss of considerable quantities of albumin, the tubules being choked by swelled epithelia or filled with casts; where the casts from the broad tubules predominate; where the glomeruli are inflamed and incapable of separating the aqueous principles, and the urinary secretion is diminished; and where these changes are fixed and chronic, little, perhaps nothing, is to be expected in the way of a cure.

Nevertheless, between the numerous cases of mild chronic albuminuria and those of advanced cirrhosis and chronic parenchymatous nephritis, there exist many, even severe, forms of nephritis in which the structural changes are marked, and even chronic, and so great as even to produce grave conditions of health and endanger life (I do not here allude to acute nephritis), where much, perhaps everything, can be hoped for, and even expected, from well-directed theapeutics. In these cases we are not confronted by a condition of abject helplessness, but may address ourselves to the work of relief strengthened by a certain sense of power.

When the epithelia are destroyed, they are never restored, their place being taken by a new formation of flat, spindle-shaped cell—endothelia—between the basis of the epithelia and the so-called structureless membrane; sometimes nucleated, though more frequently not. These may be embryonic or aborted epithelia. Of course it is no more possible to produce a new growth of epithelia than it is to restore hardened connective tissue or contracted or shrunk up glomeruli to their normal state. This must be conceded.

But in all chronic cases which are susceptible of cure there is an intercurrent of acute or sub-acute inflammation; and this it is which I believe we cure or arrest; and that in chronic nephritis there is a constant effort to develop these new inflammations. The cirrhosis, the destroyed tubules, the obliterated tufts, these conditions must remain. But this being the case, can a cure be expected?

I answer that even then there are cases which are susceptible of a practical cure, or, at least, to such an extent that the renal functions will be unimpaired, the nutrition of the system will be affected, and no symptoms referable to the kidneys will exist. This is possible: 1. Because only a moderate amount of interstitial tissue may be affected, and so few of the tubules, as to leave sufficient healthy epithelia to enable the kidney to perform its functions. So long as this condition is equable and constant, no perturbation is experienced; but when, in addition, the epithelia become more less extensively involved by inflammation, and proliferation and inflammation of the interstitial tissue occurs, and with the increased activity of the renal there is polyuria, increased albuminuria, and diminished formation of solids, then it is that the innumerable symptoms of the morbus Brightii are developed. 2. Cirrhoses may exist only in a mild degree, and sometimes only in patches. There are cases in which the organic changes are limited to one kidney. Now, it is under these three conditions, in which the great part of the cures of Bright's disease are brought about. I have no doubt that the new inflammations can usually be controlled; and when this is done the renal symptoms and deviations from health disappear.

Of course I except cases of great structural changes in the kidney. As in all organic diseases, everything depends upon the *amount* of disease.

I have treated many cases of chronic nephritis in which disturbances of vision, loss of strength and weight, headaches, œdema, nausea and polyuria, variously existed; the patients that I have so treated have been under my observation for several years, and, so far as renal symptoms are concerned, are in the enjoyment of perfect health. In some of these cases the albuminuria has completely disappeared. A few of these cases I will briefly describe.

About twenty years ago a lady, then sixteen years of age, had suffered about six months from all the conditions of chronic catarrhal nephritis. An absolute cure was effected in six months, and her health has remained, and is now, perfect.

Another case is that of a gentleman who had been incapacitated from work for one year, from chronic interstitial nephritis. There was slight albuminuria, great debility, hard tense pulse, with severe circulatory disturbances of the head. Has enjoyed now perfectly good health for about three years.

A third case is that of a gentleman, aged forty-two, of somewhat scrofulous constitution. First consulted me in 1885. There was chronic interstitial nephritis, and he had been incapacitated for work for three years. There was great debility, considerable cardiac tension, and loss of flesh. Within the last three years he has gained sixteen pounds, is strong and able to attend to business. Albumin is, however, always present, varying from $\frac{1}{40}$ to $\frac{1}{100}$ of one per cent. For two or three years there have been no renal epithelia.

The next patient I will refer to was a lady, who had been suffering from chronic nephritis for more than a year. It followed uræmic convulsions, she having had these in four different confinements. There were abundant casts, kidney epithelia, and from one-tenth to one-twentieth of one per cent. of albumin. For five years now there has not been a trace of albumin, and her health has been perfectly good. The microscope in this case showed more croupous than interstitial nephritis.

A girl, fourteen years of age, suffering from the chronic interstitial nephritis of malarial poisoning, was placed under my care nearly eleven years ago. The malady had been recognized about a year before I saw her. There were severe headaches, subsultus tendinum, threatening convulsions, debility, and always about one-thirtieth of one per cent. of albumin. For eight years now there has been no albumin, and the health has been perfectly good.

I mention these cases as illustrations of what I consider cures in grave conditions of renal cirrhosis or parenchymatous nephritis, and I could mention a considerable number of others.

Undoubtedly, were it possible for me to make now a microscopic examination of the kidneys of these patients, I should find more or less thickened and hardened interstitial tissue, obliteration of a greater or less number of renal tubules, some tubules partially stripped of their epithelia, and others partially obliterated, and perhaps thickening of Bowman's capsule and destruction or atrophy of some of the tufts. But I should expect to find no acute nor subacute inflammatory conditions, and I should find enough healthy epithelia and tufts to separate the urinary salts and aqueous principles in their normal quality.

In a word, the healthy tissue would be so much in excess of that destroyed or useless that the loss of the latter would do no harm.

Thus I have endeavored to give a summary of what may be accomplished in the treatment of chronic nephritis; certainly a much more cheerful summing up than can be given of phthisis and many other grave diseases, and, on the whole, affording much that is cheering itself.

The ordinary chronic, harmless albuminuria of years' standing, proceeding for instance from the glomeruli without any lesions of the urinary tubules, can seldom, if ever, be cured, and I will go so far as to say that in the majority of cases it matters but little whether it be cured or not.

In chronic croupous nephritis with dropsy, in the large white kidney, or the fatty kidney, the prospects of benefit from treatment are much less than in the mild cirrhotic kidney. My experience in these cases has usually been unsatisfactory, and I believe that the possibilities of what I will continue to call a cure are very small. Nevertheless, I have records of several cases of chronic tubal nephritis of more than a year's standing, with dropsy, which were radically cured, the albumin entirely disappearing. Of course these were not cases of the large white or fatty kidney, but were undoubtedly cases of simple tubal nephritis. There was, in these cases, considerable albuminuria, numerous epithelia and casts, mostly granular, many of them having undergone fatty degeneration.

Chronic parenchymatous nephritis I have found more favorable to treatment when it has resulted from paludal poisoning; I have found iron, arsenic, and quinine of great value in these cases.

Another class of cases in which treatment may yield highly satisfactory results is where the nephritis has had a specific origin.

I have given, in the third edition of my work on Bright's disease, the details of what is practically a complete cure of a grave case of chronic interstitial nephritis of syphilitic origin. That patient had been under treatment for nearly two years before he consulted me; he had for several months been incapacitated from attending to business, and suffered from debility, headaches, and dimness of vision; there was considerable œdema of the eyelids; there were at no times casts, and but few renal epithelia. Two or three years of treatment were, however, necessary to bring about a good condition of health. I will say that for many months he took from forty to eighty grains of the iodide of potash daily, besides taking Fowler's solution in large doses, and corrosive sublimate, as well as the proto-iodide and bin-iodide of mercury.

I will say no more at present as to what may be expected in the relief or cure of chronic Bright's disease. I am glad that I am able to say so much

that is favorable. I am aware that many physicians regard all cases of chronic nephritis as being beyond the pale of relief. But there is no reason why chronic inflammatory conditions of the kidney may not yield to treatment in a like proportion with other chronic inflammatory conditions, as of the lungs, cirrhosis of the liver, etc. Dr. Millard, of Paris, has published an account of three cases of the latter which he has cured.

As to acute Bright's disease, I will only say that it may be placed in the list of curable diseases. There are but few cases that with proper treatment may not be perfectly cured.

But when I say that many cases of chronic nephritis may be cured, it is not to be inferred that a cure is always easy, or to be effected without the expenditure of a good deal of labor and time on the part both of the physician and patient. Circumstances must favor the latter, in enabling him to pursue the treatment uninterruptedly for as long a time as is necessary; if needed, to take rest from work, to avail himself of a course of mineral waters, or a change of climate. Thorough chemical and microscopic examinations of the urine must be frequently made, so as to take advantage of every change in the renal conditions; the diet, selected with care, must be rigorously observed; hot air or vapor baths I consider indispensable. Whenever a new case of much gravity is presented to me, I usually require the patient to keep his bed perhaps for several weeks, and to subsist on a lacteal, or on a slightly nitrogenous, diet. It is necessary to make the patient understand *in limine* the necessity of all this, and that he has before him a long and arduous course of treatment. Unless patients comprehend all these necessities I cannot give them much encouragement, and prefer not to treat them.

It is not the purpose of this paper to refer specifically to the treatment, but I will say that, together with the measures I have referred to, I have found various mercurial preparations indispensable, and I have used with great value ergotinine caffeine, strophanthus, digitalin, sparteine, arsenic, various preparations of iron, especially the albuminate and chloride, quinine, the salts of strontium and calcium, nitro-glycerine, iron and arsenical waters of the Trentino, as the Levico and Roncegno, and diuretics. If uric acid exist in excess I neutralize it by Vichy, Vals, or similar waters, and often prescribe for the same purpose Schering's piperazine water with phenocoll. I send patients often to Evian, Vichy, or Royat, and, if the hepatic functions are greatly deranged, to Carlsbad, Marienbad, or Vichy.

I will close by quoting from my own work the following remarks upon treatment:

"There is a harmful disposition on the part of writers even of known ability, in reviewing the therapeutics of Bright's disease, to speak of the

employment of a long list of remedies in this ailment, and of finding them in certain cases useless or the contrary. Practically, their conclusions are to the effect that such and such remedies are 'good' or are not 'good for' R. Bright's disease. The mistake that such writers make is in considering this malady an *entity* and treating it as such, instead of realizing its multiple character and the fact that the pathological conditions, the changes, the constitution of the disease, the etiology, are seldom identical in different cases; although it is of course true that there is a certain number and class of remedies without recourse to which treatment would be likely to prove unavailing."—Henry B. Millard, M.D., New York, in *Medical Record*.

THE ALBUMINURIA OF PREGNANCY TREATED BY THE INTERNAL ADMINISTRATION OF CHLOROFORM.— REPORT OF CASES.

In the *Southern Medical Journal* for August, 1890, an article appeared from the pen of Dr. A. W. Griggs, claiming excellent results in the treatment of the "Albuminuria of Pregnancy" by the internal administration of "chloroform" in from ten to twenty drop doses in water after each meal and at midnight.

Inasmuch as my own treatment of this condition had not been altogether satisfactory, I determined to give chloroform a trial as soon as an opportunity offered.

As a result of my trial of the remedy I append cases representative of different cases coming under my own observation and that of some of my medical friends.

CASE I.—On November 3, 1890, my first opportunity offered in the person of Miss C., unmarried, *æt.* 22 years; pregnant about 8 months. Two weeks ago her feet and ankles began to swell and the swelling has gradually increased until to-day she has general anasarca. She is listless and complains of continuous frontal headache and dull heavy pain in the back and lower extremities. Pulse 88, temperature 99, pupils sluggish. Her mother states that during the last 24 hours she had not passed more than a half teacupful of urine (she had been treated for over a week by an irregular). I had her pass her urine and she voided about $\bar{3}\bar{i}\bar{j}$. A rough bed-side test showed it albuminous (albumen = $\frac{1}{3}$). I ordered her ten drops of chloroform in a tablespoonful of water every 6 hours.

Nov. 4, 2 p.m.—General condition about the same, has passed 16 oz. of urine in 23 hours. Treatment continued.

Nov. 6, 9 a.m.—Pain in head slightly improved, otherwise patient is about the same. Has passed

27 oz. of urine in 42 hours. Dose of chloroform increased to 15 gtt.

Nov. 8, 11 a.m.—Patient much brighter, headache only slight, pain in back and extremities very much improved. Has voided 54 oz. of urine in 50 hours. (Albumen = 1-12). Treatment continued.

Nov. 10, 2 p.m.—Patient very much improved. Swelling diminishing rapidly, has passed 80 oz. of urine in 53 hours. She perspired profusely during last night.

Nov. 12, 10 a.m.—General condition good, swelling of face and upper portion of body has almost entirely disappeared. Has passed 78 oz. of urine since my last visit.

Nov. 14, 3 p.m.—Patient says she feels comparatively well, only that nasty medicine is beginning to make her sick at the stomach. Has passed 76 oz. of urine since last visit (albumen = 1-20). Up until my third visit her parents were entirely ignorant of the fact that she was pregnant, and before I had an opportunity of seeing her again they thought it prudent to have her (for the benefit of her health?) visit friends in a distant city. I afterwards learned that she was delivered of a feeble female child (which survived only a few days) on the 7th of December, and that nothing unnatural occurred during her lying-in.

CASE II.—On the night of February 2, 1891, I was called hastily to see Mrs. C., who was pregnant near unto term in her fourth pregnancy. Her husband stated they had not noticed anything unusual about her and that she had gone to bed apparently in good health, at 9 o'clock. At 11 o'clock he awakened and found her in a convulsion. When I arrived I found her in a semi-comatose condition, pulse 120, temperature 101. I passed catheter and drew off about one ounce of urine. There was no swelling except slight of feet and ankles, no history of suppression of urine. Touch did not reveal any sign of oncoming labor. I gave her a half teaspoonful of chloroform as soon as I could get her to swallow it, and repeated the same dose every half hour until four doses had been taken. I left her with directions to give her 15 drops every hour until I returned, and in event of another convulsion to call me at once.

Feb. 3, 8.30 a.m.—Patient is stupid, answers questions intelligently. Pulse 108, temperature $99\frac{1}{2}$, pupils sluggish. Drew 6 oz. of urine with catheter (albumen = 1-10). Continued chloroform 15 gtt. every hour.

6 p.m.—Urine has passed involuntarily, pulse 120, temperature $100\frac{1}{2}$. About $\bar{3}\bar{j}$ of urine drawn by catheter. Patient very stupid, slight twitching of muscles of face and left upper extremity. Order chloroform in half teaspoonful dose every one, two or four hours as indicated by muscular movements or restlessness.

12 midnight.—Patient in labor, os well dilated, cephalic presentation L.O.A. position. 12.30 mem-

branes ruptured and at 12.40 she was delivered of a living male child weighing 8 pounds and 10 ounces. Her lying-in was perfectly normal. Abundant secretion of urine, and on fifth day there was merely a trace of albumen.

CASE III.—On July 9, 1891, I was called to Mrs. W., æt. 20, pregnant eight and one-half months; first pregnancy. She said she was feeling very well, but that her feet and legs were considerably swollen, and she thought she had better see a doctor about them. Her general health was good; pulse 84, temperature 98½, tongue clean, bowels moved every second day. She said she passed her urine very freely and frequently. I told her to send some urine to my office in the evening, and I would call the next day. In the meantime, she might take a small dose of citrate of magnesia. The urine, sp. gr. 1.028 (albumen = 1-20), a few granular casts.

July 10.—Patient reports having passed 32 oz. of urine in 26 hours; bowels moved once freely; a small quantity of urine had passed at that time, not measured. I ordered 10 gtt. of chloroform, morning, noon, supper and bed-time.

July 15.—Urine passed in last 20 hours, 18 oz.; swelling considerably increased; ordered medicine continued.

July 18.—Urine passed in last 22 hours, 15 oz.; now some puffiness of eyelids; slight headache; ordered 15 gtt. of chloroform every five hours.

July 20.—Urine passed in 44 hours, 26½ oz.; considerable swelling of the face, and swelling very much increased in lower extremities; complaints of some nausea, and headache much worse; ordered 10 drops of chloroform and a teaspoonful of infusion digitalis every three hours.

July 21.—Has not been able to take medicine regularly on account of vomiting; swelling still increasing; headache severe; has only voided about 12 oz. of urine in 24 hours (albumen = ½); ordered R—Mur. cocaine, grs. ij; aquæ calcis, ʒij. M.—Dose, a teaspoonful every one or two hours as needed for vomiting; chloroform and digitalis to be continued.

July 22.—Headache improved; has only vomited twice; passed 16 oz. of urine in 22 hours; the swelling of lower extremities so great I deemed it prudent to puncture the feet with a surgical needle, making twelve punctures in each foot. Treatment continued.

July 23, 12.30 a.m.—Patient was taken in labor about 9 o'clock; os is dilated to size of silver dollar; cephalic presentation, L.O.A. position; pains strong, bearing and regular every ten to fifteen minutes; 3 a.m., membranes ruptured, os well dilated; 3.35, was delivered of a female child, weighing 5½ pounds; no anæsthetic given during labor; recovery uninterrupted; urine abundant; all trace of albumen had disappeared on twelfth day.

CASE IV.—Dec. 27, 1891, 10 a.m., I was called to see Mrs. S. J. L.; pregnant, 7 months in her sixth pregnancy. A history of eclampsia in two of her former labors; called me because she was swelling, and felt very much the same as in her former unfortunate pregnancies. She was anæmic; pulse 110, temperature 99, tongue furred, urine scant and high colored; could not state exactly quantity passed; diarrhœa, bowels moved eight to ten times in 24 hours. She was generally anæmic, her feet and legs especially being enormously swollen. Intense headache, and some dimness of vision; subsequent examination showed urine albuminous (albumen 112). Ordered 15 drops of chloroform every four hours, and brom. potass. and chloral hydrate, ãã grs. x, every two hours until pain in head was relieved.

6 p.m.—Patient reports no improvement.

Dec. 28, 9 a.m.—Patient slept about five hours, pain in head much relieved; only took three doses of brom. and chloral; was not able to measure quantity of urine passed on account of diarrhœa. Ordered chloroform continued. Brom. and chloral only if restless or pain in head. Also bis. sub-nit. grs. xij every two hours if needed for diarrhœa.

6 p.m.—Reports having slept two and one-half hours during day; diarrhœa not so frequent; no headache.

Dec. 29, 2 a.m.—Patient slept from 11 until 1 o'clock, when she awoke and had what the nurse termed a severe convulsion, lasting about five minutes. Patient is now semi-comatose, pulse 140, temperature 99½. 2.10—took a convulsion while I was examining her; lasted three minutes. Administered chloroform by inhalation. At 3.30 slight twitchings of muscles of face occurred. I gave her then a teaspoonful of chloroform by the mouth. She then rested for two hours.

Dec. 29, 9.30 a.m.—Patient conscious but stupid. Pulse 114, temperature 99+. I drew three ounces of urine and found some urine and fecal matter had been passed involuntarily in bed. Ordered bismuth continued as needed and gtt. xv of chloroform every two hours, unless patient was sleeping.

8 p.m.—Patient resting easily, has passed urine involuntarily; no diarrhœa. Treatment continued.

Dec. 30, 9.30 a.m.—Patient slept six hours during night. Is perfectly conscious, has slight pain in head. Has passed six ounces of urine in ten hours. (Albumen = ⅓). Treatment continued. From Dec. 30 to Jan. 3, the quantity of urine passed averaged 16 oz. for the 24 hours. The swelling gradually increased. There were no further signs of convulsions.

Jan. 3, 2 p.m.—Patient is slightly delirious, pulse 124, temperature 99+. Urine passed involuntarily and some diarrhœa in morning. Ordered one-half teaspoonful of chloroform every two or four hours until rest was secured. Nurse reported

having only given three doses until Jan. 4, 11.30 a.m., when I found patient rational and in labor. Os dilated, both feet presenting. At 12.10 I delivered of an hydrocephalic monster. Her recovery was uninterrupted until the eleventh day, when a slight attack of phlegmasia alba dolens set in, which somewhat retarded recovery.

CASE V.—Mrs. S., æt. 23, pregnant 8 months, in her third pregnancy. In her first pregnancy, I was compelled to induce labor on account of rapid succession of convulsions during thirty-six hours. Second pregnancy was uneventful, no albumen or dropsical effusion occurring. Now, April 5, she is considerably swollen in lower extremities, urine high colored and scant, and on examination albumen = 1-10. Ordered 15 gtt. of chloroform four times a day in a tablespoonful of water.

This case, residing a distance out of town, was to report to me in a few days. She neglected to do so, however, for ten days, when she reported swelling reduced; urine passed from 36 to 40 oz. in 24 hours, on examination, albumen only a trace. The medicine was discontinued. She was confined on May 1; her labor and lying-in being perfectly normal.

Several other cases have been treated at my request by medical friends with a view to ascertain results. I regret very much that I have not had the opportunity for observation I thought I might have when I agreed to write this paper. It is a small experience upon which to base an opinion. Taking these cases in connection with a few others of a milder nature I have treated and several reported to me kindly by members of the Pittsburg S. S. Medical Society, I am led to conclude that chloroform does undoubtedly do good in some cases, while in others it apparently aggravates the trouble. It seems to me, whatever its effect may be determined to be upon further investigation, with regard to increasing the flow of urine and decreasing the albumen, that it does have a beneficial effect when given internally in preventing eclampsia.—J. Milton Duff, M.D., in *Jour. of Am. Med. Association*.

THE DIFFERENT FORMS OF CARDIAC PAIN.

Cardiac pain is a symptom belonging to several affections that differ from each other in their nature and pathology. These maladies have all the common property of pain, varying in degree, and seated apparently or really in the heart. There is, however, no satisfactory term in English usage for designating this pain. On the ground of analogy, it would seem proper to call it *cardialgia*, after the examples of *gastralgia*, *cephalalgia*, etc.; but this word is already appropriated, illogically

though it may be, to an affection with which the heart is not concerned at all. Thus, in the *National Medical Dictionary* of Dr. Billings, the first definitions of *cardialgia* are *gastrodynia* and *heartburn*, the last being pain in the heart. In the *Century Dictionary* and in that of Dr. Foster no other meanings for *cardialgia* are given than *heartburn* and *gastralgia*. Dr. Flint says that "*cardialgia* signifies pain at the cardiac orifice of the stomach, of a burning character"; and Dr. Wm. H. Welch, in his very valuable monograph on *Ulcer of the Stomach*, says: "With most English and American writers *cardialgia* signifies *heartburn*, while Continental writers understand by it the severe paroxysms of *epigastric pain* which we more frequently call *gastralgia*." This usage, though fixed, is certainly contrary to etymology and to the analogy of similar words. *Heart-pain* would suggest its meaning very plainly, but it is not in accordance with English usage; for we do not say *head-pain* or *back-pain*; and if *headache*, *backache*, and *earache* suggest *heartache*, we are debarred from that word by the fact that since it was included with "the thousand natural shocks that flesh is heir to" it has always been used to denote emotional rather than physical distress. We are therefore driven to the use of the terms "*cardiac pain*" or "*pain in the heart*."

This kind of pain is found as a prominent symptom principally in three different forms of disease of the heart; and I desire to refer briefly to these from a clinical rather than from a pathologic point of view.

The first of these, and the one in which the pain exists in most intense degree, is *angina pectoris*, true *angina* with increased arterial tension, occurring in paroxysms, and most frequently associated with aortic or coronary disease or with fatty degeneration of the heart. As the name of this affection implies, the pain is of the very essence of the disease itself. In severe cases it is nothing less than a mortal agony—an agony from the very intensity of the pain, and a mortal agony because, as testified by many sufferers, the pain is attended with a sense of impending dissolution. Nothing can better describe a paroxysm of *angina* than words used by a non-medical writer, and without reference to this disease, in which he speaks of "a sense of ruin which is worse than pain." As recorded by Dr. Latham, from his own observations, it is "a suffering as sharp as anything that can be conceived in the nature of pain, including something which is beyond the nature of pain—a sense of dying." Keeping in mind this element of the paroxysms, I think Professor Flint's criticism, that "Heberden's term signifying *strangulation* has but little pertinency in this application of it," is, with all deference to his high authority, hardly justifiable; for Heberden speaks of "the sense of strangling and anxiety with which the disorder is

attended"—*angor pectoris intentans vite extinctionem*; and he seems to use the word angina with reference to these rather than to the pain alone; to the combination of anxiety and anguish found in the disease; words indeed that come from the same root as angina, and bear witness to the accuracy of the term as Heberden first employed it.

The structural changes connected with true angina are in a very large proportion of cases those that produce cardiac ischemia, especially insufficiency or atheromatous rigidity of the aorta, obstruction of the coronaries or fatty degeneration of the heart. Any one of these changes may lessen the blood-supply to the heart-muscle; but only the first two, aortic insufficiency and obstruction, are diagnosticable with certainty by auscultation; we may suspect coronary obstruction or fatty degeneration, but we cannot during life prove their existence. Hence the prognosis of a case of true angina pectoris may be equally as grave when auscultatory examination yields a negative result, as when it discloses organic disease; for the cardiac ischemia on which the disease may depend may be brought about by undetectable coronary obstruction or fatty change. On the other hand, post-mortem examinations not infrequently show great sclerosis of the coronaries, and also fatty degeneration, in cases in which the symptoms of angina pectoris had not been present during life; so that it is difficult to determine what is the immediate cause of the angina, *i.e.*, what is the exact causative relation of the lesions to the symptoms.

A very common factor in the production of a paroxysm, or at least a very common attendant upon the paroxysms in the earlier attacks, is a great and sudden increase of arterial tension. Whatever be the underlying organic cause, the immediate action seems to be purely neurotic, just as it is in Nothnagel's vasomotor angina, coming on after exposure to cold, which produces apparently a spasm of the peripheral arterioles and a sudden feeling of tension or severe pain about the heart; or there may be some unknown reflex influence by which the arterial constriction and increased tension are brought about and the paroxysm excited.

It was this sudden increase of arterial tension that led Lauder Brunton, by a happy inference, to try the effect of amyl nitrite in angina. The action of this remedy in causing flushing was first observed by Guthrie, and its power of lessening tension was first shown by Gamgee, but the application of its power to the particular form of increased tension found in angina pectoris was first made by Brunton, with the well known results of giving deliverance and safety, at least for a time, to many that have seemed ready to perish. In view of the many cases of angina in which great and prompt relief has been given by this agent, I cannot but feel surprised at the opinion expressed

by several recent writers that it is doubtful if there are any remedial agents that have the power to arrest or very greatly relieve a paroxysm of the disease. No therapeutic results seem to me more obvious and satisfactory than those that are often witnessed from the use of this remedy in angina; and I fully agree with Professor F. C. Shattuck, that the value of the nitrites in angina is greater than Strümpell, the author upon whom he comments, would seem to admit.

A second form of cardiac pain closely allied in character to the one already considered, and yet distinct from it in its pathologic relations and generally less intense in type, is encountered as a complication of some cases of chronic nephritis, chiefly the contracted kidney or interstitial nephritis. In this class of cases the changes in the kidneys and sometimes in the heart are parts of a general arterio-sclerosis, and the pain in the heart is probably the expression of resistance to the blood-flow through the arterioles.

If it be asked why, with a constantly present mechanical cause, the attacks should be paroxysmal, with intervals between them, it may be said that this is a law of various neuroses, such as neuralgias dependent on pressure, or epilepsies due to exostosis or depression of bone, or spasmodic asthma due to nasal polypi—all conditions in which the causes are constant and the neurotic seizures paroxysmal. In this form of cardiac pain, the attacks may be frequent, but they are in general less severe (such at least has been my experience) than those of true angina connected with heart-lesions. I have described several such cases in a paper read before this Association at its meeting in 1888. In all of them the symptoms of chronic interstitial nephritis existed, and in one of them, in which the painful attacks were most severe and most like those of true angina, post-mortem examination disclosed not only chronic contracted kidneys, but occlusion of the coronaries. It is in cases of this kind that potassium iodide in large doses, as advised by Huchard, may sometimes prove beneficial by lessening the arterio-sclerosis. In the painful attacks, a certain degree of relief may be obtained from amyl nitrite, which, though it cannot reach the organic cause of obstruction, may lessen an incidental increase of tension.

After all, these two forms of cardiac pain may be essentially one in their pathology—both being dependent upon sclerotic changes. Regarded clinically, however, one group is composed of cases in which there are detectable or suspected organic heart-changes, with no kidney complications; while the other group consists of cases in which the kidney-symptoms are always prominent, while the heart may or may not be involved.

A third form of cardiac pain is found in dilatation of the heart, and is perhaps due to tension and stretching of the nerves in the heart-substance,

Traube held that the pain of true angina is due to this cause. Whether it be so or not, the subjects of cardiac dilatation frequently experience pain about the heart, greater in degree in general in proportion to the rapidity with which the dilatation is induced.

Pain may thus arise from any form of valvular disease of the heart that leads to dilatation; but of the various valvular lesions it is perhaps found most commonly in aortic insufficiency, which is likely to occasion rapid dilatation of the left ventricle, from the pressure of the backward current of blood from the aorta, at the same time that the left auricle is sending its supply into the ventricle. It is to be remembered, however, that aortic insufficiency may give rise to some cardiac ischemia by the imperfect filling of the coronaries; and thus there may be two causes of the pain, the ischemia and the intra-ventricular pressure. Which has the larger share in causing the pain, it may be impossible to say.

If dilatation be extreme and acutely developed, free venesection may be the best means not only for relieving pain, but also for saving life.

In all forms of cardiac pain, arsenic is a remedy of much value, from its action as an anti-neuralgic, and from its power of promoting the nutrition of the heart. It has no effect in the way of controlling existing pain, but it may lessen the severity and the frequency of future attacks, and I hold, with Anstie and with Balfour, that there is no more important prophylactic tonic against cardiac neuralgia than arsenic.

Looking at all three of these forms of disease and endeavoring to co-ordinate them as to their cause, it is quite possible that the chief factor in the production of pain common to all of them is pressure brought to bear upon the cardiac nerves or upon the cardiac ganglia themselves. The connection between these ganglia and the cervical and brachial plexuses gives a ready explanation of the extension of the pain to the arms that may occur in any form of cardiac pain. In the first or strictly paroxysmal form, true angina, the pressure may be occasioned by the sudden tension of the arterioles; in the second form, by the general sclerotic state of the vessels; and in the third form, with dilatation of the heart, by the attenuation of the heart-walls.—Samuel C. Chew, M. D., in *Med. News*.

NOTE ON THE RELATION OF THE SYMPATHETIC TO THE CEREBRO-SPINAL NERVOUS SYSTEM.

Stewart in opening his article on the disorders of the sympathetic nervous system, says: "Although the physiology of the sympathetic has been advanced considerably within recent years,

there has not been a commensurate advance in our knowledge of its diseases. In fact, with the exception of a few important disturbances which we know to have a direct causal connection with alterations in the sympathetic, our knowledge of its diseases is very superficial and in many cases purely problematical." He then gives the following list of the chief disorders attributed to changes in the sympathetic, hemigrana, exophthalmic goitre, angina pectoris, Addison's disease, diabetes mellitus, unilateral hyperidrosis, glaucoma, neuroretinitis, and ophthalmia neuro-paralytica. He does not mention neuralgia, neuritis or any of the common disorders to which nerves are liable, and yet neuralgia of the abdominal sympathetic is a comparatively frequent affection. Indeed, most modern writers have neglected this disease, seeming to regard it as synonymous with colic. It is this habit of applying the general term colic to all painful disorders having their origin in the intestine that has done so much to obscure our conception of the diseases of the abdominal sympathetic. Thus, Ross in speaking of the cœlic plexus, describes neuralgia mesenterica, and as synonyms employs the terms colic, enteralgia, and colica saturnina. That he regards these conditions as practically identical is apparent from the description, where he says that "enteralgia or intestinal colic consists of pains in the abdomen, having their seat of maximum intensity about the umbilical region." He mentions neuralgia of the gastric and hepatic plexuses, but it is only when describing the disorders of the cœlic plexus, that he seems to regard pain in this region as identical with colic. Romberg clearly pointed out the error of applying the term colic to every pain having its origin in the intestinal tube. In this he was not alone, as Thomas Willis had described essential neuralgia of these parts long before and had clearly distinguished between the colicky pains, vulgarly termed the gripes, and the disease in question. The former attacks all classes of people indifferently, is caused by incongruous or unusual beverages, diet, taking cold, etc. The latter, however, develops in persons who are predisposed, it has peculiar features, and is probably dependent upon an essential cause differing from the accidental ones named as originating the first group.

The severest case of abdominal neuralgia that ever came under my observation, was that of a young man 26 years of age, single, of good habits, who was employed as a salesman in a feed store, and led a temperate, active life, with plenty out of door exercise. He was apparently in perfect health, his complexion was ruddy, appetite good, and bowels regular. For the past seven years he had suffered from excruciating pains in the abdomen; the attacks would come on at intervals of from one to three weeks, and would last from

24 to 72 hours. The pain would begin as a dull ache, having its point of maximum intensity, about the umbilicus, it would gradually increase in severity until it was quite unendurable. In the attacks when I saw the patient, the abdomen was usually retracted, the pulse was small, and the pupils moderately dilated. The face was often covered with perspiration. The pain would increase for some time, reaching the maximum at the end of twenty-four or thirty-six hours, it would then gradually subside until it had entirely disappeared, and the patient was again in apparently perfect health. While the patient has suffered for seven years, it is only during the last three, that the disease has acquired its present severity. At no time during the attacks was there any tenderness upon pressure, nor did pressure afford any relief to the pain. There was no rise of temperature during the attacks, though it was frequently taken. While the pain always began about the umbilicus, after some hours it would radiate to all parts of the abdomen, and would apparently pass a short distance above the margin of the ribs; it extended into the loins when the attack was at its worst.

During the time this man was under treatment, which extended over some months, every possible source of reflex irritation was looked for. The stools, urine, bladder and rectum were carefully and repeatedly examined, but were invariably found to be normal. During the paroxysms of pain the stools were always regular, and the fæces well formed. An important fact in this patient's history was that at no time did he present any of the usual symptoms of neurasthenia. He had used morphine for some years to control the pain but had not become an habitual user of the drug. He was rigorously treated in a variety of ways. The constant current was used with at first quite marked effects, but it soon ceased to exercise any control over the disorder. Various anti-neuralgics were employed, but like morphine, they seemed to exercise only a temporary influence. The patient realizing that I could do little for him finally drifted away; the last I heard from him was that he was having his attacks with their old time regularity, and he had settled down to the belief that with him they were a fixed and irremediable condition.

My reasons for regarding the above case as one of pure neuralgia of the abdominal sympathetic is that it closely resembles neuralgias of the cerebro-spinal nerves in its paroxysmal character, the freedom from all associated structural changes in the organs supplied by these nerves, the unaltered secretions and absence of all signs of inflammation. Of course the absence of tender points and the tendency of the pain to radiate to different nerves and plexuses until apparently all within the abdomen were involved, could be affirmed *a priori*

when we consider that this portion of the nervous system is made up largely of non-medullated nerve fibres and closely associated ganglia.

Another case was one in which the cardiac and pulmonary plexuses were involved. A man 38 years of age was sent to me from an adjoining State, with the following history: Three years before he began to experience pains in the chest radiating from the sternum in all directions, but especially over the precordia. There was a good family history and an account of previous good health. The onset of the pains was gradual, but they increased in severity until now they are at times very severe. He says that he is never free from some uneasy feelings in the chest. The man is in excellent health, never has a cough or any severe illness. His digestion and appetite are good and he sleeps well when not disturbed by the pain. He admits having used tobacco excessively for many years, but for the last twelve months has stopped it entirely. An examination of the heart shows arrhythmia but no enlargement or murmur.

I have detailed the above histories for the purpose of showing that so far as one common form of nerve disturbance is concerned the sympathetic nerves do not behave differently from those of the cerebro-spinal system.

Most writers seem to regard the sympathetic as having peculiar and distinguishing functions apart from those possessed by other portions of the nervous system. Doubtless much of the obscure theorizing regarding the pathology of the sympathetic has its origin in the vague and fanciful notions held for so many years by the older physiologists.

Bucke, of London, Canada, claimed that the moral nature of man resided in this part of the nervous system, and in one case of insanity, associated with marked moral perversion, he searched these ganglia closely for anatomical changes.

Even yet it is the custom of our standard works to look upon the nervous system as composed of two divisions, the cerebro-spinal and sympathetic, but Dr. Gaskell pointed out the erroneous nature of such an assumption, and showed that the so-called sympathetic system was but an expansion of the cerebro-spinal nerves. The chief reason relied upon by the older anatomists for making this distinction was morphological; the presence of numerous ganglia and the fact that the greater bulk of the fibres were non-medullated, or the so-called grey fibres. Later research has abundantly shown that the structural differences are more quantitative than qualitative. Non-medullated fibres are found in the spinal nerves in considerable numbers; these nerves are also associated with nerve cells irregularly aggregated but in small numbers, usually at the point where they break up to form

plexuses before passing to final distribution. Bearing in mind, therefore, that these structural differences are of degree and not of kind, we are better prepared to regard the nervous system as an entity and we shall reach a much better understanding of its different parts. What structural differences there are, are due to the fact that it is through the cerebro-spinal nerves that the principal sensations from the skin and voluntary impulses to the muscles pass. Of necessity these fibres must be insulated; they must have a medullary sheath. If such were not the case there would be an interference with sensations, and we would not be able to locate the point of impingement upon the surface. Again, the voluntary movement of a single muscle pre-supposes that the impulses which give it origin shall start from the cortical centre and travel upon a medullated, *i. e.*, insulated fibre to its termination in the particular muscle. The older and indeed current writers on this subject said it was the peculiar function of the cerebro-spinal nerves to preside over the voluntary functions, in contra-distinction to those of the sympathetic whose function it was to govern the involuntary or vegetative functions. If we could strip the cerebro-spinal nerves of every sensory and motor medullated nerve fibre we should find almost the exact counterpart of the sympathetic system. A careful examination of the anatomical structure of the sympathetic shows that these conclusions are correct, as no fibres are found to have their origin in the ganglia but all are derived from the cord. For the most part they have their origin in the inner side of the posterior horns and they are at first medullated, but as soon as they reach the ganglia they lose their insulating sheath, that is, the greater part of them do, and pass on to their distribution. A relatively small number of medullated fibres persist in the sympathetic just as a relatively small number of non-medullated fibres are found in the cerebro-spinal nerves. The error of the older writers was in regarding the cerebro-spinal nerves as being distinctively motor and sensory, overlooking the fact that they possessed to a marked degree the vegetative or trophic functions. We venture the prediction that only for this unfortunate misconception of the functions of these two great divisions of the nervous system we would have a much clearer knowledge of many pathological processes than we now possess.

We may divide the development of this subject into three stages. In the first, physiologists divided the nervous system into two parts, the voluntary and the vegetative. This regulated the sympathetic, to a position not much more important than held by ordinary connective tissue. The second stage was ushered in with the discovery of the vaso-motor nerves and the fact that most of the cerebral ganglia were connected by filaments with

the sympathetic, and that many of these exercised a direct influence on the calibre of the blood vessels to which they were distributed. With this epoch came much of the bizzare pathology that linked many strange disorders, such, for example, as hemifacial atrophy to changes in the sympathetic. It was such an easy matter to sever the cervical sympathetic and note the dilated capillaries, therefore the atrophy of the same region must be due to changes in the circulation. As a matter of fact this disorder is much better explained by referring it to a trophic disturbances in the fifth nerve. These and other erroneous conceptions were accentuated by the fact the sympathetic is concerned in regulating the blood supply of the great organs: their relative importance in this respect has obscured the fact that the spinal nerves have the same function. In fact there is not a single difference in the function of these two systems, so-called, that is not readily explainable by these structural peculiarities and by differences in the office of the organs to which they are distributed. There is not a single basic function of nervous tissue which they do not possess in common.

The third stage will, we hope be one in which the nervous structures are described, not as being divided into two systems, but one in which the sympathetic nerves are regarded as branches of the cerebro-spinal, subject to the same laws of functional activity and liable to same accidents and diseases. With this more correct understanding of its relations, we look for increased interest in its structure and functions and a better clinical grasp of its disorders.—Harold M. Moyer in *Jour. of Am. Med. Assoc.*

TREATMENT OF GASTRIC ULCER.

In those cases in which the most prominent symptoms are localized, epigastric pain, vomiting, loss of appetite, and anæmia, and which principally occur among young and chlorotic females, rest, strict diet, and the administration of alkalies and bismuth has been the stereotyped treatment. It is essential that each of these measures should be, wherever it is possible, strictly enforced. Complete rest in bed for some weeks, recommended at first by English physicians, and more recently insisted upon by Leube, Ziemssen, Ewald, and Rosenheim, is an essential point in the treatment, and must be insisted upon even if there is no hæmatemesis or vomiting of food. After a few weeks the patient may be allowed to sit up a few hours and move about slowly, or take a drive when the weather permits it.

As regards diet, it is necessary, where the irritability of the stomach is very great, and where the pain and vomiting occur frequently, to withhold for a few days (three to eight days) all food by the

mouth, and feed the patient entirely by nutritive enemata. A mixture of two raw eggs with two ounces of beef-tea, to which, in some cases, a small quantity of brandy (one ounce) may be added, often acts better than peptonized suppositories. It has been shown by Ewald that the nutritive value of raw eggs in the form of an enema, without the addition of a peptonizing ferment, is considerable. As the patient often complains of great thirst, small quantities of warm water, or of barley-water, or small pieces of ice, may be given by the mouth. After a few days one may commence cautiously with small quantities of food, such as with warm milk, to which lime-water is added, or peptonized milk, peptonized foods, arrow-root, or gruel. The food should be given every two hours, and in small quantities (three to four ounces) at a time. This treatment should be continued for at least three to six weeks, the quantity of food being gradually increased, and the dietary during the last few weeks may be a little varied. Brand's essence, or other similar preparation, may be given with advantage, rice-milk, and (where they are well borne) soft-boiled or raw eggs, or eggs beaten up with milk. Soups of all kinds and beef-tea he has not found useful during the first few weeks of the treatment. In some cases it is necessary that this diet should be continued for months: often a slight deviation from it gives rise to pain; in most cases, however, the pain and vomiting have completely subsided after four to five weeks, and then he found that a diet, slightly modified from that proposed by Leube, most useful, comprising milk, with stale bread, water biscuits, peptonized food, mutton or lamb finely minced, but without any spices, boiled chicken, soft-boiled eggs, coca, rice, stewed fruit, sweetbread, oysters. After some months, the patient may take fish, roasted fowl, pigeon, rabbit, game, underdone meat, and, of vegetables, small quantities of potatoes and asparagus; of fats, butter and cream are best borne. The foods especially to be avoided are fresh bread, strong tea and coffee, cabbage and other green vegetables, beans, peas, and the heavier kinds of meat, all curries, preserves, cheese, sweets and cakes.

Alcoholic stimulants are best avoided. As drink with the meals, warm water, or milk and water, or some of the aerated waters, may be recommended. The dietetic treatment, though the most important factors in the therapeutics of gastric ulcer, has to be supplemented by other measures. For the first few weeks the constant applications of hot poultices to the epigastrium will do much to relieve pain. Acting on the recommendation of some observers, he has used Carlsbad salts early in the treatment of gastric ulcer, but he has so often found patients complaining of pain and discomfort after its administration that he has for

the last few years reserved its use for those cases where there is marked gastric catarrh besides the ulcer, and for chronic cases of ulcer, when the acute symptoms have subsided. Instead of Carlsbad salts, he has laterly been in the habit of giving an infusion of senna-pods (eight to ten senna-pods, added to about ten ounces of boiling water; the water is allowed to cool, and the pods are removed. Usually six or eight hours after this infusion has been taken, a satisfactory action of the bowels follows. Where the pods give rise to griping, or cause an increase of the gastric pain, he gives as aperients simple or glycerin enemata. Of drugs, bismuth and bicarbonate of sodium, are the most useful, and ought to be given in larger doses than are prescribed in the text-books. Where the epigastric pain is very great, Dreschfeld found powders, consisting of fifteen grains of bicarbonate of sodium, fifteen grains of subnitrate of bismuth, and one-twelfth grain of hydrochlorate of morph., two or three times daily, very useful.—Dr. Dreschfeld, in *March Med. Chron.*

TREATMENT OF PHTHISIS BY CREASOTE AND GUAIACOL.

Dr. F. P. Kinnicutt, in delivering the Middleton-Goldsmith Lecture for this year in New York, chose as his subject "New Outlooks in the Prophylaxis and Treatment of Tuberculosis." He considered very carefully the various methods of treatment which had lately been introduced and gave his experience of those he had tried. One of the most interesting series of records are those cases treated by creasote and guaiacol. Dr. Kinnicutt wished to test the practicability of employing a very large daily dosage of creasote preparations, and to determine, if possible, any advantage which this method might possess over their use in smaller quantities. Several of the patients selected for this treatment presented in a well-marked degree many of the symptoms—namely, hectic, sweats, etc.—attributed to the toxic influence of the products of the bacillus and were therefore well adapted to test the effect of creasote upon such manifestations. A tabulated report is given of seven cases which were treated with subcutaneous injections of guaiacol, rapidly pushed to a daily dosage of one gramme, and five cases with creasote by the mouth, also rapidly increased to six grammes daily. In four of the former cases there was little, if any, appreciable change in the physical signs of disease. In one of them, however, the general condition greatly improved, and there was a gain in weight of eight pounds; in one the weight decreased by one pound and three-quarters; in one there was a loss of four pounds; in one the weight remained stationary; in the three remaining cases there was a progressive

increase of the pulmonary lesions. No influence upon hectic, when present, was observed. Night sweats, however, were affected favorably. In a single case suffering from chronic nephritis (confirmed by necropsy) a marked increase in the albuminuria was observed when a daily dosage of one gramme was reached. The treatment was then discontinued and the albuminuria gradually diminished. In no other case treated either with guaiacol or creasote did any trace of albumen appear in the urine, although examinations were made every other day. In a single case, where the maximum dose of guaiacol was reached, the urine became dark in color and very similar in appearance to urine containing carbolic acid products. In the cases treated with creasote two exhibited no appreciable difference in the physical signs. In those there had been a gain of one pound and a loss of three pounds respectively. In the three remaining cases there was a progressive increase of the lesions. The effect of a very large daily dose of creasote upon hectic, and sweats corresponded to that noted in the use of guaiacol. Entire tolerance of six grammes (over one and a half drachms) of creasote was exhibited by three of the five patients. One complained of slight gastric discomfort when a daily dose of five grammes was reached. Carbonate of guaiacol was also tried. In addition to possessing the advantage of being tasteless and odourless, it seemed to have a beneficial effect on the appetite. The conclusions which Dr. Kinnicutt formed from a careful study of these cases were: That both creasote and guaiacol in certain forms could be given in very large doses with entire tolerance and without injurious effect; that such doses apparently possessed no advantages over much smaller ones and had no greater effect upon hectic and night sweats; that subcutaneous injections of the drug possessed no advantage over administration by the mouth; that whatever beneficial influence creasote might exert in pulmonary tuberculosis could be effected with a comparatively small dosage; and that favorable results could be expected only by its continuance and prolonged employment.—*Lancet*.

BALDNESS AND ITS TREATMENT.

There are two classes of patients who resort either to the profession or to quacks—generally to the latter—for aid in the production or reproduction of hair in those parts of the scalp or face where it ought to grow, but owing to age or disease fails to do so. There is, first, the youth, who from vanity or a desire to improve his chances of employment, wishes to don before his time those hirsute appendages which are universally regarded as the outward sign of manhood. To him, in spite of the confident assertions of nostrum advertisers,

we can offer little beyond the poor consolation of which he is well aware, that time is not only the sure, but almost the only, remedy. No doubt those means which promote an increased circulation in the skin of the face will also promote the nutrition of the hair, and, therefore, but only within narrow limits, increased growth in the more vascularized region. This, doubtless, is to a large extent the *modus operandi* of shaving, which, it is well known, increases the vigor of the hair in the region operated upon. The good effect of the slight irritation of the razor on the callow chin must not, however, be used as an argument for the application of stronger irritants, and the young man, who, in his eagerness to hasten a natural process, painted strong acetic acid on his cheeks in the then approved mutton-chop shape, not only excited inflammatory redness, and brought ridicule on himself, by publishing his youthful yearnings to all beholders, but also, by the inflammatory exudation produced, injured the nutrition of the follicles, and hindered rather than helped forward the growth he so much desired. On the whole, patience, *plus* the adoption of all means which promote general invigoration of the system, and avoidance of excesses of all kinds, is the best advice that can be given to the beardless boy. The second class, apart from those who have a definite disease like alopecia areata, comprises those who are losing their hair prematurely, or even as a result of advancing age, and it is among these that the vendors of hair restorers find a ready market for their wares. It would take up too much space to discuss all the causes of baldness, which may be either of local or general origin, or the two combined; but it is too much the custom, instead of investigating carefully into the general health and circumstances of the patient, and the exact condition of the skin of the scalp, to prescribe a hair lotion, in which may generally be found as the principal ingredient cantharides in some form or other. This, by attracting an increased blood supply to the part, is often useful, no doubt, where the baldness is due to mere sluggishness of the cutaneous circulation, but it fails altogether to reach the cause of that very large class who lose their hair from seborrhœa capitis. This is benefited by microbicide remedies—sulphur, mercurial applications of almost all kinds, and many other antiseptic drugs, both new and old. We do not know what particular microbe, among the legion which may be found in the greasy and dry scales in seborrhœa, produces the proliferation of epithelium, which, according to Unna, is directly due to an inflammatory process; but the effect on the follicle is such that it leads to atrophy of the hair, and if the disease is not arrested atrophy of the whole follicle and consequent permanent alopecia. Where the damage to nutrition is not so great the hair is lustreless and more or less

marked canities ensues, and then the hair restorers, which color the hair from without and not from within, are eagerly resorted to. Sulphur and acetate of lead form frequent ingredients of these applications, while perchloride of mercury is too frequently the leading ingredient of a large number of vaunted remedies. No doubt it is of high value as a microbicide when employed in suitable cases, but used indiscriminately for months or even years, injurious effects may be, and sometimes are, produced. Pilocarpine, hypodermically injected, or given internally as tincture of jaborandi, is certainly of value as a direct promoter of the growth of hair, but it is too powerful a remedy for indiscriminate use, and the copious perspirations and sometimes the cardiac depression it induces should keep its employment within narrow limits. Less direct means may be found in tonics of iron, strychnine, quinine, etc.; but more powerful are cod liver oil and change of air, generally to a bracing, climate. It will be seen from the foregoing remarks that baldness is a symptom of such diverse conditions that there is no routine treatment for it, but the cause must be carefully sought out and intelligently treated, while the local treatment must be diligently and perseveringly carried out, as when due to its most common cause, seborrhœa, relapses are the rule, and constant watchfulness against recurrence is accordingly required—*Lancet*.

PEANUTS IN THE VERMIFORM APPENDIX; OPERATION; COMPLETE REMOVAL OF THE APPENDIX; RECOVERY.

Emma J., an American, twenty-three years old, was first seen on May 2, 1892, at 5 P.M. She had had a slight chill and pain in the abdomen since early in the morning. She had been feeling well the day before, when she came from her home in the country to her friends in the city. She had always been constipated, but had had two slight bowel-movements in the forenoon. On inquiry, I learned that she had eaten some cherries the evening before, but she was positive that she had not swallowed any of the stones. It was only at a latter questioning that the fact was elicited that she had eaten peanuts two days previously. She felt nauseated, and had vomited once or twice. I prescribed a mixture containing the fluid extract of opium, but without relief. The pain gradually became localized to the right iliac region, and increased in intensity. The temperature was 100.5°, the pulse 96. I made a diagnosis of appendicitis, and administered half a grain of morphine hypodermatically, and ordered warm local applications. I saw the girl again the following day at 8 A.M. She had rested several hours during the night, but

the pain gradually returned, and was again controlled by the administration of quarter-grain doses of morphine. The lower limbs were flexed on the abdomen, and there was great tenderness over the cecum. There was considerable nausea and frequent retching. The temperature was 99.5°, the pulse 96. The warm applications were continued, as well as morphine administered at intervals. At 5 P.M. of this day there was much pain, in spite of the anodyne, and the abdomen was tympanitic, excepting in the region of the cæcum, where there was fatness. The right groin was at this time also a little more elevated than the left groin. Nausea became extreme, and the slightest attempt to move or to raise the head was attended with retching. The temperature was 102°, the pulse 108. The bowels had not been moved since the morning of the preceding day; nor had the patient taken any nourishment. Thirst was marked, but only small quantities of lemonade were retained. The family had been advised of the girl's illness, and some members having arrived, a consultation was proposed.

At 9 P.M. I saw her again, in consultation with Dr. W. H. Earles, who concurred in my diagnosis. The patient was having great pain, with almost constant nausea and retching. The temperature was 101°, the pulse 108.

Operation was advised, but it was decided to wait until morning.

The girl rested some during the night, after full doses of anodyne, but the pain returned. It was now decided to operate, and the conditions being explained to the patient, an intelligent young woman, her consent was obtained. A full dose of morphine was administered, and she was transported to Trinity Hospital. The operation was performed at 11.30 A.M., Drs. Earles and Hoyer assisting. The patient took chloroform badly, and ether was substituted. She ceased breathing several times, and became deeply cyanosed, so that it became necessary to resort to artificial respiration. While under the anesthetic, a circumscribed induration in the right iliac region could be plainly mapped out. An incision was made parallel with, and about an inch and a half internal to, Poupart's ligament, extending from the level of the anterior superior iliac spine downward for three or four inches, and the seat of the trouble exposed. On opening the peritoneum, some brownish, slightly fecal-smelling fluid escaped. After some search, the appendix was found. It contained two large bodies, and was gangrenous for an inch of its length, having perforated at three points. After the appendix had been removed, it was found to contain two good-sized peanuts. The abdominal cavity was irrigated with sterilized water, the wound plugged with sterilized iodoform-gauze, and an antiseptic dressing applied. The patient's condition at the close of the operation, which occupied

about forty minutes, was critical, but improved after the administration of several hypodermatic injections of brandy. She was placed in bed, and heat applied to the extremities. Morphine was given hypodermatically, in sufficient quantity to keep her comfortable.

The temperature of two days varied between 100° and 102°; the pulse ranged at about 132, and was feeble. The wound was dressed after twenty-four hours, quite a quantity of fecal-smelling fluid saturated the dressings. On the fourth day the temperature and pulse became permanently normal. Absolutely nothing was given for the first twenty-four hours, although the thirst was distressing. After this, lemonade in dram-doses was administered, and, later, milk and lime-water. She improved rapidly, and made a complete recovery. At the date of writing, five weeks after the operation, the girl had left the hospital, and returned to her home in the country, a distance of fifty miles.

My supposition is that the peanuts were shrivelled and small when swallowed, and found their way into the appendix, where, absorbing moisture, they swelled, and, giving rise to strangulation, caused the subsequent trouble.—Dr. M. Rosenheimer, Milwaukee, in *Medical News*.

.....

EPILEPSIA GRAVIOR OF SIX YEARS STANDING COMPLETELY CURED BY OPENING AND STRAIGHTENING THE CERVIX UTERI.—Dr. John Snyder reports the following (*Phys. and Surg.*):—Miss B. S., a tall, fair young lady, age nineteen years, moderately well nourished, presented herself May, 1891, for relief from very severe epilepsy.

She has been subject to epileptic attacks at night since her thirteenth year—the beginning of her menstrual life. She had started well on the menstrual rhythm and for five months presented no deviations from the normal. But after this period of well-being she became irregular, going sometimes six months or a year without menstruating, and at those rare periods of the flow she would suffer excruciating pain. During this time she fell a victim to epilepsy. The attacks occurred in series until the year preceding her appearance at my office, when she scarcely had any respite from these terrible seizures.

She had consulted numerous medical men, taken untold quantities of patent medicines, and finally ended by drinking the potion sold by an "eminent specialist" in New York city, whose advertisement announces "I cure fits." The probability was she had rung the theapeutical changes from alpha to omega.

Her mental condition was rapidly becoming deplorable. Irritable and morose, she avoided society and all indications pointed to her speedy entrance into that unfortunate class of human beings—the imbecile.

Examination was thorough and was conducted with patient practically nude. Search was made for every conceivable cause of her trouble, and my patience was not rewarded until discovering a pronounced antelexion of the uterus and a very small cervical canal and uterus somewhat over half normal size. The cervical canal was nearly closed at internal os. Left ovary hyperæsthetic.

The indication for treatment thus became clear. Consequently I enlarged and straightened the cervical canal by passing a knife through the internal os and by introducing a glass tube three sixteenths of an inch in diameter, slightly curved, with a flange on its lower end. This tube was held in position by a borated cotton tampon. The patient was kept in bed one week. She wore the tube three weeks when the canal had healed open. Daily vaginal antisepsis was practiced.

Two weeks after removing the tube she menstruated normally and has been regular ever since. Her epilepsy was cut short as if by magic. She has gained over thirty pounds in weight, and her mental organism has been revolutionized.—*Med. Rec.*

GALVANISM IN ATROPHY OF THE TESTICLES.—Dr. Ernest B. Sangree reports, in the *Philadelphia Times and Register* of July 30th, the following case, illustrating the use of galvanism in atrophy of the testicles:—"Six months ago a man of thirty-five years of age came to me complaining of being generally run down; in addition to this, informing me that he feared he 'was getting smaller.' This last rather general statement I took to refer to that appendage of the lower portion of the body which, from many of our male patients, is likely to receive the most consideration, and consequently to be uppermost in the mind, namely the penis. I found, however, on examination that the allusion was to his testicles. These organs had indeed grown exceedingly small, at that time being no larger than very small almonds, and of a flabby consistence, denoting marked degeneration in structure as well as diminution in size. No history of syphilis could be elicited, though he freely admitted being 'one of the boys' for a good portion of his life. He did not go on sprees, but was in the habit of taking three good drinks of whiskey a day. This he stopped at my suggestion. So far he had noticed little or no loss of virile power. A general tonic was given him, and for the special trouble I decided to try galvanism. For the first month the sittings were twice a week; after that but once a week for two months longer. Sometimes the negative, at others the positive, current was used. As regards the method of administration, the indifferent pole for the time being was attached to a sponge electrode held in the hand, whilst the application to the testicles was made by rapidly touching different portions of the surface with an

olive-tipped urethral electrode. As a rule I began with a very mild current, gradually increasing it until a smart stinging sensation was experienced at each touch, and the cremaster muscle firmly contracted. During each application I noticed also that the testicles became considerably larger and firmer. The length of each sitting was about five minutes. After five or six applications it could be easily be seen that the testicles were enlarging, and at the expiration of three months, though the applications had been comparatively few, these organs had grown as large as before; and, indeed, he was rather of the opinion that they were a little larger. Whether this increase was due simply to a proliferation of connective tissue cells or to a natural growth of the proper gland structure I do not know. Probably the former is the case; but if normal spermatozoa were found in his semen, doubtless the latter explanation would be true. Whatever the character of the tissue may be, the result was certainly a pleasant one to attain, one that made my patient on much better terms with the world in general and with himself in particular.—*Hospital Gazette*.

PROGNOSIS IN ALCOHOLISM—This was the subject of an address by Dr. Thomas Barlow at the closing meeting of the Islington Medical Society. Dr. Barlow took a more favorable view of the prognosis of such cases than is commonly taken, and, indeed, expressed strong disapproval of the mood of pessimism in which such cases are generally regarded. He based his arguments largely on cases of alcoholic neuritis as seen more frequently in women than men. After describing the grave lesions in the nerve structure in such cases, and emphasizing the fact that the healthy structure often returns, and with it the lost function, he proceeded to argue that the lesions of cirrhosis even should not be regarded as incurable. Striking cases of recovery were given by Dr. Barlow, Dr. Stokes, Mr. Teal, and others. The great points in the treatment of such cases were three: first, the entire abandonment of the irritant causing the disease—*i. e.*, alcohol; secondly, good feeding and fresh air, and, thirdly, the action of time.—*Weekly Med. Rev.*

THE TOXIC ACTION OF IMPURE CHLOROFORM.—DuBois-Reymond says that the difference found between the physiological action of pure chloroform produced by Pictet's process of refining, as opposed to that of the impure residue from that process, is as follows: (1) No difference was found in the pulse-waves nor in the frequency of respiration; the former being equally affected by both forms of the drug, the latter varying considerably. (2) The pulse-rate, compared in nineteen cases, is higher at the close of the experiments with residue than of those with pure chloroform. (3) The blood-

pressure, is by far the greater number of the experiments, at the moment the respiration stops is higher after inhalation of pure chloroform than after inhalation of the impure residue. (4) The residue causes stoppage of respiration much more quickly than pure chloroform.

These experiments, conducted with chloroform refined by Pictet's process, from what is considered pure chloroform commercially, show how necessary is the testing of chloroform before its use, as even the best commercially is impure.—*British Medical Journal*.

THE MECHANISM OF CONCUSSION OF THE BRAIN.—In "Brain," part 1 of Volume VIII, there is a paper by Dr. Alexander Miles supporting and confirming the conclusions published by Duret, that the group of phenomena commonly spoken of as "concussion of the brain" is the result of a temporary anæmia of that organ. This anæmia is the reflex result of stimulation of the restiform bodies, and perhaps of other important centres in the region of the bulb, produced by the wave of cerebro-spinal fluid which rushes through the aqueduct of Sylvius and the foramen of Magendie from the subarachnoid space of the brain to that of the spinal cord when a severe blow is dealt over the skull. In accordance with the laws of hydrostatics this cerebro-spinal wave will disturb the equilibrium of the ultimate nerve cells throughout the nervous system. The hæmorrhages found throughout the brain substance and on its surface are to be ascribed to the recession of the cerebro-spinal fluid, which naturally supports the blood-vessels of the cerebrum. These petechial hæmorrhages are not the proximate cause of the symptoms of concussion, but are rather to be looked upon as an index of the force that produced the injury.—*Jour. of Am. Med. Asso.*

THE LOCAL TREATMENT OF VAGINAL ULCERS WITH ALCOHOL.—Dr. Barsony reports the case of a woman who was admitted to the hospital for operation upon a carcinoma of the vagina. Owing to the overcrowded condition of the hospital, operative treatment was deferred and the author, chiefly for the sake of cleanliness, washed the cancerous sore daily, later twice daily, with alcohol. Eight days later the sore had diminished to such an extent that the operation was again postponed. The ulcer healed completely, but two small sores reappeared which closed up after washing with alcohol. The patient left the hospital cured. In the case of another woman, in which a carcinoma of the vaginal portion of the cervix had been diagnosed, but operation refused, the author resorted to the alcohol washings with success.—*Wien. Mediz. Blatter.*

SYMPTOMS PRODUCED BY ADENOID VEGETATION

IN YOUNG INFANTS.—Lubet-Barbon reports that in a child of one month the symptoms presented were that it could not breathe while nursing, and while nursing was frequently seized with attacks of coughing. It did not gain in weight, breathed with mouth open, and had a constant mucopurulent discharge from the nostrils. In another case, a child aged sixteen months, there were difficult respiration, mouth breathing, dryness of the lips, the face of violet hue; the respiration was noisy, hoarse, frequent, such as to closely simulate the respiration in a case of croup. The child has never been able to take the breast nor nursing bottle, but had been fed from a glass. Cough was frequent and often caused vomiting. In another case there was considerable emphysema. Four cases was reported. In all the treatment consisted of removing the growth by means of forceps of a particular model. The operation was performed at several sittings. In all complete recovery or great improvement followed.

MEDICAL EDUCATION OF WOMEN IN GLASGOW.—The experiment made by the directors of the Royal Infirmary in opening certain of their wards for the clinical teaching of women has turned out a failure, and the governing authorities of the infirmary and also those of St Mungo's College have now determined to exclude females both from the wards and from the college classes. It is about two years since the students of Queen Margaret College were granted facilities for obtaining clinical and pathological instruction in the infirmary, and at the same time the ladies attending medical classes in St. Mungo's College and other lady "medicals" were afforded the same opportunities, the Queen Margaret students, however, having their instruction separately, while the others attend mixed classes both in college and in the wards. The arrangement, however, has come to grief over the dispensary question, it having been found inconvenient, if not impossible, to carry on the very essential dispensary work of the curriculum either in mixed classes or separately, the objection to mixed dispensary classes having come, not from the women, but from the male students. To get over this deadlock the managers have decided to exclude ladies at once from St. Mungo's College and from the wards, the only exception made being in favor of Queen Margaret students, who will be permitted to attend pathological and clinical classes till the end of the summer session of 1893. All this comes as something of a shock to the friends of medical education for women in Glasgow, as unless some new arrangement is speedily made such teaching must come to an end in this city. Queen Margaret College in particular will be in a difficulty and will specially feel the hardship; it has been prospering to the satisfaction of its friends, and has only recently been affiliated

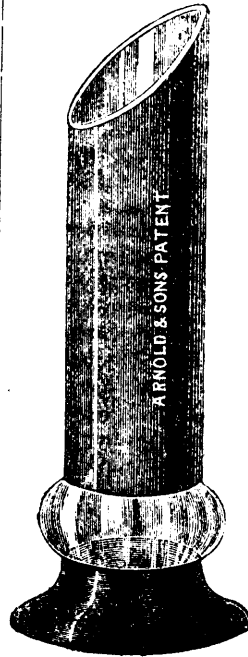
to Glasgow University, which has taken over its buildings and endowments and with them all duties and responsibilities. Amongst other things it must provide clinical facilities for its lady medical students, and at first sight it is not easy to say where these are to be found.—*Lancet*.

A noted French physician claims to have got good results in goitre from tincture of strophanthus ten to sixteen drops three times a day.

SELF-RETAINING CYLINDRICAL SPECULUM.

The cylindrical form of vaginal speculum is the one most universally used, and Ferguson's, with mirrored surface, being cleanly, moderate in price, and affording a good view of the os and cervix, seems to be the favorite (at least with the general practitioner). The main objection to this valuable speculum is its extreme fragility, and that if left unheld after introduction it is very liable to be extruded by contraction of the vaginal walls and, if falling from the bed or couch, to be broken. The illustration represents a modification which, if the proper sized speculum be chosen, renders it self-retaining. It consists of a bulbous expansion at the outer end, which is to be introduced within the vagina; owing to its increased calibre and the sucus around it the sphincter vaginæ muscle is enabled to hold the instrument, thus setting free both hands of the practitioner.

The bulbous expansion has also another advantage—that is, the concave surface forms a trough which will catch any small quantity of caustic fluids (carbolic acid, for instance) which might otherwise find its way downwards and burn or stain the external parts of the patient's clothing. This form of speculum will be found in practice a great improvement on the older form if only for the reasons given. The makers are Messrs. Arnold & Sons, who have carried out the idea to my complete satisfaction.—Alexander Duke, in *Lancet*.



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. MAHER 23 Rue Richer, Paris.

TORONTO, DECEMBER, 1892.

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

THE TREATMENT AND MANAGEMENT OF ASTHMA.

In a very interesting lecture recently delivered to the class in the Philadelphia Polyclinic, by Dr. Thomas J. Mays, Professor of Diseases of the Chest in that institution, the speaker took the ground that asthma is a paroxysmal disease of the pneumo-gastric nerves, which throws the muscular fibres into spasmodic contraction. Its prominent symptoms are itching of the head and neck, oppression and tightness of the chest, dyspnoea, bloating of the abdomen, pain in the region of the diaphragm, cough, expectoration and fever. Its causes are predisposing and exciting. (1) It may be inherited as asthma, and it may appear in children who come from consumptive or nervous families. It seems as if there is a predisposition necessary before the disease can develop. (2) Among the exciting causes are the inhalation of dust, powered ipecacuanha, pollen of grasses and of roses odors of certain animals, as cats, sheep, etc.; reflex excitation coming from the nose, stomach, liver, intestines, uterus, etc. Its relation to hay fever is very close. Practically there is no difference between the two. He finds that that which relieves the one will also relieve the other.

Its treatment resolves itself into that (1) which aims to give immediate relief from the paroxysm, and (2) that which aims to prevent a recurrence of the paroxysm. Those remedies which relieve the paroxysms may be classified as follows: (1) Central narcotics, consisting of morphine, bella-

donna, stramonium, hyoscyamus, tobacco, chloroform, ether, ethyl, bromide, etc.; (2) emetics, consisting of lobelia, ipecacuanha, sanguinaria, etc.; and (3) the peripheral narcotics or relaxants, consisting of nitro-glycerin, amyl nitrite, sodium nitrite, pilocarpine, etc. Now all our more or less powerful therapeutic agents are stimulants to the general or special bodily tissues which they affect, in small doses, while in large doses they paralyze the same. All the above named agents only relieve asthma when given in large or paralyzing doses, the central narcotics exerting their influence on the central nervous system, the emetics acting on the pneumogastric filaments, while the peripheral narcotics paralyze the vasomotor or sympathetic nerves which supply the unstriated muscular fibres of the bronchial mucous membrane and blood vessels. While all these agents relieve asthma, and indeed in some cases are indispensable, it is quite clear that in doing so they lower or depress the functions of the parts on which they act, and that they do not, therefore, come up to the ideal of an asthmatic remedy. The best among them are nitro-glycerin, one or two minims of a one per cent. solution every three or four hours, by the mouth, and $\frac{1}{20}$ or $\frac{1}{10}$ of a grain of morphine hypodermically once or twice a day.

What then is the remedy which may be given continuously for the alleviation of this disease, and without the undesirable effect of the above named classes? What drug will relieve asthma in stimulant does? Such a drug, he believes, we possess in strychnine. Of course we must bear in mind that all stimulants are only supplementary agents which maintain the functions of the body without any direct material support to the same; but there is also good reason for believing that they cause the tissues to appropriate a larger amount of nutritive material than they would otherwise do, and in this way our stimulant drugs become tissue builders. It has been shown that the power of strychnine in this respect is greater than that of any other stimulant. This drug has a special affinity for the nervous system, which action is especially accentuated on the respiratory centre and pneumogastric nerves. In stimulant doses it gives a supporting influence to the respiratory movements, and, unlike morphine, lobelia, belladonna, or nitro-glycerin, it does not depress or narcotize the nervous system. Asthma,

being a spasmodic disease, in what manner does strychnine bring relief? How does it act as an anti-spasmodic? The most probable theory of the spasmodic state is that there is, at the beginning of the paroxysm, a super-abundant discharge of nerve force through the pneumogastric nerves which throws the bronchial muscles into contraction. But whatever the intimate nature of this condition may be it is evidence of nerve degradation or nerve weakness, and strychnine, by elevating the tone of these nerves, increases the controlling power of the same.

A stimulant dose of strychnine will depend on the age of the patient, and the length of time during which the drug has been given, although asthmatics, as a rule, will bear larger doses of strychnine than most other patients. Begin, as a rule, with $\frac{1}{30}$ of a grain subcutaneously once a day, and gradually increase to $\frac{1}{20}$ or to $\frac{1}{10}$ of a grain, or more, if necessary, to impress the system with its full stimulant effects. Do not waste your time with small doses. To these amounts of strychnine small doses of from $\frac{1}{400}$ to $\frac{1}{600}$ of a grain of atropine may be added. It is best to administer these drugs in the evening, because asthma is nocturnal in its attacks, and your patient should be protected at night so that he can sleep. Additionally to its hypodermic use, this drug may be given in the following combination:

R.—Phenacetini, gr. lxiv.
 Quinæ sulph., gr. xxxii.
 Ammon. muriat., ʒ iss.
 Pulv. capsici, gr. iv.
 Strychninæ sulph., gr. 1½.

M.—Ft. capsulas, No. xxxii.

Sig.—One capsule four times a day.

Or in the following:

R.—Strychninæ sulph., gr. 1½.
 Syr. acid. hydriodici,
 Syr. hypophosph. āā ʒ iss.

Sig.—One teaspoonful four times daily.

In fact, light cases of asthma require no hypodermic injections, and do well enough where the above-named preparations are given. In severe cases it is, of course, advisable to add morphine or nitro-glycerine to the strychnine and atropine treatment, especially at the beginning. This treatment will break up the paroxysms, but even after they are broken, many old asthmatics still remain in the most abject misery. They may be com-

pelled to sit up day and night, panting for breath, and still labor under the impression that they are suffering from asthma. This is a mistake, it is not asthma, but the natural state of exhaustion which follows asthma. The respiratory movements as well as the whole nervous system are almost completely paralyzed. It is the disorder and chaos following the flood. The dyspnoea is not paroxysmal as before, but is felt now on the slightest exertion. This stage of the disease is most important from a therapeutic standpoint. Nitro-glycerine, lobelia, and other narcotics are of no use. Rest is essential now; they must do absolutely nothing; lie down if they can, or sit still. I have known patients who were breathing comfortably, bring on a most severe exhaustion-dyspnoea by merely undertaking to write a letter. During the rest-treatment give food of the most nourishing character, such as freshly expressed beef juice, a cupful a day, beef powder, beef, mutton, milk, oysters, clams, etc. In this stage strychnine is also of the greatest value; massage is also to be used in desperate cases. Electricity is also of great service, so are rarefied air and calisthenic exercises, obtained in the pneumatic cabinet-treatment. To procure sleep at night morphine may be added to the hypodermic injection of strychnine.

Success in treating asthma depends as much on the proper management of the individual as it does on the administration of drugs in the proper doses, and at the proper time. Principles can only be carried out by paying attention to details, hence each patient must be under the complete control of his physician in regard to his food, medicines, exercise, and everything else. This pertains particularly to old asthmatics who are constant sufferers. If the instruction which is given this evening is closely followed, there are very few cases which will not yield to it; and, as an illustration of what may be done in desperate cases, I will conclude by relating the condensed histories of the two following cases, the second of which is still under occasional observation:

CASE I.—A, aged 46, a sufferer from asthma for thirty-five years—the attacks becoming more frequent and severe during the last three years. For four weeks before coming under observation, he had been unable to lie down on account of his disease. The injection of strychnine, gr. ½ and

morphine, gr. $\frac{1}{15}$ gave him almost immediate temporary relief. The morphine was discontinued after the second day, and one minum of a one per cent. solution of nitro-glycerin every four hours was substituted. The strychnine was gradually increased, and the nitro-glycerin omitted in the course of a week. Additionally he was kept quiet, received nourishing food and strychnine by the mouth. In three days he was able to lie down, and in ten days more the asthma ceased.

CASE II.—B, aged 50, an asthmatic for twenty-five years. Daily attacks for one year, during which time he had been unable to lie down, day or night. Came under observation six weeks ago, and received about the same treatment as the previous case. The relief was prompt after each injection, but this had to be continued nightly for five weeks to keep the stubborn disease in abeyance. In two weeks he was able to lie down, and is now practically well.

MATTEI'S CANCER CURE (?)

Some few years since a certain Count Cesare Mattei published a work on what he termed electro-homœopathy, a new system of medicine based upon a most fantastic theory of vegetable electricity. This work went through many editions, and was translated into German, French and English.

An old castle that he occupied in Italy speedily became the Mecca of many invalids suffering from all sorts of complaints, and the Count pursued his studies and prepared his medicines in a secret room, in an isolated tower that was filled with warlike utensils as well as the peaceful accessories of science. The reason of this was, the Count was apparently in fear that his remedies would be wrested from him.

His pretensions impressed many educated people. Lady Paget, and Mr. W. T. Stead have separately published papers in English periodicals advocating his methods, especially that of curing cancer without the aid of the knife, which of course, always appeals to the credulity of the general public. An investigation committee, consisting of the late Sir Morell McKenzie, Mr. Lawson Tait and Dr. G. W. Potter, was appointed by the British Medical Association, and the later gen-

tleman publishes its report in the *British Medical Journal* for August 13th. It is stated that the doctrines of Mattei were being propagated to such a large extent in England, where it was practised even by regular medical practitioners, that the committee, while never doubting the ultimate results of their investigations, considered it necessary to give the matter serious and careful attention.

The Matteists declined to inform the gentlemen of the committee of the composition of their remedies, and it was assumed that it was not to treat cases, but to see cures and admit their accomplishment, that the committee came. While it was affirmed that cancer would be cured, if still in the "first or second stage," yet patient after patient sent in by the committee was refused upon one ground or another.

This put Mr. Stead in the position of having to expose the Matteists in his journal, the *Review of Reviews*, if they continued to refuse to treat the patients sent in, so they were obliged to accept five, out of a large number having cancer of the breast, submitted for experiment. The patients were carefully watched from week to week for a year; and the members of the committee, in turn, regularly inspected them and noted their progress.

When Sir Morell McKenzie died, Mr. H. A. Reeves and Mr. John Hopkins were added to the committee. The patients grew gradually worse, just as if no treatment of any kind had been tried. The Matteists tried in various ways to bring the examination to a close by accusations against the gentlemen above named of having broken one of the rules of the committee, and at last were successful in so doing.

The committee consider Matteism, "to consist exclusively of vulgar, unadulterated, unredeemed quackery." An analysis of the "electricities" so called, yielded no other reaction than that of simple distilled water, and the result of their administration confirmed this analysis. The report concludes as follows: "The savage trusts to his armet; the civilized man, both in the upper and lower circles, submits himself with childish, if not child-like, simplicity to the pretences of the quack. It is a strange world; but, such as it is, open and honorable medicine has to live in it, and work in it, and must make the best it can of so wonderfully varied an environment."

THE FIRST PAN-AMERICAN MEDICAL CONGRESS.

The Americans always do anything of a national character on a grand scale, as befits so great and progressive a nation. The preliminary announcement of the above Congress, to be held at Washington, Sept. 5th, 6th, 7th and 8th, 1893, is an evidence that it will be a great meeting.

A goodly number of Canadians are named as officers. Dr. J. F. W. Ross, Toronto, is our representative on the Executive Committee. In the Section on Medicine, Dr. Moorehouse, London, is Secretary; Section on General Surgery, Secretary, Dr. F. G. Roddick, of Montreal; Section on Military Medicine and Surgery, Honorary Presidents, Surgeon-General Bergin, of Cornwall, and Surgeon Strange, of Toronto; Section on Obstetrics, Honorary President, Dr. Adam H. Wright, of Toronto; Secretary, Dr. J. C. Cameron, of Montreal; Section on Gynecology and Abdominal Surgery, Honorary President, Dr. James F. W. Ross, of Toronto; Section on Therapeutics, Honorary President, Dr. A. D. Blackader, of Montreal; Secretary, Dr. J. L. Davison, of Toronto; Section on Anatomy, Dr. F. L. Shepherd, of Montreal; Section on Physiology, Honorary President, Dr. Wesley Mills, of Montreal; Secretary, Dr. A. B. Macallum, of Toronto; Section on Diseases of Children, Honorary President, Dr. A. D. Blackader, of Montreal; Section on Pathology, Honorary President, Dr. L. D. Mignault, of Montreal; Secretary, Dr. John Caven, of Toronto; Section on Ophthalmology, Secretary, Dr. G. H. Burnham, of Toronto; Section on Laryngology and Rhinology, Honorary President, Dr. Stephen Dodge, of Halifax; Secretary, Dr. G. W. Mayor, of Montreal; Section on Otology, Honorary Presidents, Dr. J. C. Connel, Toronto, Dr. Stephen Dodge, of Halifax, Dr. J. W. Good, of Winnipeg, and Dr. G. Sterling Ryerson, of Toronto; Secretary, Dr. D. G. Wishart, of Toronto; Section on Dermatology and Syphilography, Secretary, Dr. J. E. Graham, of Toronto; Section on Hygiene, Climatology, and Demography, Honorary Presidents, Dr. E. P. Lachapelle, of Montreal, and Dr. F. Montizambert, of Quebec; Section on Marine Hygiene and Quarantine, Secretary, Dr. J. J. Cassidy, of Toronto; Section on Orthopædic Surgery, Secretary, Dr. B. E. McKenzie, of

Toronto; Section on Diseases of the Mind and Nervous System, Honorary President, Dr. Joseph Workman, Toronto; Secretary, Dr. Stephen Lett, of Guelph; Section on Oral and Dental Surgery, Honorary President, Dr. J. B. Willmott, of Toronto; Secretary, Dr. Luke Teskey, of Toronto; Section on Medical Pedagogics, Honorary Presidents, Dr. Fife Fowler, of Kingston, Drs. Walter B. Geikie and Adam H. Wright, of Toronto; Section on Medical Jurisprudence, Secretary, Dr. N. A. Powell, of Toronto; Section on Railway Surgery, Secretary, Dr. J. G. Roddick, of Montreal.

Auxiliary Committees,* one formed for each State and country. For Canada we have Dr. Jas. F. W. Ross, Toronto; Dr. John L. Bray, Chatham; Dr. James E. Graham, Toronto; Dr. H. P. Wright, Ottawa; Dr. Herbert S. Griffin, Hamilton; Dr. Vincent H. Moore, Brockville; Dr. Charles E. Barnhart, Grey; Dr. Walter H. Moorehouse, London; Dr. J. L. G. McCarthy, Barrie; Dr. John Bostwick Lundy, Preston; Dr. Howitt, Guelph; Dr. Henwood, Brantford, Dr. Boucher, Peterboro'; Dr. Wm. H. Henderson, Kingston; Dr. Taylor, Goderich; Dr. Eakins, Belleville; Dr. D. S. Bowlby, Berlin; Dr. D. H. Moore, Brockville; Dr. Robt. Astley Corbett, Port Hope; Dr. J. G. Scott, Seaforth; Dr. Albert B. Welford, Woodstock; Dr. Francis E. Shepherd, Montreal; Dr. F. J. Austin, Sherbrooke; Dr. Eusebe Napoleon Chevalier, Iberville; Dr. E. P. Lachapelle, Montreal; Dr. M. J. Ahren, Quebec; Dr. R. A. D. King, Compton; Dr. J. A. Hamel, Riviere; Dr. E. Gervais, Three Rivers; Dr. W. S. Muir, Truro; Dr. A. D. MacGillvary, South Sidney; Dr. John C. McDougall, Amherst; Dr. W. H. McDonald, Antigonish; Dr. John Stewart, Picton; Dr. H. B. McPherson, North Sidney; Dr. Willis B. Moore, Kentville; Dr. C. J. Gossip, Windsor, N.S.; Dr. D. A. Campbell, Halifax; Dr. Augustus Robinson, Annapolis; Dr. Miller, New Glasgow; Dr. Farrish, Liverpool; Dr. Chown, Winnipeg; Dr. J. A. Macdonald, Brandon; Dr. Robert Wilson, Morden; Dr. J. Z. Currie, Fredericton; Dr. Murray McLaren, St. John; Dr. John S. Benson, Chatham; Dr. H. B. Chandler, Moncton; Dr. Ferdinand L. Pedolin, New Castle; Dr. Alfred Harvey, St. John, Nfld.; Dr. J. H. C. Willoughby, Regina.

192.]
 GOLDEN RULES OF SURGICAL PRACTICE.—*Continued.*—(*Times and Reg.*):

OPERATIONS.—Never permit a naked light to approach the ether apparatus in anæsthetizing. Never neglect in all operations which will produce a shock to the urinary system—*e. g.*, varicocele, fistula, piles, radical cure of hernia—to ascertain, before the operation, if the urthra canal be without stricture, for sometimes stricture is found in relieving retention after operation, and you may be unprepared for the obstruction.

Never neglect to examine the lungs in all cases of ischio-rectal disease and fistula in ano.

In inserting plugs or plug appliance, for colotomy, gastrostomy, or drainage tubes for abscesses, or wounds, especially in thorax, always see that the end of the plug or drain is properly secured.

Never operate without first examining the urine for albumen and sugar.

Never apply an elastic (Esmarch) bandage to render a limb bloodless if tuberculosis or gangrene is present.

Never forget a patient's age in years is not the index to his "vis" or "last." *Vide* "Errors in the Chronometry of Life," "Paget's Old Note Book."

PELVIS.—Never forget to determine the absence of a foreign body in buttock wounds.

Always ligature a bleeding vessel in the buttock at once, even at the risk of a deep dissection.

In fracture of true pelvis do not carry out passive movements very actively, in order to elicit crepitus.

Remember the serious consequences which may ensue from the displacement of a pointed fragment

In falls on the buttock or rump in fractured pelvis, or blows in the belly, never omit to empty the bladder, if the patient cannot.

RECTUM.—Never forget in fistula in ano to eliminate tertiary syphilitic, strumous, or dysenteric ulceration, stricture and malignant disease of the rectum.

Remember the saying, "No internal opening to a fistula, or a blind fistula is usually a blind surgeon."

Do not forget the probable need for a catheter after an operation on the rectum.

SHOCK.—In shock and collapse never forget that the essence of successful treatment is to obtain

time for your patient to rally. Keep the heart going, but do not trade on its exhausted power; maintain its action, do not force it.

SINUS.—Never neglect the hint the guardian papillæ give of the irritating focus deeper down.

Never neglect the therapeutics of rest.

Never neglect to slit the forks and the burrows up as well as the sinus.

SPINE.—Never forget that in fracture of the spine the tendency to death is due to pneumonia and complications, if the fracture is situated high up, and to urinary inflammation and bed sore, if lower down.

Therefore never forget the atonic bladder or the back. The urethra is insensitive, therefore use your catheter with care and gentleness; let it be clean and smooth.

Never neglect to see for yourself that the back has been kept clean.

Never puncture a spina bifida in the median line, always at the side, taking in the skin; avoid air, and close puncture securely.

Never suspend by the head alone in adjusting a Sayre's jacket for Pott's curvature of the spine; let the toes and armpits help to support the weight.

Never forget that the earlier stages of caries are not accompanied by any decided symptoms. When curvature exists there is no longer room for doubt, but do not wait for curvature.

Never permit a patient who has sustained an injury to the back to quit the casualty department until he has passed water. [Bloody urine will show at once that the kidney has been injured.]

TREATMENT OF CHLORISIS.—Dr. Schubert, in *Rev. de Therap. gen. et Thermale (Med. Brief)*, says: The treatment may seem paradoxical, however, the author has many times established a clear amelioration in chloretics following epistaxis or hematemesis. Dyes was the first to restore this method. Having been called to attend a woman with grave chlorosis, whose death was hourly expected, Dyes, after considerable hesitation, decided to take about three ounces of blood from a vein. The effect was striking; at the end of some days she was greatly improved; after five weeks of treatment her face had regained its color, and since then, she has given birth to four children. Wilhelmi has published thirty cases of

chlorosis treated by bleeding, and he concludes that the more nearly the chlorosis approaches the typical form the stronger is the indication for the operation, and the more striking the results. Schultz has, for a score of years, employed diaphoretics in the treatment of chlorosis, combined with laxatives and blood-letting. After the bleeding the patient should rest in bed for twenty-four or forty-eight hours, and be given acidulous drinks, and be allowed to eat at will. The consecutive effects are, according to Schubert, abundant perspiration, a feeling of hunger, sleep, and a sense of well-being. At the time of bleeding the patient should be lying down in bed; immediately after, favor the diaphoresis.

GYNÆCOLOGICAL WORK AMONG INSANE WOMEN.—Dr. George H. Rohe of Catonsville, Md., read a paper upon "The relations of Pelvic disease to Physical Disturbances in woman." The author pointed out the frequency with which bodily conditions influenced mental states. Thus a torpid condition of the intestines, Bright's disease, putrefactive processes in the intestinal canal, etc., might give rise to melancholia and other disorders of the mental functions. It is not irrational to suppose likewise that diseases of the femal sexual apparatus would have a not inconsiderable influence in the production or perpetuation of mental disorders as a contribution to the knowledge of the subject the following report was submitted. In a hospital containing 200 insane women, 35 were subjected to vaginal examination and 26 found with evidences of pelvic diseases. In 18 of these the uterine appendages were removed with the following results: Sixteen recovered from the operation and two died. Of the sixteen recovered, three have been discharged from the hospital completely restored, both physically and mentally. In 10, considerable improvement followed the operation in both physical and mental conditions, and in three the operation was of too recent a date to allow any definite expression of opinion. The mental disorder present in the 18 cases was melancholia in six cases, simple mania in one, puerperal mania in four, hysterical mania in one, periodic mania in two, hystero-epilepsy with mania in one, and epilepsy with mania in three. The author basing his opinion upon his experience, concludes as follows: "The

facts recorded demonstrate, first, that there is a fruitful field for gynæcological work among insane women; second, that this work is as practicable and can be persued with as much success in an insane hospital as elsewhere; and, third, that the results obtained not only encourage us to continue in the work, but require us, in the name of science and humanity, to give to an insane woman the same chance of relief from disease of the ovaries and uterus that a sane woman has."

PUERPERAL INSANITY.—In closing an article upon this important theme (*Jour. Am. Med. Assoc.*) Dr. Rohe, of Baltimore, says:

Time is lacking to review here in the unsatisfactory theories that have been propounded to account for the origin of puerperal insanity. I offer here no theory, but submit the cases which I believe justify the following conclusions:

1. Puerperal insanity is, in at least the large majority of cases, an infection psychosis.
2. Without rejecting the influence of other factors, such as heredity, anæmia, exhaustion, mental shock and distress, careful observation will show that few cases of puerperal insanity occur without preceding or coincident puerperal infection.

The reasons for this opinion may be briefly summed up as follows:

1. Puerperal insanity occurs in the great majority of cases within the first ten days after delivery—about one-half in the first five days—the same period during which puerperal infection usually occurs.
2. It is usually accompanied by elevation of temperature and other evidences of febrile disturbance.
3. The clinical form in which puerperal insanity manifests itself is, in the majority of cases, that of acute, delirious, or confusional mania. Depressive states are rare except as secondary forms. In other words, the most frequent condition is one most closely resembling febrile delirium.
4. The death-rate is much higher than in simple mania. Death occurs from exhaustion, usually with high temperature and rapid pulse.
5. Post mortem examinations, though [apparently] infrequent in these cases, have shown grave involvement of the pelvic viscera.
6. Examinations of the pelvic organs during life

show lacerations of the perineum and cervix uteri (facile channels of infection in the puerperal woman). As secondary conditions are found intrapelvic (peritoneal) inflammations, and consequent abnormal locations, fixations and congestions of the uterus, tubes and ovaries.

7. The results of operations seem to show that removal of local sources of irritation increases the chances of recovery from the mental disease.

SANITATION AND HYGIENE AT THE WORLD'S FAIR.—The Bureau of Hygiene and Sanitation of the World's Columbian Exposition has been organized to prepare a collective exhibit illustrative of the present condition of sanitary science. Starting from the standpoint that "the common health is the common wealth" and that hitherto sanitation and sanitary science have not received that amount of general public support which their importance demands, the Bureau will seek to set before the visitors to the Exposition such a representation of sanitary work and sanitary aid as will help to lift the general mind to a higher plane in its estimate of the work of sanitation. Not even the most exaggerative optimist would assert that the sanitary arrangements of our chief and best-cared for cities are perfect, while it is well known that those of smaller towns and villages are of the most reprehensible type. On the other hand the pessimist cannot deny that the last two decades have seen very great and very marked improvements in the theory of hygiene as a science and in its practice as an art; the "vantage ground" thus gained, it is to be hoped, will be but a new base from which a more general and complete advance all along the line may be made.

URINARY GRAVEL.—Dr. E. Golovine, a Russian physician, is convinced (*Med. Abstract*) from a number of observations he has made, that the prolonged use of a mixture of equal parts of calcined magnesia and prepared chalk gives the best results in gravel and nephritic colic. With this mixture, in doses of two teaspoonfuls three times a day with the meals, without any alteration in the diet, he has obtained the rapid suppression of the deposits of urates and oxalates in the urine; the disappearance of the neuralgia of the sciatic nerve, so frequently seen in these cases; and the paroxysms of nephritic colic, formerly common, no

longer appear. M. Golovine explains the favorable action obtained on the hypothesis that the chalk and magnesia, combining with the phosphoric acid, set at liberty a quantity of soda sufficient to neutralize the uric acid.

APPENDICITIS AND ITS TREATMENT.—Prof. A. Iverson, of Copenhagen (*Thesis*), relates two successful cases where the patients exhibited the well-known symptoms of perforation of the vermiform process, where the removal of the appendix vermiformis was performed. The appendix had a thickened and inflamed wall, was fixed to the environs by peritoneal adhesions, and contained muco-purulent fluid. The author recommends the removal of the vermiform process (1) when symptoms of inflammation of this organ recur several times, (2) when there are signs of distension of it from pus, and (3) in cases of intra-peritoneal abscess.

THE TREATMENT OF PLEURISY.—M. Trasbot contributes a very interesting paper (*L'Abeille Med.*) to the discussion at the French Academy of Medicine, treating the subject from the standpoint of the veterinarian. He concludes that: 1. The sero-fibrous pleurisy of animals has nothing in common with tuberculosis. 2. Frequently the relation between its development and chilling is indisputable. 3. It is impossible to liken the sero-fibrinous pleurisy of the horse to an eruptive fever, or to a cyclic disease. 4. Antiphlogistic medication and derivative applications surely exercise an advantageous action. 5. Thoracentesis can be done without danger to the horse, and constitutes a measure to which we may have recourse before the effusion gives rise to asphyxia.

RATIO OF PHYSICIANS TO POPULATION.—Dr. P. H. Millard, of Minn., in a paper recently read before the American Academy of Medicine (*Coll. and Clin. Rec.*), gave the following as the ratio of physicians to population in various parts of the world:—

Sweden.....	1 to 7,000
Italy	1 to 3,500
Germany	1 to 3,000
Austria-Hungary	1 to 2,400
France	1 to 2,000
United States	1 to 600

LARYNGISMUS STRIDULUS.—*Nouveaux Remèdes* recommends the following :

R—Chloroform 5 to 10 drops.
Water 3 vi.
Glycerine 3 ii.

Sig.—Teaspoonful every half hour.

DR. LAPHORN SMITH, of Montreal, was elected a Fellow of the American Gynecological Society, at its recent meeting in Brooklyn.

Books and Pamphlets.

THE MEDICAL NEWS VISITING LIST FOR 1893 has been thoroughly revised and brought up to date in every respect. The text portion (32 pages) contains the most useful data for the physician and surgeon, including an alphabetical Table of Diseases, with the most approved Remedies, and a Table of Doses. It also contains sections on Examination of Urine, Artificial Respiration, Incompatibles, Poisons and Antidotes, Diagnostic Table of Eruptive Fevers and the Ligation of Arteries. The classified blanks (176 pages) are arranged to hold records of all kinds of professional work, with memoranda and accounts. Four styles are now published : Weekly (dated, for 30 patients); Monthly (undated, for 120 patients per month, and good for any year); Perpetual (undated, for 30 patients weekly per year); and Perpetual (undated, for 60 patients weekly per year). This last style consists of 256 pages of assorted record blanks, without text. *The Medical News Visiting List* adapts itself to any system of keeping professional accounts. Each style is in one volume, bound in handsome red leather, with pocket, pencil, rubber, and catheter-scale, price \$1.25. When desired, a Ready Reference Thumb-letter Index is furnished, which is peculiar to this Visiting List, and will save many-fold its small cost (25 cents) in the economy of time effected during a year. In short, every need of the physician seems to have been anticipated in this work.

LEONARD'S PHYSICIAN'S POCKET DAY-BOOK, bound in red Morocco, with flap, pocket, pencil-loop and red edges. Price, post-paid, \$1. Published by *The Illustrated Medical Journal Co.*, Detroit, Mich.

This popular day-book is now in its fifteenth year of publication. The front part of it is occupied with dose tables, and other useful pocket memoranda. It is good for *thirteen months*, from the first of any month that it may be begun, and

accommodates daily charges for 50 patients, besides having cash department, and complete obstetric records. There are also columns for the diagnosis of disease, or for brief record of the treatment adopted, following each name-space. Name of patient needs to be written but three times in a month. The book is $7\frac{1}{2}$ inches in length and is $3\frac{1}{2}$ inches wide, so that it will carry bill-heads or currency bills without folding. It is bound in flexible covers, and weighs but five ounces, so that it is easily carried in the pocket.

OVER 1,000 PRESCRIPTIONS AND FAVORITE FORMULÆ from Authors, Professors and Practising Physicians. Cloth, 12 mo., post-paid, \$1. *The Illustrated Medical Journal Co.*, Detroit, Mich.

The various formulæ contained in this volume are *practical prescriptions* of new and old remedies for the various types of disease that affect mankind. *They are the favorite ones*, of the various authorities, for the diseases indicated. The *Index* is full and complete, thus rendering the whole book easy of access. The volume is copiously interleaved, so that on the blank pages can be recorded, by pasting or copying with pen or pencil, any other prescription suitable for any disease that is on the opposite page of the book; the complete index thus indexes each new formulæ you may see fit to copy into the pages of the volume. The whole is comprised in a handy cloth-bound volume of nearly 300 pages, and will be mailed to any address upon receipt of its price by the above publishers.

MANUAL OF PRACTICAL, MEDICAL AND PHYSIOLOGICAL CHEMISTRY, by Chester E. Pellew, E.M., Demonstrator of Physics and Chemistry in the College of Physicians and Surgeons, New York, etc. With illustrations, pp. 314. New York : D. Appleton & Co. 1892. Toronto : Carveth & Co.

This is an excellent work for students who should, although they do not always, take a course with not too much pure chemistry. The author seems to have appreciated the necessity of making his work fit in with the medical student's other studies, every subject and every test having some relation to such other work. The lessons deal with physiological chemistry, with the food-stuffs and their products of assimilation with the different fluids and tissues of the body. Much attention has been given to the latest chemical tests, e.g., breast-milk and gastric juice. The work seems practical and in the right direction for medical students.