

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

- | | | | |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> | Coloured covers /
Couverture de couleur | <input type="checkbox"/> | Coloured pages / Pages de couleur |
| <input type="checkbox"/> | Covers damaged /
Couverture endommagée | <input type="checkbox"/> | Pages damaged / Pages endommagées |
| <input type="checkbox"/> | Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> | Pages restored and/or laminated /
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> | Cover title missing /
Le titre de couverture manque | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> | Coloured maps /
Cartes géographiques en couleur | <input type="checkbox"/> | Pages detached / Pages détachées |
| <input type="checkbox"/> | Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> | Showthrough / Transparence |
| <input type="checkbox"/> | Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> | Quality of print varies /
Qualité inégale de l'impression |
| <input checked="" type="checkbox"/> | Bound with other material /
Relié avec d'autres documents | <input type="checkbox"/> | Includes supplementary materials /
Comprend du matériel supplémentaire |
| <input type="checkbox"/> | Only edition available /
Seule édition disponible | <input type="checkbox"/> | 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. |
| <input checked="" type="checkbox"/> | 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. | | |
| <input checked="" type="checkbox"/> | Additional comments /
Commentaires supplémentaires: | | Continuous pagination. |

The Canadian Practitioner and Review.

VOL. XXXII.

TORONTO, APRIL, 1907.

No. 4

Original Communications.

TREATMENT OF PNEUMONIA WITH QUININE.*

BY JOHN L. DAVISON, M.D.,

Professor of Clinical Medicine, University of Toronto.

Mr. President and Gentlemen,—I was asked some time since by you, sir, to say a few words on the treatment of pneumonia with quinine, a matter which to my mind is of great importance. There is every reason to hail with joy any treatment of pneumonia which even approaches specificity, for Osler voices the general view of the profession when he says, as he does in his last edition, there is no specific treatment for pneumonia. We have the expectant plan put before us in all the works on medicine, and we know what that means. Leaving nature to deal with the pneumococcus or its toxins by antibodies, and meeting serious conditions as they arise by digitalis, strychnine, alcohol, saline injections, oxygen, etc.

The serum therapy has not as yet proved adequate in this disease, though it is used here and there when the expectant or other plans markedly fail.

Now it is scientifically certain that the pneumococcus is causative of pneumonia. But mixed infections are undoubtedly common and add materially to the gravity of this disease—the measure of gravity depending upon the nature or virulence of the adventitious germ or germs present.

If some agent exists which acts upon the pneumococcus in the blood, or in the alveoli of the lungs, or where not, as defin-

* Read at meeting of Toronto Clinical Society, March 6th, 1907.

itely and as destructively as quinine acts upon the plasmodium malarie, in malaria, then the use of such agent would materially advance our therapeutic resources and prove of vast importance.

I have reason to believe that, speaking broadly, quinine does thus inhibit the growth of the pneumococcus, or antagonize its toxins, though I have no scientific demonstration of my belief to offer you, but only my clinical experience, and that of a few practitioners who have adopted this plan of treatment.

As to the possibility of this inhibition being accomplished, Abbott, of the University of Pennsylvania, says: "The pneumococcus is an organism of low resisting powers and easily destroyed by either thermic or chemical methods of disinfection."

How does quinine act as a specific (to use the word in its ordinary sense, for we have really no specifics) in malaria?

In a word, it poisons or inhibits the growth of the ameba-like plasmodium malarie in the blood.

The discovery of the plasmodium is of comparatively recent years, although Binz in 1867—forty years ago—offered the theory that malaria was due to the presence of a germ. It remained for Laveran, Machiafafa, Celli and others to place the quinine treatment of malaria upon a scientific basis by demonstrating the plasmodium as the causative agent, and showing that quinine acts upon the organism as a real poison in solutions as weak as 1-20000. Previous to this scientific showing the treatment of malaria by quinine was for scores of years truly empirical, though not on that account any the less successful.

So now the treatment of pneumonia by quinine is, so far as I am concerned, in a sense empirical, though by parity of reasoning, after my experience, and that of others also, the mode of action of this therapeutic agent is not difficult to understand; and we have found it, as did the men of long ago, in malaria, eminently successful in pneumonia.

I have no statistics. I can only tell you in a general way what my experience has been since I have regularly used quinine in sufficient doses in croupous pneumonia and the broncho-pneumonia of children.

From my observation I believe that any case of frank pneumonia, in which the treatment is begun within say 24 hours of the initial symptoms or the initial chill, and the sooner the better, may be aborted in from 36 to 50 or 60 hours.

It will at once occur to you that cases of pneumonia abort

without the quinine treatment, or, indeed, without any treatment. But the average time of ending of the fever, which may be looked upon as the termination of the action of the living germ and its toxin, is when it terminates by crisis, 7.1 days, when by lysis, 8.4 days. These figures are the result of an analysis of 486 cases, with 100 autopsies, of lobar pneumonia by McRae and others, published in *American Medicine*, January, 1904. They give at the same time the percentage as 60 by crisis and lysis in 28 per cent., atypical, 12 per cent.

Now my experience has been that the disease in the great majority of cases ends in from 30 to 60 hours when quinine is exhibited in sufficient doses, within 24 hours of the initial chill or the initial symptoms.

I have found it so in a large number of cases, so that I have come to consider that quinine taken into the blood acts as a poison to the pneumococcus.

But, it may be argued, Is not pneumonia a local infection? How can the quinine be carried to the consolidated lung tissue?

The disease is so regarded, I mean as a local infection, and undoubtedly there is the local manifestation in the lungs.

But the germ is present in the blood.

Kinsey (*Zeit. für Klin. Med.*) found it in 76 per cent. of 25 cases, and believes that with proper technique, "the pneumococcus will probably be found in the blood of every pneumonia patient."

Prochaska (*Central. für innere Med.*) holds the same, as do all the recent observers whose opinions I have seen expressed. So that the present view seems to be that with proper technique, and notably by employing a large enough quantity of blood in making the culture, the pneumococcus may be demonstrated in every case of pneumonia.

As to its action on the germ in the alveoli, it may be said that any drug which is dissolved in the blood plasma may be exuded in the air cells and thus inhibit the growth of the germ there.

I am aware that quinine has been used in this as in other infectious diseases, but, so far as I can gather, in insufficient quantities.

Thus in a discussion by Petzold on Anfrecht's treatment by quinine, it appears that the treatment was by the hypodermic injection of half a grain of the hydrochlorate of quinine once, twice, or latterly as long as the fever continues.

Osler, in his last edition, speaks of 30 to 60 grains daily. Mitchell Bruce, in his "Treatment in Practical Medicine,"

suggests at the outside 5 to 10 grains every six hours—20 to 40 grains per day; and so on of others whom I have consulted. The point is they do not exhibit large enough doses.

Now to close this rather rambling talk, I may outline what I think should be done, omitting a consideration of everything except that which applies to the quinine.

First, give a mercurial purgative, free, as say calomel, 3 grains, at once, and follow in six hours by a saline.

This to prepare the way for the quinine to act, for we have been well taught by some of the fathers in medicine that with a congested liver quinine is inert.

Thus Sir Lauder Brunton quotes Sir Joseph Fayrer, who, in speaking of the treatment of malaria by quinine, says: "We might just as well throw the quinine down the sink as to administer it under such circumstances" (a loaded liver).

Give 15 to 20 grains at once and 3 to 5 grains each hour for 24, 36 or 48 hours, if needed.

These are the smallest doses that should be administered, but I would not fear to give much larger ones.

Now what of the cases in which these large doses of quinine are not successful in bringing about a speedy termination of the disease, or are only partially successful in so doing? Are they not mixed infections in which we have the malignant influence of other germs which are not prejudiced in their growth by the quinine circulating in the blood? That seems a reasonable explanation of the old cases, which cannot be considered frank pneumonia. Just as the streptococcus greatly increases the virulence of diphtheria, so may the streptococcus render the quinine only partially valuable in such mixed infections of pneumonia.

May I mention some other drugs which have been held to act upon the pneumococcus in a similar way to quinine: Sod. sal., ammon. sal. (aspirin, Peabody); creosote, creosote carb.

Sebring (*Med. Rec.*, April, 1899) says that 100 cases treated by 10 grains ac. sal. every two hours gave only one death. I have had no experience with these drugs, having been well satisfied with the action of quinine now for eight or ten years. I shall not discuss with this learned society the toxic aspect of quinine, but may say that I have had no evil experience with the drug in a large number of cases. Certainly the doses I have used are in no way poisonous, nor are their ill effects other than unimportant and fleeting.

A CASE OF TRAUMATIC ASPHYXIA WITH RECOVERY.

By E. STANLEY RYERSON, M.D., C.M.,

Out-door Surgeon, Toronto General Hospital; Surgical Registrar, Hospital for Sick Children, Toronto.

The following is the history of the case which I am able to report through the kindness of Mr. I. H. Cameron:

N. B., male, aged 5 years, was admitted to the Hospital for Sick Children on May 9th, 1906, at 5 o'clock in the afternoon, for injuries which he had received about an hour previously while riding on the back of a G.T.R. lorry. In some way he was caught between the hind wheel and the spring, stopping the wheel and making it skid along the ground for some feet, thus attracting the attention of the driver, who immediately stopped the horses. When picked up he was unconscious, black in the face, and breathed with difficulty. He was immediately taken to the hospital in the ambulance.

Examination on Admittance.—Family and personal history are unimportant. Patient is a fairly well developed and nourished boy, but is in a somewhat neglected condition, his hands and face being begrimed with dirt. Symptoms of marked shock, cold and shivering, teeth chattering, extremities cold, pulse weak and rapid, face and lips pallid, are present. Consciousness is dulled, but patient rouses if asked questions or is subjected to pain. Eyes are held tightly closed as though the light was painful.

Abrasions and contusions are found: (1) Behind the right ear; (2) on the forehead, the blood from which ran into the left ear, making a careful examination necessary to exclude the possibility of hemorrhage being intra-cranial in origin; there was no cerebro-spinal fluid present, nor was the tympanum ruptured; (3) down the outer side of the left leg and thigh; (4) on the right side of the abdomen just above the iliac crest; (5) on the inner side of the right thigh just below the perineum, and (6) on the left side of the lower jaw.

The face and neck present a deep blue mottled appearance, which shades off and disappears over upper part of thorax, both anteriorly and posteriorly. The pallor of the face due to shock can be seen through the blue discoloration. The dark spots are small, circular and dark blue in color; they are not influenced by pressure and are separated from one another by narrow bands of normal skin. Over the face and neck they are placed

so close together that they resemble a diffuse ecchymosis of blood. Over the clavicular and infra-clavicular regions in front and the left scapular region behind, they are separated by larger areas of normal skin and they follow the distribution of the vessels in these parts. Around the neck at the level of the collar is a circular band about one-half inch wide, which is quite white and free from bluish discoloration. The eyelids are blue and swollen. On opening them, which is only done with force, the conjunctivæ are raised and projecting over the cornea, from the hemorrhagic effusion beneath them. There was no bleeding from the nose or the mouth. The bowels moved at the time of the accident. Respirations are regular, but shallow. Heart sounds are irregular, but moderately strong, with no murmurs. No fractures were found in extremities or ribs.

Wounds were disinfected and dressed and shock combated by warmth and stimulants, to which he rapidly responded. During the evening his dull, apathetic condition continued, becoming irritable if he was roused in any way. Catheterization was necessary.

May 10th.—He was quite conscious, but drowsy. Temp. 99 deg., pulse 120, respiration 30. His eyes were kept closed as if light caused pain. The pallor had gone and the blueness was not so deep a hue.

May 11th.—Quite bright and sitting up in bed. Blue spots have faded considerably. Some similar spots found on soft palate. Conjunctivæ are almost black.

May 13th.—Blueness continues to fade rapidly, without going through any changes of color.

May 23rd.—Patient up and running about ward. All discoloration has disappeared from face and neck. Hemorrhage beneath conjunctivæ still present, but color is less marked than it was. Wounds all healed.

June 3rd.—Only slight redness remains beneath conjunctivæ. Was discharged from hospital in good general condition.

The interesting feature of the above case was the bluish discoloration of the face and neck, called by some the "ecchymotic mask," which was found present immediately after the accident. In the first place, what was this bluish discoloration? and in the second, under what conditions does it occur?

1. In answer to the first question, (a) it was quite evident that the blueness was not the result of cyanosis, because pressure did not cause the blue color to disappear, and because there were bands of normal skin between the discolored areas.

Its sudden appearance, its local distribution to the head and neck, and the absence of any cardiac or pulmonary disease, also help to exclude this cause. (b) Was the discoloration, then, caused by hemorrhages into the subcutaneous tissues or by venous stasis? Beneath the conjunctiva the condition was undoubtedly an escape of blood into the tissues. In this connection it is interesting to note a similar condition in two cases of traumatic asphyxia reported by G. Perthes¹ in 1898-99. In these the hemorrhage under the conjunctiva covered the whole white of the eye. In both cases sight was lost immediately at time of the accident, either from venous hyperemia and edema of retina or by compression of the optic nerve by the retrobulbar effusion of blood.

In the skin, however, the blue spots are not so easy to explain. True hemorrhages or ecchymoses or petechiae may occur in these cases, but the fact that the spots merely fade and disappear without the changes of color usual in a bruise or extravasated blood, indicates that most of them are not of this origin. Ollivier² and others claim that they are largely stasis of carbonized blood in dilated and temporarily paralyzed capillaries. Heuter suggests that this stasis is probably due to mechanical causes, " (1) the sudden upward pressure of blood dilates the vessels of the face; (2) the pressure on the sympathetic nerves of the abdomen and thorax leads to a paralysis of the vessel walls." Willers also favors this view and points out that the limitation of the bluish discoloration to the face and neck is due to the lack or incompetence of the valves of the facial and jugular veins.

Definite proof that the discoloration was not due to hemorrhages was given by Beach and Cobb,³ of Boston, in reporting their case in the *Annals of Surgery*, 1904. They excised portions of discolored skin, submitted them to careful pathological examination, and found that every section showed normal skin with enormous distension of the small veins and the capillaries, there being no signs of blood in the tissues outside the blood-vessels, thus corroborating the theory of Ollivier, Heuter, and others.

2. Under what circumstances does this bluish discoloration of the face and neck occur?

Forcible compression of the chest or abdomen extending over some minutes, accompanied by entire cessation of respiration, is the recognized cause of this condition. There can be no doubt, Villemain⁴ acknowledges in a French journal in 1906, that violent compression of the large venous reservoirs of the

abdomen may cause a forcible reflex of blood into the system of the vena cava; and the jugular veins, being feebly protected by valves, are more open to an attack by this reflex than the venous trunks in the limbs. He says, however, that this is not sufficient in itself, and that some more energetic factor must also be present. He accepts the view that there exists an influence from strong personal action, and recognizes the violent though unconscious struggles of the patient to evade the forcible pressure to which he is subjected at the moment of the injury, by making a considerable thoraco-abdominal effort. Under such circumstances, the intra-venous pressure is likely to overcome the resistance of the vascular coats, giving rise to temporary paralysis of their walls with stasis and carbonization of the blood in them.

As an example of the influence of the personal factor giving rise to petechiæ one might refer to their occurrence in women after a prolonged effort in labor, persons suffering from whooping cough, epilepsy or convulsions.

(a) This ecchymotic mask has been found post-mortem in the bodies of persons crushed to death in great crowds or panics from fire. Classic examples in literature, collected by Burrell and Crandon,⁵ of Boston, are: (1) Crowd in Champs de Mars, in 1837, in which 23 persons were killed; (2) Vienna Ring Theatre Fire, in 1881, with 1,000 deaths; (3) Victoria Hall, Sunderland, when 200 children were killed; (4) the Charity Bazaar Fire in Paris, in 1897. Olivier examined the bodies of the 23 persons killed in the Champs de Mars crowd and found in all of them the uniform violet tint of face and neck, spotted with blackish ecchymoses. The severity of the crushing force is indicated by the fact that fracture of the ribs occurred in 7 of these cases. In 9 of the cases in which infiltration was seen beneath the conjunctiva, and in those cases where blood flowed from the ears, the vessels of the pia and of the substance of the brain were engorged with blood, which condition would account for the dulness and stupidity, invariably present in all cases which have recovered. It would explain the drowsiness and irritability which occurred in the case just reported. No permanent injury to the brain results, for, as Villemain states, indications of cerebral or meningeal hemorrhages have never been observed either during life or on post-mortem examination.

(b) In cases in which death has been caused by strangulation the face is "livid and swollen and sometimes mottled. Ecchymoses of small size are present in the skin of face, neck and chest, giving it a spotted, mottled or dotted appearance"

(Draper⁴). The mark of a cord, band, or hands are usually seen on the neck.

The presence in this case of the band of normal white skin at the level of the collar band suggested the possibility of strangulation as a cause, the spring or some projecting bolt of the waggon catching the back of the shirt collar, constricting the neck and temporarily interfering with respiration. The more probable explanation, however, is that the thorax or abdomen were severely compressed between the wheel and the spring of the waggon. Some authorities state that the ecchymoses in these cases of compression ceases at a circular margin on a level with the shirt collar, but this was not true of this case nor of that of Morestin, reported by Villemin, in which they extended down over the chest and back. The fact that the collar compressed the walls of the capillaries and small venules and prevented any blood from entering them, would explain the absence of discoloration in this position. A third possibility in the case reported would be that both compression of the thorax or abdomen and constriction by the collar band were present, each contributing to the production of the condition.

To sum up, then, the diagnosis of traumatic asphyxia with the ecchymotic mask is based upon the following points:

- (1) History of overcrowding or a severe crush.
- (2) Localized discoloration of the face and neck, to which the name "ecchymotic mask" has been given, which must be distinguished from cyanosis.
- (3) The presence of stupidity and dulness of the patient, even up to the degree of insensibility.
- (4) Absence of delirium, convulsions or paralysis.

Villemin insists on the importance of the recognition of the existence and nature of this lesion in order that a faulty diagnosis of direct injury or of fracture of the base of cranium may be thus prevented.

The history of the following case is interesting in this connection:

R. J. A., male, aged 11 years, was admitted to the hospital on August 9th, 1906, giving the following history: Two and one-half weeks ago was watering a horse, and when returning the horse ran away, and, as the rope was twisted around his right hand, he was dragged about 300 yards over a hard clay road. When picked up he was quite unconscious, and a swelling was found on the back and the right side of his head. A small quantity of blood came from his mouth. Convulsions soon developed, and continued for 72 hours, being controlled by morphine.

Great difficulty was experienced in getting the bowels to move, croton oil having to be used on one occasion. Urine was passed involuntarily at irregular intervals.

Examination on Admittance.—Patient is in an unconscious condition, lying with his eyes and mouth partly open. There is a small wound on the back of his head. Two bed-sores are present, one on his back and one on his heel. Respirations are slow and shallow. Abdomen is retracted and fecal concretions are readily felt in the colon. Bladder is distended to midway between pubes and umbilicus. Arms and legs are flexed and held in a spastic condition. No strabismus. Some ptosis of right eye-lid. Mouth drawn to left side and lines of right side of face are indistinct. A dark purplish mottled discoloration is present on the right side of head and neck, extending from line between external angle of eye and occipital protuberance, half way down back and sides of neck, where it gradually disappears. The same condition is present on the pinna and in the external auditory meatus of ear. In one or two spots there is a tendency to greenish discoloration, but the mottled condition greatly predominates. There was evidently intra-cranial pressure, which it was thought might be due to hemorrhage as the result of a fracture of the skull.

On August 12th double optic neuritis was found, so operation was advised to relieve tension and with the possible hope of finding an intra-cranial hemorrhage.

On removing a piece of skull with trephine, the dura mater, which was dark and congested, bulged out. A small opening was made into it, and a large quantity of cerebro-spinal fluid spurted out. No signs of hemorrhage could be found. Wound was closed with drainage. The spasticity became less marked after operation, but the general condition gradually became weaker, and death occurred on August 15th, three days after operation.

Post-Mortem Report.—Death resulted from a hemorrhagic pachymeningitis. Scalp wound was quite healthy. No fracture could be found in any part of the skull. Brain was quite normal.

In the above case one might reasonably explain the discoloration of the head and neck by attributing it to the suspension of respiration when he was being dragged and bumped along the rough road at the time of the accident, and to the efforts and struggles to get released and to get breath, which he would naturally make.

The prognosis in traumatic asphyxia is extremely grave,

only seven cases being reported in which recovery has occurred, the present case making an eighth.

The treatment of such cases may be spoken of as primary and secondary. Unfortunately it is very seldom that a medical man is on hand at the time of the accident, so he rarely has an opportunity of using the primary treatment. Should he be so, the immediate application of artificial respiration and the administration of oxygen might resuscitate certain cases.

The secondary treatment consists in combating shock by warmth and stimulants and applying any symptomatic remedies that might be advisable. The bluish discoloration fades in a week or two, but should it not do so with sufficient rapidity, the use of citric acid to reduce the coagulability of the blood might be tried.

REFERENCES.

1. G. Perthes.—*Deutch. Zeit. f. Chir.*, 1898-99.
2. Ollivier, Heuter, Willers.—*Annals of Surgery*, 1904, vol. 39.
3. Beach and Cobb.—*Annals of Surgery*, 1904, vol. 39.
4. *Brit. Med. Journal*, 1906.
5. Burrell and Crandon.—*Bost. Med. and Surg. Jour.*, 1902.
6. Draper.—*Legal Medicine*, 1905.
7. *Keen's Surgery*, 1906.

REPORT OF A CASE OF RAPID EMPTYING OF THE UTERUS IN ECLAMPSIA.*

By J. MILTON COTTON, M.D., M.R.C.S. (ENG.)

Mrs. C., age 32, primipara, was admitted to Grace Hospital on the 6th of December, and referred to me by Dr. Burns, of Parkdale, with the following history:

The patient had been suffering from albuminuria, headaches, and vomiting for some time past, and was in the thirty-second week of pregnancy. On the evening of the 5th patient showed symptoms of convulsions, and had four or five before her admittance to the hospital at 11 p.m.

The patient was made comfortable, after which the bowels were moved by calomel and enema. She was also given a $\frac{1}{2}$ -grain of morphine, which was repeated in two hours. Patient was nauseated and vomited frequently.

She had convulsions at 1.15 a.m., 3 and 5 a.m., each lasting from five to eight minutes. Patient had another severe one at 8 a.m. lasting about ten minutes. Each was controlled by chloroform. The catheter was passed upon admission, and only about $\frac{1}{2}$ oz. of urine came away. A consultation was held with Dr. A. O. Hastings, and we decided to empty the uterus. Patient was unconscious and markedly edematous and cyanosed.

Pulse 96, full and bounding. Examination showed abdomen large, flabby and edematous, and probably owing to this we could not make out the fetal heart. Vaginal examinations showed the cervix thickened and about $1\frac{1}{4}$ inches in length. No signs of softening as you get preceding labor. There were no uterine pains, nor any sign of labor. Owing to the desperate condition of the patient, we decided to empty the uterus by vaginal cesarean section, after the manner of Dührssen.

The patient was anesthetized at 10.50, was placed in the lithotomy position and thoroughly prepared, and at 11.15 a baby boy was delivered, or in fifteen minutes from the time the incision was made the labor was terminated.

The technique of the operation was as follows: A tenaculum was hitched to either side of the cervix, and brought well down. A strong pair of scissors was used and the cervix was split in the anterior middle line up to the body of the uterus. Then cross incisions at an angle of about 45 degrees, between the cervix and body of the uterus, extending about $1\frac{1}{2}$ inches on either sides from the central incision. (The hemorrhage

* Read at meeting of Toronto Clinical Society.

was very slight owing to the fact that the vessels were immediately stretched by delivery of the child.) This gave us an opening in the uterus of probably four inches in diameter, after the parts were stretched. The membranes were then ruptured, forceps applied, and the child delivered in a few minutes.

The placenta was expelled in about five minutes. Hemorrhage was nil. Then applying the tenaculum to either side of cervix again, and third one to the apex of the upper lip, bringing it down to its place, 10 day chromic acid sutures were applied to either sides and down the anterior cut in cervix. This left the cervix and body of the uterus much as it was before the operation was performed.

A slight tear of the perineum was made at the time by the child's head, owing to the rapid delivery.

The patient came out of the anesthetic quietly, was not nauseated. The pulse tension had fallen slightly.

The notes show that she made an uninterrupted recovery, and was discharged from the hospital on the 20th day of December, or exactly two weeks from the date of her admission.

Lochia was about normal in amount. The secretion of urine commenced so that during the following twenty-four hours twenty-three ounces had been passed. Sterile water was administered freely. Bowels were kept well moved with calomel and mag. sulph.

The third day patient took her nourishment well, and each day showed marked improvement until her discharge.

Examination per vagina before her discharge showed the uterus well contracted and the cervix normal in shape and appearance.

I believe that this operation is one that should be used in properly selected cases where you wish to empty the uterus quickly, as in eclampsia in primiparas, placenta previa, and accidental or concealed hemorrhages.

The advantage it has over stretching operations, either manual or with dilators, are:

1. It can be done more quickly.
2. Less shock to the patient.
3. Less danger from sepsis.
4. It being a clean surgical proceeding instead of leaving a torn and ragged cervix.
5. And not least important, much less exertion on the part of the operator.

A CASE OF DOUBLE PNEUMONIA, WITH COMPLETE TRANSCIENT BLINDNESS SUCCEEDING.

By W. S. LEMON, M.B.,

Of the Resident Staff, Toronto General Hospital.

Charles H. Tanner, aged 21, an Englishman, in this country three years, was brought from a neighboring town to Toronto General Hospital on January 21st, 1907, and entered in the service of Dr. W. H. B. Aikins.

He complained of a sharp, lancinating, and at times agonizing pain in the left side, extending from the axilla almost to the hip, and forward to the mammary line, of a short, painful cough and of difficult respiration.

He had always lived under favorable conditions; had indulged in no form of intemperance; had never had specific disease, and had never before been seriously ill.

On Saturday, January 19th, while at work indoors, he became overheated; took off his coat and started working out of doors, where a light rain was falling. He experienced a decided chill, which lasted from five to ten minutes, and was so severe he had to leave his work. That same evening he became so ill he was forced to take to his bed, complaining then of headache and general pains.

Pain in the side developed within an hour of the chill, and soon became very troublesome—like an exaggerated stitch in the side. It was referred to the region of the axilla forward toward the left breast and downward, extending almost to the anterior superior spine. It was much aggravated by coughing and by taking a long breath, so that within three to four hours of the chill his breathing became rapid, short and suppressed, and his cough short, dry and paroxysmal.

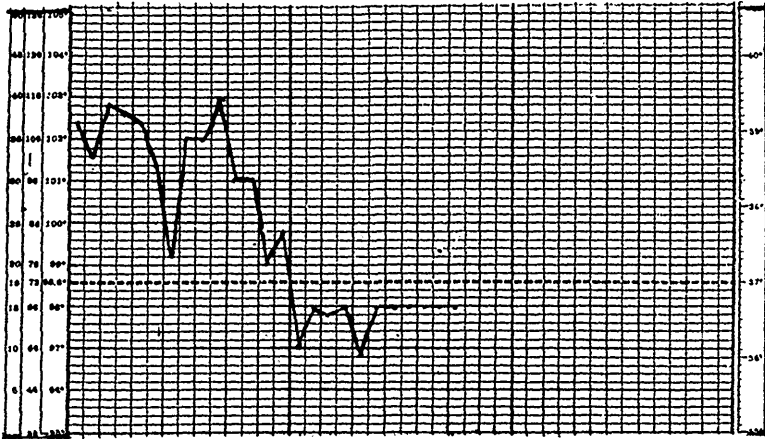
On Sunday, January 20th, his skin became yellowish in color; the pain and cough, with the difficulty in breathing, so urgent that on the 21st he was brought to the hospital. The admission temperature, 102.2; pulse, 120, and respirations, 40 per minute. Patient was a well-developed man, strong and healthy in appearance. His skin was dusky, with a decided yellowish tint, and the conjunctivæ and mucous surfaces of the lips markedly jaundiced. His eyes were bright, but with a restless, anxious expression. The pupils equal in size, not dilated, and giving brisk reflex response to both light and distances. There were no herpes developed on the lips or *ala nasi*.

On examination the nervous system seemed quite unaffected, except for the restlessness and sleeplessness caused by the pain and cough. There was delirium, but patient complained of severe frontal headache.

The tongue was dry and coated with a white fur, and the appetite quite lost; there was no abdominal pain, but constipation was marked; the liver and spleen were not palpable.

The pulse was full and bounding—rate 120—and not dicrotic. The heart was normal in size, the apex beat visible and palpable in the fifth interspace; a half inch to right of nipple line, and the heart sounds clear and pure without a murmur at any area.

The urine was not markedly acid, of specific gravity, 1.028, and contained neither albumin nor sugar.



The sputum was brought up only after painful coughing, and was very thick, glairy and tenacious, clinging to the lips and teeth, and so viscid that it could not be poured from the sputum mug. It was not very frothy, nor abundant, and not mixed with saliva. In color it was bright red—the blood being mixed intimately with the mucus, but, at times, apparently free as pure blood—“denoting an unusually intense congestion or unusual fragility of the pulmonary vessels” (Allbutt). Microscopically it consisted of red and white blood corpuscles, alveolar epithelium, and of micro-organisms, contained the diplococcus of Fraenkel with staphylococci.

Examination of the chest revealed a limited movement on the left side, but no edema nor bulging of the chest walls. The vocal fremitus and resonance plus, the percussion note

decidedly flat and the breathing tubular in character, with a well-marked expiratory grunt, but not accompanied by adventitious sounds, over the left lower lobe behind and forward as far as the mid-axillary line. Immediately in front of this line the breath sounds were accompanied by fine crepitations occurring at the end of inspiration, while immediately above the consolidated part there was a narrow area giving a decided hyper-resonant note. With the forward progress of pain toward the mammary region, there was a corresponding advance of the line of dulness and fine crepitations.

The blood examination showed 90 per cent. hemoglobin, the presence of 21,200 leucocytes, of which 95.5 per cent. were polymorphonuclears. There was an absence of eosinophiles.

For three days the patient ran an ordinary course of pneumonia when he appeared to have his crisis; the temperature fell to 98.3, the respirations to 28 per minute, but the pulse became very feeble, soft and easily compressible and remained high, 110 to 116 per minute. There was no enlargement of the heart, and no murmur presented. A profuse perspiration covered the body, especially the face. Jaundice disappeared during the day. Within an hour the patient experienced a sharp pain in the right infra-axillary region, the breathing again became rapid and painful (46 per minute), and took on the character of the respiratory grunt. The cough and sputum remained unchanged from the initial attack, but the temperature rose within two hours to 102.4. Within another hour examination revealed a condition in the right lower lobe almost identical to that found on first examination of the left.

During the succeeding three days the patient presented the usual symptoms and signs of an ordinary pneumonic attack, except that the left lower lobe showed the redux crepitations of resolution. On that day the temperature fell to 98, and the patient experienced what appears to have been a second crisis. From this date, January 27th to February 9th, resolution was completed in both lungs, and the recovery was uneventful.

The post critical blood count showed a decrease in polymorphonuclears from 95.5 to 79.25, with an increase in transitionals from 1.25 to 4.25, an increase in large lymphocytes from 3.25 to 9.50, an increase in small lymphocytes from .75 to 5 per cent., and the presence of .75 per cent. myelocytes, but again an absence of eosinophiles, a rather unfavorable indication.

On February 9th, after patient had been sitting up out of

bed for three days, and after all medication except strychnia had been discontinued for a week, he complained of tenderness over the eye balls, of aching limbs and back. The temperature remained subnormal, the pulse 80, and respirations 18 per minute, but patient was again put to bed.

On the next day his condition seemed unchanged, but on the following day, February 11th, he complained of being blind in the left eye, and of more urgent pain. On examination the pupil was much dilated, and the reflex for both light and distance lost. He could not, with this eye, see objects of any kind: in fact, could not distinguish light from dark. The external muscles of movement were acting quite normally; no strabismus and no nystagmus being present.

On ophthalmoscopic examination of this eye, the media were found to be beautifully clear and the retina normal in appearance. The disc itself was pinkish in color, but with a clear-cut, well-defined outline. The arteries were found to be much diminished in size, while the veins were enlarged and engorged. No sign of hemorrhage could be found.

The right eye seemed quite normal till late in the afternoon, when its pupil gradually dilated and became sluggish in its reactions. Nothing abnormal was then found on ophthalmoscopic examination. Sight gradually became impaired, so that by the next morning he could distinguish only that it was day, and by the early afternoon entire vision had gone. The two discs gave now a similar picture of large and engorged veins, with narrowed arteries, but by this time both discs were slightly swollen.

The tenderness over the eyes and in the eye-balls largely disappeared; the tension in both was plus (?), and there was a slightly marked exophthalmos. The pupils were large and fixed, but there was no impairment in action of the muscles controlling the movements of the eye-ball, and thus no involvement of that branch of the third nerve, or of the fourth, or of the sixth nerves.

The condition of absolute blindness existed for only a few hours; vision in the right eye, after from four to six hours, returning gradually till he could with great difficulty and uncertainty distinguish objects. The field of vision for the nasal side of the right retina was but little contracted, but for the temporal side almost abolished. The discs were still slightly swollen in appearance.

By the next day, February 14th, the left eye still remained without sight or reflexes, but the right reacted to light and

consensually, but not to distances, and the reflex was more marked for light when a ray was thrown into the outer side of the retina. The sight of this eye was gradually improving, so that he could count one's fingers with considerable accuracy if held not more than a foot from him.

By February 16th he could see the first and second row of letters in the Snellen Scale, if it was held at a distance of not more than two to three feet from him, and on this day his fields were about two-thirds the normal size.

During the entire course of his illness his urine had remained free of albumin or of casts.

On March 11th the final examination was made, showing the discs, retina and vessels to be normal; movements of the eye and the pupillary reflexes also normal, and the fields of vision contracted only in the slightest degree. V.R. and L., 6-12 L., at 5in.

The treatment used for the pneumonia consisted of local applications of ice-cold cloths for ten minutes, followed by hot applications for two minutes, and continued alternately for an hour. These applications were made over the pneumonic areas four times daily.

The diet was confined to fluids during the severity of the fever, and then the hospital soft diet was started, and gradually added to, till by January 31st, he was receiving the full tray.

Internally he was given quinine sulphate in three-grain doses every three hours, given with citric acid, potassium bicarbonate and ammonia carbonate, aa. grs. X, according to the Burney Yeo plan of administration. Purgatives—calomel and magnesium sulphate were used to keep the bowels acting well.

For supporting treatment he received strychnia grs. 1-20 every six hours, with an ounce of whiskey every two hours during the severity of the illness, but reduced immediately after the depression of the crisis had passed.

On January 31st, nine days before the onset of blindness, all medication, except strychnia grs. 1-30 q. 4 h., had been discontinued.

After the onset of blindness, blistering fluid was painted on the side of the face opposite the outer angle of the eyes: inunctions of mercuric ointment used externally and potassium iodide administered internally.

In looking over the literature on the subject Noyes was the only one to speak of an optic neuritis succeeding pneumonia.

Many possible explanations of the condition have been advanced. The use of quinine during the pneumonia might have influenced it, but the patient had had no quinine for nine days, and had never been given large doses. There had been no disturbance of hearing at any time, and though the onset and reactions of the pupils were similar to those produced by quinine poisoning, yet there was no pallor or anemia, and the vessels—arteries and veins—were not contracted. Wood alcohol also produces a blindness similar in some characteristics, but he had had none administered in any way—not even in the alcoholic back rub.

Posey and Spiller, speaking of sudden blindness, give anemia as one of the causes. "Anemia from hemorrhage may produce blindness, which may be sudden, trifling or complete, transient or permanent, immediate or postponed, and more frequently from the so-called spontaneous than from traumatic hemorrhage. The fundus in these cases may or may not be changed. The pupils are usually dilated and immobile."

Such a condition might produce thrombosis or embolism—a block somewhat back of the tracts—followed by a spreading edema, and thus including the centres for both left and right retina. But in such a condition the onset would probably have been much more sudden and the recovery slower. One could hardly believe the condition an organic one, but rather a toxic or chemical one, because of this rapid recovery, and also because there was no endocardial disease, and no extraocular effect whatever. The same authors in discussing anemic blindness, due to a poisoning, probably of a chemical nature, but, of course, usually occurring where the kidney disease is far advanced, describe it as follows: "The characteristics of this blindness are its sudden onset, its completeness, the preservation of the pupillary reactions, the sudden disappearance of the blindness when the blood state is relieved by active purgation or sweating, and the absence of ophthalmoscopic changes." Gowers states that slight transient edema of the papilla has been noted to coincide with the symptom and to pass away with it.

Such a transient blindness caused by a toxic substance taken with Knie's assertion that in central disorders of vision the ophthalmoscopic appearance is normal, the involuntary and unconscious movements on illumination, particularly the reflex to light remains intact, would lead one to believe that the lesion was in front of the corpora and due to some toxæmia

probably affecting the fibres in the chiasma. According to later observers there are fibres of two varieties, according to size, of which the smaller are the afferent papillary constrictors, and these affected would cause loss of reflex, and because of decussation in the chiasm loss of consensual reflex, which in this case was the first to make its reappearance.

I am indebted for much assistance to the members of the visiting staff of the eye and ear department, who saw and examined this case.

Selected Articles.

SOME OBSERVATIONS ON THE THERAPEUTICS OF CHRONIC HEART DISEASE.

BY FRANK J. WETILERED, M.D., F.R.C.P.

Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

The methods which should be adopted in the treatment of chronic heart disease are well worthy of careful attention, both on account of the number of patients afflicted with some condition accompanied with heart failure, and on account of the great relief which may be afforded to the sufferers.

The chief varieties of chronic cardiac disease met with are degeneration of the myocardium, either fatty or fibroid; valvular disease, the result of former rheumatism or due to atheromatous changes, and to these must be added the difficulties to the proper performance of its functions forced on the heart by changes in the smaller blood-vessels (*arterio-capillary fibrosis*). The symptoms complained of by the patients are somewhat similar in all cases: Shortness of breath, pain across the upper part of the chest, more or less severe, on exertion, irregular action of the heart, sleeplessness, apprehensiveness, digestive disturbances, especially flatulence, and in the later stages edema and ascites. These symptoms naturally vary both as regards degree and frequency. The differential diagnosis as to the nature of the cardiac lesion and between organic heart disease and functional disorder (including purely gastric trouble) is often difficult, but I do not propose to discuss these differences here, but only to offer some suggestions as to the therapeutic measures to be adopted when evidences of chronic cardiac disease manifest themselves.

The main indications for treatment are two in number, (1) to stimulate the action of the heart, and (2) to reduce the peripheral resistance—these two are of equal importance, although the latter dictum is too often forgotten. Symptomatic treatment also needs consideration, as most of the more distressing symptoms can generally be relieved by appropriate remedies.

In commencing a course of treatment the arterial tension must be carefully observed. If it is high, vaso-dilators are of importance, whereas if low tension prevails, cardiac stimulants

hold the first place. In the majority of instances a combination of these two classes of drugs is called for.

The most popular cardiac stimulant is probably digitalis, administered either in the form of the tincture or of the fresh infusion. If cardiac failure is marked, digitalis is certainly called for, whatever the lesion may be, but in the majority of instances it should be given in combination with drugs which will cause dilation of the smaller vessels. The particular drug to be used must depend upon the degree of pulse tension. Iodide of sodium or potassium in doses of from 3 to 5 grains will be found useful in this respect, as will also the bicarbonates of potash and soda. A prescription I have found of considerable value under such circumstances is: Tinct. Digitalis *m* v. (to xv.), Sodii. Bicarb., gr. x.; Potass. Bicarb., gr. v.; Sodii. Iodidi, gr. iii.; Tinct. Card. Co. 3 *m* Aq. Cinnamomi ad 1 $\frac{3}{4}$ T.D.S. If the arterial tension is considerable, Liq. Trinitrini gr. $\frac{1}{4}$ to gr. 1 will be found useful. In the case of elderly patients particularly, a vaso-dilator is indicated when giving digitalis. When digitalis is being continually employed, the effect of its action can be to a large extent estimated and regulated by the amount of urine passed. An increase in the secretion may not be apparent for three or four days, but subsequently the diuretic action of the drug manifests itself.

Strophanthus in the form of tincture may with advantage be occasionally substituted for digitalis. If the latter drug causes vomiting, strophanthus may be well borne. It is in those cases, however, in which a cardiac stimulant is required which does not markedly raise the blood pressure that strophanthus is of value, as for instance in cases of chronic renal disease with evidences of heart failure. I regard strophanthus, however, as rather a dangerous drug, at any rate, as one that has to be given with caution when large and repeated doses are employed. Digitalis gives warning when too large quantities are being given, and the drug can, therefore, be withdrawn. But very serious symptoms occasionally arise without any warning when large doses of strophanthus have been administered.

Citrate of caffeine is also valuable, being a cardiac stimulant which does not raise peripheral tension. The employment of squills in cases of heart disease is often of value, and the beneficial effects are speedily apparent. Of convallaria I have had but little experience, although its value is highly estimated by some physicians. In old age strychnine adminis-

tered either by the mouth or by hypodermic-injection, or tincture of *nux vomica*, are useful adjuncts or substitutes for the drugs previously mentioned, but their use causes a rise of arterial tension which must be carefully regulated. Before leaving the subject of the purely drug treatment of chronic heart disease, the old method of prescribing a "blue pill" occasionally must not be forgotten, for it is a therapeutic measure of considerable value.

Turning now to other points in the treatment of chronic heart disease, the mechanical form of treatment has for some years claimed a considerable amount of attention. The hill-climbing of Oertel, the apparatus designed by Zander, the resistant exercises introduced by the brothers Schott, and the effervescing baths first elaborated at Nauheim have all from time to time had their adherents. At the present day the employment of natural or artificial effervescing baths has been strongly advocated by some physicians in this country, as well as by continental authorities. Many theories have been expounded as to the cause of the undoubted benefits derived from a course of baths in certain forms of chronic heart disease, but personally I believe that the stimulating effects on the skin of the bubbles of carbonic acid gas cause a general dilatation of the superficial vessels, so acting as a vase-dilator. I have not found the same benefits from the artificial baths that I had from the actual baths at Nauheim.

A similar explanation applies to exercises such as those of the brothers Schott. A muscle in action requires more blood than a muscle at rest. By the sustained action of the muscles such as is brought about during the performance of these exercises a considerable amount of blood is retained in the muscles, with consequent relief to the heart. Combined with the exercises and baths a strict *regime* of the general course of life must be maintained. The diet, amount and kind of exercise, and hours of rest must be duly regulated, and these precautions form an all-important part of the treatment at Nauheim and other resorts where these therapeutic measures are carried out. The same precautions may with advantage be taken in the management of patients in their own homes. Care must naturally be taken in the selection of cases for "baths and exercises." Those which do best in my experience are those in which there has been some cardiac overstrain, but in which the acute symptoms have subsided; cases in which there is a strong neurotic element: instances of early fatty or fibroid degeneration, and

cases of mitral regurgitation in which compensation is not quite satisfactory. I can add but few words here about diet, suffice it to say that as a general rule it should be as dry as possible, and that only the most easily digestible articles of food must be allowed.

Much may be done by symptomatic treatment, that is to say by giving drugs designed to relieve special symptoms.

Sleeplessness is often one of the most prominent causes of distress in chronic cardiac disease. Of all drugs I have found chloralamide the most satisfactory. It may be given at first in doses of from 20 to 30 grains, suspended in mucilage or dissolved in rectified spirit. The dose may be increased until from 60 to 70 grains are given nightly. The use of the drug should, however, be suspended at intervals, and, of course, if possible, the dose should be gradually lowered. Veronal (gr. v.) I have also found useful in cardiac cases. Sulphonal, trional and tetronal have not yielded such uniform results in the cases in which I have prescribed them. Sleep is essential in cardiac cases, and occasionally resort must be had to opium or morphia, although symptoms giving rise to anxiety are sometimes manifested, particularly if there are pulmonary complications. Apprehensiveness, irritability, and restlessness are prominent symptoms of failing heart. The addition of bromide of sodium or hydrobromic acid to the treatment suggested above will often have a calming effect.

Dyspnea may be relieved either by increasing the cardiac stimulant, or by a mixture of carbonate of ammonia and spirits of ether. Inhalation of oxygen gas at frequent intervals will assist the oxygenization of the blood and also tend to induce a feeling of restfulness or even sleep.

The occurrence of edema or ascites must be treated by rest, the administration of cardiac stimulants, and if necessary by removing the fluid from the legs and abdomen.

Pain in cardiac disease may, of course, be a prominent symptom, but the differential diagnosis between pain due to the heart and that caused by digestive disturbances may be difficult. For the relief of pain due to the heart, inhalation of nitrite of amyl, nitro-glycerine, or some preparation of opium, are generally employed according to the nature of the affection.

Digestive disturbances may be relieved by regulation of the diet and the use of drugs which aid digestion and prevent fermentation.

In this short article I have only been able to consider very briefly the means which may be employed in cases of chronic heart disease, and need scarcely say that each case must be carefully studied both as regards the lesion present and the individual nature of the patient. To bring about ease in working and so combat the effect of disease must be the aim of the practitioner. This may be accomplished by the aid of the medicines suggested above, together with careful advice and guidance with regard to the daily life of the sufferer.—*Folia Therapeutica.*

THE PREVENTIVE TREATMENT OF NON-SPECIFIC DISEASES.

BY P. LONDE, M.D.

Of the Faculty of Medicine, Paris.

We must bear in mind that all parts of the organism are intimately connected for good or for evil in the living body. The sum of vital energy at the disposal of the individual is not unlimited, and there are moments in his existence when this has to be concentrated on one particular spot, as in combating infection or establishing a new function. In the young infant digestion is the principal function, and under ordinary circumstances matters go on smoothly until a demand is made on the fund of vital energy by some phase of evolution—teething, for instance. Provision must be made for this fresh demand, and if this be not done serious constitutional disturbance may accrue. Most of the accidents of dentition are due to over-alimentation, either comparative or absolute. The same remark applies to the establishment of puberty in the young girl. Here we must impose a large measure of repose, muscular, cerebral, and even digestive. At periods of rapid growth, it is true, a liberal supply of food is in a certain measure legitimate, but it will be all the more efficacious if associated with a reduced expenditure of energy. The menstrual function is throughout life a critical period. It comprises a salutary depletion, but it places the woman temporarily in a state of morbid imminence, and if the period be postponed by the necessity of concentrating the vital energy on a threatened point—lungs, liver, or what not—the woman will only recover complete equilibrium four weeks later, when the next period

supervenes. Repose is therefore always indicated at the menstrual period.

At the menopause the suppression of a function entails the necessity for a modification of nutrition, and if the woman fails to conform to this requirement, nature will set up a supplementary emunctory, such as rheumatism, or bronchitis, or interstitial nephritis, or she may become a chronic dyspeptic.

The conclusion to be drawn from the study of the state of morbid imminence (see "*Predisposition to Disease*," *Medical Press and Circular*, October 10th, 1906, p. 385) is that all non-specific diseases are fundamentally identical, *i.e.*, they owe their existence to some change in the abdominal functions. In the complex human organism this change may be primary or secondary to a shortcoming on the part of the nervous system. It follows that a mild acute disease is often a fortunate circumstance, provided it be completely recovered from. It constrains its victims to repose and a healthful regimen, which arrest the morbid process, as is seen in the longevity of persons subject to migraine. Conversely it is by no means uncommon to see patients affected with chronic affections, and suitably treated, escape serious acute diseases, thanks to the rest and regimen which they are constrained to adopt. Most non-specific maladies can be avoided by timely recourse to rest and dieting. These two must always be associated, because rest facilitates digestion. The practice of resting after a meal which we inculcate on our dyspeptic patients is of unquestionable value. When we rest the voluntary centres, the sympathetic system can dispose of a comparatively larger amount of nervous energy for functional purposes. On the other hand, we cannot subject a patient or a person threatened with disease to a reduction of diet unless at the same time we insist upon repose—in other words, he must economize his strength.

The repose must be double in that it must ensure rest for the diseased organ, as well as of the whole organism, in order to liberate as much nervous energy as possible to fight the common enemy. Local affections tend to become general or to get worse if our energies are expended externally. Thus comparative repose should be insisted upon even in such affections as whitlow, zona, or even slight attacks of bronchitis, under penalty of the risk of aggravation or complications. For the principles that govern the preventive treatment of non-specific diseases are the same that must be applied when we desire to avert complications. It is good practice to be severe at the onset of even the most trivial maladies, and a rigid dietetic

treatment is the best means at our disposal to curtail the duration of the attack.

The regimen must be a restricted or lessened one. It is always desirable to throw the least possible burden on digestion at the onset of an infection, whether grave or slight. In short but acute maladies, such as pneumonia, though it may be well to keep up the patient's strength by liquids, it is wrong to attempt feeding, properly so-called.

Absolute deprivation of food, and even liquids, is necessary in acute affections of the digestive tract, infantile enteritis, appendicitis, hepatic colic, etc. Protracted liquid diet entails recourse to injections of serum, but the diet is itself an excellent preventive means. The child will never have grave enteritis or broncho-pneumonia or articular rheumatism if the patient has been subjected early enough and long enough to repose and diet. In every case the treatment should be strictly applied from the onset. Moreover, to avert recurrence, it is well to enrich the diet very gradually. The gradation of diet is the same in all diseases; at first diluted milk, or milk and egg; then pure milk and soups; then semi-solid foods, creams, purées, and lightly-boiled eggs. On the whole, abstinence from salt is a good thing in acute diseases. The food should be given in small quantities, frequently repeated.

These simple principles of hygiene are, unfortunately, unknown to many mothers of families and nurses; yet it is in early childhood that their efficacy is most clearly demonstrated, and it is at this age that negligence in this respect has the most disastrous consequences. In the newly-born, in a state of morbid imminence, rest is inadequate and illusory. The only prophylactic means at our disposal is functional rest. We cannot too strongly proclaim that the most important factor in determining the present high rate of mortality among the very young is, along with the too early administration of solid food, giving too much food.

It may safely be asserted that the majority of text-books advise far too large doses for the artificial feeding of infants. We do not recognize what a small quantity of cow's milk suffices to nourish an infant provided it be diluted with boiled sweetened water. Many infants twelve months of age do better on a pint and a half of milk diluted with half a pint of sweetened water than on a quart of pure milk. Between six and nine months a pint of milk is usually sufficient, provided it be diluted with a third of its volume of water. Between the third and fifth months the milk should be diluted with half

its bulk of water, and given in fractional doses of one half to one pint. Infants under two months should not exceed half a pint, and the milk should be diluted with more than its volume of water—indeed, to begin with, twice its volume. These are merely general indications, for in every case we must be guided by the weight chart and the appearance of the stools. It is undesirable that a child should grow too quickly or get too big for its age.

The daily allowance of milk may be increased by about a teaspoonful every second day, so that by the end of the first year we shall have reached close upon two pints. For children over a year two pints is a maximum, and is not necessarily the proper quantity. The great point to be insisted upon is that when a child seems to be hungry, when it coughs, whenever the stools have too pronounced an odor, whenever it is in the least indisposed in any way, the fault lies in the direction of over-feeding. We must go back on our steps and very gradually re-increase the allowance. Even if over-feeding be not at fault, it behooves us, in presence of dentition troubles, to put the child on half rations. The treatment of the morbid state is the same as that of morbid imminence, and we must always commence by rest and diet.

In adolescents the treatment of the state of morbid imminence is somewhat different. Here muscular and cerebral repose is the fundamental requirement. Diet is only of use in so far as it is associated with rest. The regimen must be curtailed to begin with, then slowly augmented. Super-alimentation is only justifiable in growing lads on condition that it is preceded by a period of rest. We too often overlook the fact that it is contrary to common-sense to overfeed a patient or a threatened subject without insisting upon, at any rate, comparative repose. Too zealous and too hasty overfeeding is badly borne by many of these subjects.

The same remark applies to adults. Although we have to allow for the wear and tear of the struggle for life, we shall be doing good service to our patients if we insist upon an adequate cessation of professional work whenever the general health is below par.

At the change of life, and in old age, moderation becomes all the more necessary, since the expenditure of energy is reduced. Regimen, then, is here the essential feature. I have known old people, and even adults, who make a practice of putting themselves on half-rations, and remaining a day in bed once a fortnight.

The progress of surgery, on the one hand, and of pharmacology on the other, must not make us forget that it is always easier to prevent than to cure. A certain proportion of persons operated upon for appendicitis and gynecological diseases derive much more benefit from the repose imposed by the intervention than from the operation itself when the latter was not very urgently indicated. A great many medicinal treatments are useless, and even injurious, if we lose sight of the fundamental element of the treatment—repose and rest. Medicine has everything to gain by getting rid of illusory and doubtful or ephemeral medications.

Lastly, when we are confronted with a disease of comparative specificity, like tuberculosis, the safe-guarding and utilization of vital energy, along with reduction of digestive auto-intoxication, remains our sheet-anchor, hyper-alimentation only coming later.—*The Medical Press and Circular.*

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. AIRKINS, H. J. HAMILTON, C. J. COPP,
F. A. CLARKSON AND BREFNEY O'REILLY.

Treatment of Pneumonia.

It is a matter for serious regret that one can add nothing particular upon the matter of treatment. There have been the usual number of articles advocating this or that specific, but unfortunately none of the articles is sufficiently convincing to lead one to try again that which has been tried and found wanting.

One sees rather less of the articles urging the use of creasote derivatives, and one can safely predict their complete disappearance within a short time.

Last year in *Progressive Medicine* mention was made of the fact that quinine was being advocated as a specific in pneumonia when given in large doses.

The basis of Galbraith's confidence in the use of quinine in the treatment of pneumonia is purely clinical, and his report would be more convincing were it not for the fact that medical literature is full of accounts of specific methods of treatment based upon pure empiricism, and of the thousands of such specifics only mercury and iodides for syphilis and quinine for malaria have stood the test of time. Moreover, among those abandoned specifics is quinine for pneumonia. Years ago this same drug was used in large doses and then abandoned.—*Progressive Medicine*, March, 1907.

Urinalysis.

In the *New England Medical Monthly* of February, 1907, we note an excellent review of the newer tests employed in urinary analysis. Several of these may prove of interest:

1. Tognetti has devised the following method for use in detection of albumen: To the urine under examination add an equal part of a tannin solution (20 grains in 3 ozs. of 90 per cent. alcohol); heat, add $1\frac{1}{2}$ the quantity of 33 per cent. HCl. in water. A yellowish-white precipitate indicates a positive reaction; this test fails in the presence of bile, which

may first be removed by the addition of glacial acetic acid in proportion of one-fortieth the volume of urine (Grocco).

2. For acetone, Framner advises that the urine be rendered strongly alkaline with KOH, a few drops of a 10 per cent. solution of salicylic acid in alcohol are then added: heat mixture to 70 deg. C.; in the presence of acetone a purple red ring will appear.

3. Gruber's osmic acid reaction for indican is worthy of note. To the urine add a double quantity of strong HCl, followed by two or three drops of 1 per cent. osmium solution; shake and in the presence of indican a violet to blue color immediately appears. The indigo blue may be removed by the addition of chloroform (in concentrated urines clarify with acetate of lead previous to examination).

4. For the detection of morphine in urine Pellagris' reaction, although not a recent discovery, is well worthy of repetition. To the urine add 5 drops of ferric chloride solution (1 gram of crystallized Fe. 2 Cl. 6 in 8 cc. H₂O), then 4 drops of solution of ferri cyanide of potassium (1 gram ferri cyanide pure in 120 cc. H₂O); in the presence of morphine a fine blue tint is observed.

Mediastinal Lipomatosis.

Hampeln, in the *St. Petersburg Med. Woch.*, October 7th, discusses the area of cardiac dulness in health and in mediastinal lipomatosis. He insists that this latter condition is one not as yet sufficiently recognized. The writer agrees with Ostreich that the right border of absolute cardiac dulness frequently passes obliquely across the sternum to the insertion of the fifth or sixth costal cartilage with a normal heart. Supposing that this oblique line is present, the intensity of dulness to the left of the left sternal border is always greater than that to the right.

He believes that a moderate degree of enlargement of the right ventricle cannot be distinguished from those cases where the dulness extends across the sternum with a normal organ, but if absolute dulness is found to the right of the right sternal margin considerable enlargement is present. The author believes the left border of the heart to be of greater value in determining alterations in size, and that the apex beat is of equal importance. He suggests that in outlining the heart measurements be made from the mid-sternal, and a horizontal line drawn through the xiphoid-sternal articulation. This latter

usually cuts the point of maximum impulse of apex. In adults the average distance of the apex beat from the middle line is $3\frac{1}{2}$ to 4 inches (8 to 10 cm.), and the upper angle of the triangular area of dulness $\frac{1}{2}$ to $1\frac{3}{5}$ inches above the xiphoid line (2 to 4 cm.). In healthy adults extensive areas of cardiac dulness are not infrequent, especially laterally, as upwards behind the sternum, almost to the notch, in these cases the pulsations are frequently impalpable. The writer believes this to be due to a deposit of fat in the mediastinum, and is supported in this by Romberg.

Such patients, although in excellent health, are usually more or less obese from hypertrophy, dilatation and pericardial effusion. The diagnosis is made by character of apex beat, absence of murmurs, and finally by outwardly concave outlines of dulness reaching from the manubrium sterni. The diagnosis may be complicated in cases where the deposit of fat is mainly on either side of the pericardial sac, or when the heart is closely applied to the chest wall by an abnormally high diaphragm; the edge of the right lung here being displaced to the right and upwards.—*Med Review*, February, 1907.

Treatment of Sunstroke.

We note in the *Medical Review* that Capt. M. F. Foulds, of the British Army Medical Corps, recommends the use of iced water enemata repeated every ten minutes (a quart to each injection). In addition cold water is poured over the body and the neck blistered. From extensive experience in India the author has found this to be of great value. He also suggests its use in hyperpyrexias of rheumatism, etc.

A New Reflex.

We extract the following from the *British Medical Journal*: W. Bechterew, of St. Petersburg, has described (*Neurol. Centralbl.*, No. 7, 1906, p. 290) a peculiar reflex phenomenon consisting of plantar flexion of the foot and toes, in cases of affection of the central motor neurons, ranking in significance with true ankle clonus, the extensor plantar reflex, and other indications of structural interference with the pyramidal tracts. The phenomenon in question is as follows: If one takes hold of the patient's foot and causes the toes to be in strong plantar flexion, there follows immediately dorsiflexion of the foot and toes. In advanced cases and with stronger plantar flexion there ensues, closely after the dorsiflexion of

the foot and toes, a flexion movement of the knee and hip-joint. This he considers a distinct reflex phenomenon produced by putting on the stretch the tendons of the dorsiflexors of the foot and those of the extensors, which leads to a contraction of the corresponding muscles and a consequent dorsiflexion of the foot and toes. In the case of stronger plantarflexion of foot and toes the reflex spreads not only over the muscles whose tendons were stretched, but also to the flexors of the knee and hip. This reflex he has observed in traumatic lesions of the spine, in spinal syphilis, in myelitis, and in intracranial lesions of the motor tracts. It is to be looked upon as an expression of a general increase of reflex excitability. The phenomenon is of special value, because it can be elicited in the presence of organic lesions when ankle clonus and Babinski's extensor reflex cannot be obtained.

Heller's Test.

Sachse suggests an improvement in the technique of Heller's test for albumin. A glass slide is laid on a black surface; on this are placed, side by side, a drop of urine and one of nitric acid. If the reaction is positive at the line of junction of the two drops, a characteristic film of albumin will form, and gradually a milky veil spreads over the fluid, which can be clearly discerned against the black background. This modification is extremely simple, delicate and only minute quantities of urine and reagent are needed.

Shreds in the Urine.

An excellent article by De Santos Saxe, of New York, appeared in the *N.Y. Medical Journal*, of March 5th, 1907, dealing with the results of his original investigations.

The technique consists in procuring an early morning sample of urine, and from it removing the shreds by means of a sterile loop. The best agent for fixing the tissue, after it has been spread out on a glass slide, is a 5 per cent. solution of mercuric chloride, which is allowed to flow copiously over the specimen, the last quantity to remain for several minutes in contact with the shred. The excess is then removed with water; or equal parts of ether and alcohol for ten minutes answers equally well. Unna's polychrome methylene blue is used for one to ten minutes as a stain; the specimen is washed in distilled water, dried, dehydrated for a few seconds in 95 per cent. alcohol and blotted with filter paper, clear in xylol, dry again with filter paper and mount in balsam.

Sachse divides shreds into four classes—pus, mucopus, mucous and epithelial shreds; or by another classification, collicular, prostatic, comma and vesicular. The order of appearance of these in an inflammatory process is pus, mucopus, mucous, and, finally, epithelial shreds as the lesion becomes more chronic.

In cases of gonorrhœa, marriage should never be permitted until all the organisms have disappeared, and of equal importance the fact that the terminal shreds contain, for a period of months, no pus cells, even after provocative measures, such as the drinking of beer; beyond this, Saxe is unable to draw any further conclusions.

The Urine in Contracted Kidney.

The work of Cabot and others has shown how frequently the text-book picture of the urinary changes in kidney disease fails to correspond to the changes seen in actual practice. In chronic interstitial nephritis we have flattered ourselves that the urinary changes are apt to be characteristic, likewise the high arterial tension and the cardiac hypertrophy. Nagel has recently analyzed the urinary and other changes in a number of undoubted cases of contracted kidney, and shows that some of the signs generally accepted as being almost constant are far from being so. Thus, polyuria occurs in only one-third of the cases, a normal amount of urine being secreted in a second third, and a condition midway between polyuria and oliguria existing in about one-fifth of the cases. Increased blood pressure is present in a little under three-quarters of the patients, and clinically appreciable heart hypertrophy in a little over four-fifths. Night polyuria occurs in only one-quarter of the patients, while uremia occurred in every case observed. These findings serve to emphasize the remarks previously made regarding the necessity of correlating the clinical and laboratory findings before making a diagnosis, and they also suggest the necessity of avoiding a too strict adherence to the text-book pictures of disease. Students of medicine often refuse to decide on a diagnosis because they expect too close a correspondence to the text-book description.—*J.A.M.A.*

OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, K. C. M'ILWRAITH, FRED.
FENTON AND HELEN MACMURCHY.

Has the Preliminary Vaginal Douche an Influence on the Morbidity of the Lying-in Period?

Ahlfeld, F. (*Zeitschrift für Geb. und Gyn.*, Vol. LIV, No. 1, p. 145.)

Ahlfeld has made a careful study of the statistics of the lying-in patients to ascertain the effect of ante-partum vaginal douches. He found that for a period in 1891-2 the douche was considered unnecessary, so dispensed with, with the result of having a marked increase of the morbidity rate. A temperature of 38 deg. or over was arbitrarily held the lower limit of morbidity. The following figures tend to prove his contention:

In 7,000 puerperal women, 662 patients in each thousand were fever free; *i.e.*, under 38 deg.

In the first 5,000 cases, 646 patients in each thousand were fever free.

In the last 2,000 cases, 698 patients in each thousand were fever free.

In the period when the douche was dispensed with, there were 700 cases with 527 patients per thousand who were fever free, an increase of 15 per cent. over the average for the remaining 6,300 cases. As soon as the douche was again introduced the results improved.

There always has been a lowered rate of morbidity among the operative cases (inductions of labor, forceps, versions, manual removal of the placenta) than in the non-operative cases, which he ascribes to the fact that an additional douche was employed at the time of the operation. Finally, he found that in those cases of streptococcic contaminations of the vagina the colonies were greatly reduced in number a couple of hours after the vaginal douche. For the three reasons: the fact that the morbidity rate increased when the douche was not employed, that operative cases showed a lower rate of morbidity, and that the colonies were fewer in number, makes him conclude the douche should be employed as a routine practice. He uses "Seifen-Kresol" 3 per cent.—*Surgery, Gynecology and Obstetrics*.

A New Management of the Occipito-Posterior Positions of the Fetal Head.

O'Brien (*Medical Record*) introduces either hand under the occiput, with or without anesthesia, grasps it firmly, having separated the middle and ring fingers to steady the neck, making counter pressure upon the fundus, thus bringing the fetal body and head into one solid mass. With assistance he slowly rotates the mother to the genupectoral posture. This manipulation brings the occiput to the anterior position without traumatism to the mother or child. Labor proceeds as when the patient is placed in the genupectoral position for prolapsed cord, or in the lateral obstetrical posture of the English school. The writer calls attention to the awkward movement which occurs when the patient's knee passes over the accoucheur, for the crux of the manipulation is to keep the head fixed steadily with the body curled upon it.

Veronal in the Vomiting of Pregnancy.

F. M. Rowland, of Lichfield, Eng., reports the following case of interest (*Brit. Med. Jour.*): A healthy primipara, aged twenty-nine, developed serious symptoms of vomiting at the end of the second month of pregnancy. Nothing was retained by the stomach, and the retching and vomiting prevented her obtaining any sleep for more than a few minutes at a time. No improvement resulted from treatment by the ordinary remedies. At the end of three days veronal, gr. xxxii., in powder, was administered in a nutrient injection. The patient fell asleep within half an hour, and slept well for eleven and a half hours, and at intervals afterwards for the next six hours, merely rousing up while the nutrient injections were given. No vomiting occurred for twenty-five hours after the administration of the veronal, but after that time it gradually returned, though not to the same distressing extent as formerly, and during the following ten days small quantities of Brand's essence, kreochyle, dram doses of pepsin wine, peptonized milk, lime-water and barley-water were occasionally retained for a few hours. After ten days, as sleep was chiefly being obtained in snatches of one to one and a half hours, and as the patient was not getting on, another dose of veronal, gr. xxxii., was administered by the rectum. This was followed by ten and a half hours' sleep, with no ill effect other than a purpuric rash on the arms, which passed off in twenty-four hours. Vomiting recurred at intervals, but the patient gradu-

ally began to take more varied nourishment by the mouth, the nutrient injections being continued as well for a time. Sleep was obtained naturally in longer periods each day, and a week after the veronal she was getting from five to nine hours daily without the aid of drugs. The intervals between the attacks of vomiting became longer, and by one month from the commencement of the illness she was convalescent, taking ordinary food, and getting out each day. Since that time, four months ago, she has remained quite well, and quickening took place normally. The sleep obtained by the veronal was apparently sound and peaceful, and the patient awoke refreshed and feeling better in every way.

The Prevention of Ophthalmia Neonatorum.

Dr. R. Brudenell Carter says: There can be no possible reason why the instructed midwives whom we are hoping to obtain in the near future should not universally adopt this (Crede's) preventive treatment, and thus place the children of their patients beyond the reach of danger. The application ordered by Prof. Crede appears to me to be unnecessarily strong. For curative purposes I have always found a solution of one part in 240, or of two grains instead of ten to the fluid ounce of water, to be perfectly satisfactory; and I have no doubt that it would be equally so as a prophylactic.

The Intravenous Injection of Colloidal Silver in Puerperal Fever.

Cohn (*Revista de chirurgie*, June, 1906) reports that in the course of one year in the Lying-in Hospital at Bucharest, 28 cases, chiefly severe puerperal infections, were treated by the intravenous injection of colloidal silver, and 23 were cured. This treatment was not undertaken except in cases which did not react favorably under the usual treatment of puerperal sepsis. In the latter cases larger doses were used than at first, sometimes to the extent of 0.25 (grammes) daily, and Cohn declares that though not a specific, colloidal silver must be considered a useful adjuvant in the treatment of severe septic processes in childbed.—*The British Gynecological Journal*, November, 1906.

The Use of Oxygen in Asphyxia Neonatorum.

Spivak writes that at the maternity department of St. Luke's Hospital, Denver, in desperate cases of asphyxia neonatorum, a novel method has been adopted at the independent suggestion

of two nurses, each unknown to the other. In one case, after having exhausted all his skill, resources, and strength, the attending physician concluded that the child was beyond human aid, and left the hospital in despair. The attending nurse cast her eye on the tank of oxygen which was standing in the corner of the room, and decided to make an experiment of her own. She therefore turned on a stream of oxygen into the nostrils of the baby, and was overawed to see the infant take its first breath. On the following day the attending physician was amazed to find a live baby in the arms of its mother. The other nurse, in a similar case, suggested to another attending physician, after he had thrown up the sponge, to use a few whiffs of oxygen. He grasped at the opportunity of trying a novel procedure and was repaid by having saved a human life, and by the gratitude which shone in the eyes of the parturient and nurse.—*N. Y. Med. Jour.*

Neuritis of Pregnancy.

Rudaux includes under the above heading those cases of neuritis occurring during pregnancy and apparently dependent upon the same; these cases occurring as a result of some infection from without he excludes. The neuritis of pregnancy is relatively rare, and is most often preceded by albuminuria, headache, vomiting, etc., other symptoms of auto-intoxication occurring during this state. The most common type is that of a generalized polyneuritis, which, as a rule, first affects the legs and then the arms; in severe cases there is foot-drop and inability to stand, or even to raise the feet from the bed; the leg muscles (generally the antero-external group below the knee, but sometimes the calf and extensor muscles of the thigh) rapidly waste—in the upper extremity the muscles of the hand and the flexor muscles of the forearm are the ones mostly involved. Reaction of degeneration is rarely observed, but a diminution of excitability of the muscles to galvanism is frequently found. These motor disturbances are generally preceded by sensory phenomena, such as lancinating pains, tingling, numbness, etc. Sometimes the facial muscles may be involved, the nerves of the pharynx, or tongue, the phrenic, or the vagus. In some cases there are mental disturbances—such as a loss of memory for recent events, weakness of intelligence, irritability, delirium, hallucinations, mania, etc.—which indicate that the nerve centres themselves, besides the peripheral nerves, may be affected by the poisonous products arising from auto-intoxication. In some cases the neuritis is

limited to the arms or legs; in other cases a single nerve may be involved; thus optic neuritis may occur without there being albuminous urine; disturbances of hearing and of taste and smell may also arise. If suitable treatment be adopted, recovery of function generally follows, unless marked and irreparable damage has already occurred. In the generalized forms of neuritis, the sensory disturbances disappear before the motor, and the arm recovers before the leg. As regards the treatment of these conditions, the author advises that if signs of neuritis are gradually appearing, or if marked signs already exist, the patient should be placed on a milk diet, purgatives and irritation of the large intestine should be employed, the functions of the skin should be promoted by warm baths, and the general health should be attended to. If success does not follow this plan of treatment, and there be serious changes also present—for example, optic neuritis—pregnancy should be brought to an end. For muscular atrophy massage and electricity should be employed.—*Arch. Gén de Méd.*

Editorials.

THE TORONTO STREET RAILWAY AND THE MEDICAL PROFESSION.

The medical profession in Toronto have been given a demonstration of the law of agency as applied to the officials of a corporation. For some time past members of the profession have received emergency calls from motormen and conductors employed by the Street Railway Company to attend persons injured in accidents. From their experience with railroads and other large employers of labor the members of the profession inferred that the Toronto Street Railway Company would ratify the acts of their employees and pay usual and proper fees for their services. Most employers of labor have realized that in nine cases out of ten it is a benefit to have the damage diminished by speedy cure if possible, and that it is also a benefit to have an immediate examination of the party injured by a competent practitioner in the absence of his own regular surgeon, whose services cannot, from the nature of things, be always available immediately after the happening of an accident. The experience of a number of practitioners who have tried to collect by process of law their reasonable fees from the Toronto Street Railway Company for emergency calls rendered at the request of employees of the company to injured persons may be of some interest to our readers. We think it our duty to warn the profession that this company is prepared to rely on the technicalities of company law to avoid liability. A typical example will, perhaps, best illustrate the point.

Some weeks ago one of their conductors was severely injured in an accident, and was carried into a neighboring drug store, and a well-known practitioner, living near by, was hurriedly summoned by the druggist, as the man's condition was evidently very serious. This practitioner had had an unhappy experience with the Street Railway Company under somewhat similar circumstances before, the company having refused to

acknowledge liability for an emergency call made at a very early hour in the morning for attendance on an injured passenger, who was carried into his office, and relying on the advice of the judge, who had tried his former case, called up the head office of the Street Railway Company before attending the injured man, and after some delay the person answering the telephone, advised him, on behalf of the Railway Company, that the company would be liable for an emergency attendance. After an examination of the man, in conjunction with another surgeon, it was decided that the only chance for saving the man's life would be by an immediate operation, and an ambulance was called and arrangements made with the authorities of the Toronto General Hospital. Restoratives and stimulants were applied, and the two practitioners rode with the injured man to the hospital; took care of him on the way, and got him on the operating table, when he succumbed from shock. A moderate bill was rendered to the Street Railway Company, when the latter offered \$10 in full of all claims, and which sum the surgeon refused to accept, and brought suit in the Division Court. The judge was of opinion that the defence filed by the company, that no official of the company, except the General Manager, had power to call in the services of a medical man, and that the General Manager had not employed the plaintiff, was good and valid. The judge followed a case decided a number of years ago in England, at a time when it was thought that a corporation could only contract under its corporate seal. In the English case referred to, a man was injured while trying to enter a railway carriage, under instructions of the guard. The station master called in the services of the local surgeon, who ascertained that a major operation would be necessary to save the man's life, and recommended the station master to procure a well-known surgeon in Birmingham. The station master complied with his request and had the surgeon brought down by a special train. It became necessary for the surgeon to sue for his bill, and it was held by the court that as it was not an incident of the employment of the station master to bind the company by contracts for surgical attendance on injured passengers, the com-

pany was not liable for the attendance unless evidence of express authority could be given. The court was of opinion that the company should not be bound by the discretion of a man who was not appointed to exercise a discretion in the matter of employing medical men. In giving their judgment the court stated that, "It is not to be supposed that the result of our decision will be prejudicial to railway travellers who may happen to be injured. It will rarely occur that a surgeon will not have a remedy against his patient, who, if he be rich, must at all events pay, and, if poor, the sufferer will be entitled to compensation from the company if they, by their services, have been guilty of a breach of duty, out of which he will be able to pay, for the surgeon's bill is always allowed for in damages. There will, therefore, be little mischief to the interests of the passengers, little to the benevolent surgeons who gave their services, but it would be a serious inconvenience to the public if the rule of law as applicable, not merely to railway companies, but to all partnerships and individuals as to the extent of the authority given to the agent, were relaxed out of a compassionate feeling which it is difficult not to entertain towards the suffering party, the present plaintiff."

The Division Court Judge in Toronto, when giving his judgment in the case above referred to, against the plaintiff, expressed himself as follows: "I am sorry that these doctors can't be paid, but it is the old story—they should have gone farther in the matter of getting authority. In a previous case the doctor was candid enough to state that it was a test case which he was bringing. I warned him then that he must get someone in authority if he wished to collect; now I warn him that he must get the authority of the General Manager. If this can't be done the doctor can do nothing." In answer to the doctor's query—if he should let the man die—the judge replied: "Certainly, from a legal standpoint there is nothing else to do; morally, it may be different."

The management of the Toronto Street Railway have apparently deliberately decided to take the risk of having damages in accident cases greatly increased by their refusal to procure prompt surgical attendance for an injured party rather

than pay the nearest available surgeon the usual fees chargeable in such cases.

We will allow our readers to themselves criticize the railway policy from the humanitarian and moral standpoint.

UNIVERSITY OF TORONTO.

The finances of the University of Toronto caused an interesting debate in the Provincial Legislature on March 13th. The Prime Minister explained the needs of the University, and stated that the amendments which he proposed to the University Act of 1906 would enable the Governors of that institution to borrow money on their endowment, when the approval of the Lieutenant-Governor-in-Council had been secured. A new section was also added to the bill by which former presidents of seven years standing shall become trustees. The effect of this clause will be to make ex-President Loudon a trustee.

Mr. A. G. Mackay, on behalf of the Opposition, expressed the opinion that the support of the University should not be dependent upon the number of rich men who may die in the Province throughout the year, that is, to the succession duties, but that the estimates should be brought down and passed upon, just as was done in the case of prisons, asylums and other public institutions. He also thought that the requirements of the University should be discussed each year by the Legislature instead of giving up control of the expenditure to the Board of Governors.

The Premier stated in reply that the University already had its own endowments, and it had not been thought wise that part of the expenditure should be controlled by the Government and part by the University authorities. The present amendments were framed in such a way as to be consistent with the legislation of last session. The Hon. Mr. Mathieson explained that the Government during the last session had given the University a stated source of income, and had then thrown it on its own resources. When the University was able

to come every year and get what it wanted from the Legislature private donations were discouraged. He thought a great service had thus been done in freeing higher education from State control.

THE ONTARIO MEDICAL ASSOCIATION.

As before announced, the next meeting of the Ontario Medical Association will be held in Toronto a week earlier than usual, May 28th, 29th and 30th, 1907.

Dr. Crile, Professor of Clinical Surgery, Western Reserve University, Cleveland, will deliver the address in Surgery; and Dr. Ravenal, of the Phipps Institute, Philadelphia, will deliver the address in Medicine, his subject being "The Methods of Infection in Tuberculosis."

One of the afternoons will be given up to a series of papers dealing with the relation of the profession to the public. In connection therewith the following programme has been arranged:

1. "The Medico-Legal Aspects," by Dr. G. Silverthorne. This paper will take up the question of the appointment and remuneration of coroners; the selection of expert pathologists for autopsy work and proper remuneration; the present undesirable method of retaining experts in legal cases; a discussion of the present irresponsibility for the payment of fees in legal cases, and a comparison of all fees with those of other countries.

2. "The Public Health Aspects," by Dr. J. W. S. McCullough. The need of the appointment of county health officers; compulsory vaccination; remuneration for the registration of births, deaths and infectious diseases, and that attendance upon the poor should be remunerated by the municipality; the organization of the profession and how to deal with the peripatetic dead-beat.

3. "The Ideals of Asylum Work for Ontario," by Dr. C. K. Clarke.

4. "The Infection of Drinking Water," by Dr. J. A. Amyot.

The following have promised to discuss these papers: Drs. C. A. Hodgetts, R. Haikes and W. R. Hall will take up certain portions of Dr. McCullough's paper. Drs. Becmer, Burgess (Montreal), J. Russell, and W. N. Barnhart will discuss Dr. C. K. Clarke's paper; and Drs. Starkey (Montreal) and W. T. Connell will discuss Dr. Amyot's paper.

The Committee on Arrangements wishes to announce that there will be a smoking concert on the first evening, and on the second a dinner at one of the large hotels, at which a distinguished guest will speak.

SIR CHARLES TUPPER.

There are at present two grand old Canadians in England, Lord Strathcona and Sir Charles Tupper, M.D. About the 1st of March a number of friends of Sir Charles Tupper presented him with a portrait of himself, painted by the late Mr. A. G. Turner.

The presentation was made on behalf of the subscribers by Lord Strathcona, who read an address setting forth the services which Sir Charles Tupper had rendered to Canada during the last sixty years, first in his native Province of Nova Scotia where he was Premier, then in the Dominion Parliament where he was for a time Prime Minister, and finally as High Commissioner in England.

Sir Charles Tupper, in returning thanks, mentioned that he was the sole survivor of the sixteen representatives of Canada who met in London forty years ago to discuss certain matters in connection with the British North America Act.

He was born in 1821, received his preliminary education in Nova Scotia, and pursued his medical course at the University of Edinburgh. He represented his native county in Parliament for thirty-one years, and has held nearly every office in the Government of Canada. In addition he was one of His Majesty's plenipotentiaries on the Fishery Commission at Washington in 1887, and in the negotiations for a treaty between France and Canada in 1893.

LORD LISTER.

Lord Lister is now 80 years old, his birthday being April 4th. We learn from the *British Medical Journal* that many of his friends were anxious to convey to him on that day some token of their admiration and affectionate regard for him. Dr. C. J. Martin, Director of the Lister Institute, suggested a re-publication of all his scientific papers prefaced by a suitable biography. Lord Lister's original papers are scattered throughout the medical and scientific publications of Great Britain. It was thought by his friends that a large proportion of the profession in Great Britain, Greater Britain, Europe, and the United States would be glad to obtain the collected works of Lord Lister. At the time of writing we do not know whether the Committee were able to accomplish this important work before Lord Lister's birthday.

THE STATE AND THE CHILD.

The Government and Legislature of Ontario are taking another important step in the advance of public opinion as to the duty of the State towards the child. The feeling has been steadily growing that where parents and other natural guardians notably neglect or violate their duty in the care and education of children the State should stand by the child, and see to it that the man and woman of the next generation receive a fair start in life. The School Laws, Truancy Act, Shops and Factory Acts, Children's Act, and the various officials appointed under these, exert influences in this direction. But it has been found that the provisions heretofore existing have not gone far enough, and that some of them are poorly enforced, and many of the children do not yet "get a fair show." A Committee of the Legislature consisting of Hon. Mr. Monteith, chairman, Hon. Dr. Pyne, and Messrs. T. H. Preston, R. J. Preston, Dargavel, McNaught, Pattinson, Pense, Studholme and Tudhope has been appointed, and the members are earnestly working to safeguard the health and the physical, mental and moral well-being of the children. This appears to be the dom-

inant aim of the Committee, but in carrying out this object care is being taken not to make the provisions impracticable, nor such as to seriously embarrass the poor and their families.

The Committee has heard a good deal of evidence and representations from different interests, and the problems which it has to confront are the following: Evasions of the Truancy Act or neglect of it through want or inefficiency of inspection, the consequent illiteracy of factory children; evasions of the age limit and of restriction of hours of labor. Both these conditions have been rendered worse by immigration of foreigners. Then the present age limit and hours are, in many cases, unsatisfactory, and are worse under the Shops' Act (10 years!) than under the Factory Act; and in the cases of employment in hotels, in homes, and other places not classed as factories, there is no restriction.

The maiming and other physical injuries of children, well known to surgeons who have practised in factory districts, have also occupied the attention of the Committee. The report has not been published at the time of going to press, but we hope to present the readers of the *PRACTITIONER*, in our next issue, with a short summary of the skilful manner in which the problems presented have been met. w. o.

NOTES.

Margaret Eaton School of Expression.

We find in the March issue of the *University of Toronto Monthly* an interesting description of the public opening of the new Greek theatre, which took place on January 7th, 1907. It has been said that it is possible to gain from the Parthenon alone a true impression of the spiritual condition and quality of the Greeks. It has often been copied, and it is well known that a model of the Parthenon is one of the most admired objects in the British Museum. The Athenians themselves have copied the Parthenon in one of their legislative buildings. The *Monthly* tells us that of this copy Toronto has now a replica in the Greek theatre erected on North Street, to be the home of the Margaret Eaton School of Literature and Express-

sion. Quietly and unobtrusively, like the work of the school for which it forms a fitting abode, this wonder of Athenian architecture has been reproduced in the Athens of Canada.

At the opening ceremony the late Mr. Timothy Eaton presented the keys of the building to the Principal, Mrs. Scott-Raff. We are told that this was the last public act of Mr. Eaton, whose family name is thus permanently connected with the University of Toronto.

The writer in the *Monthly* concludes as follows: "We hope that the favorable auspices under which the school was opened will continue to influence its work, and that the gifted principal may be a very *fortun clavigera*, bearing not only the silver key—a symbol of eloquence—but the inner golden key betokening that power of literary interpretation by which alone the works of the world's greatest geniuses give forth their highest value.

"Let us hope that the generous gift which so befittingly crowned the career of Toronto's successful merchant may be an inspiration for others to go and do likewise."

The New Hospital for Toronto.

We understand that all the land, or nearly all the land, required for the new General Hospital for Toronto has been acquired. This consists of a rectangular block, situated on the corner of Queen Street Avenue and College Street, containing between eight and nine acres. It is an admirable situation, and if the block system is adopted there will be ample space for the buildings themselves, with some ground to spare outside the buildings.

As announced in a former issue, Messrs. Darling & Pearson, of Toronto, have been appointed the architects. A regular building committee has been appointed to consider the plans and work of construction. A party consisting of Messrs. W. J. Haney, Chairman of the Building Committee; A. B. MacCallum, M.D., a member of the Hospital Board; J. N. E. Brown, M.D., Superintendent of the Toronto General Hospital; Bruce Smith, M.D., the Provincial Inspector of Hospitals and Charities; and Mr. Darling, the architect, left

Toronto, March 10th, to visit the leading hospitals of New York, Baltimore, and Philadelphia.

It happens unfortunately that this Committee did not find many really good hospitals to inspect, because such institutions are exceedingly scarce. It is hoped, however, that they learned much on their tour, particularly from the mistakes that have been made in other places. We are assured that every endeavor will be made to erect a structure, or a number of buildings, which will be, in all respects, up to date.

The University Magazine.

We have received the first number of a new quarterly magazine, which appeared in February. It is called the *University Magazine*, and is a continuation of the *McGill University Magazine*, with a certain departure. With two exceptions the members of the editorial staff are upon the professional staff of McGill University, but the magazine will not be the official publication of that university.

The main purpose of the magazine is set forth by the Committee, under the following heads: 1. To express an educated opinion upon the questions immediately concerning Canada. 2. To treat freely in a literary way all matters, especially those that have to do with politics, industry, philosophy, science and art.

We congratulate the editorial staff upon the general excellence of the February number, and wish them every success in their endeavors to publish a magazine which will rank with the British quarterlies.

At the last meeting of the Medical Faculty of the University of Toronto, the following resolution was moved by Dr. George Bingham, seconded by Dr. G. Peters, and unanimously carried: "That the sincere and heartfelt sympathy of this Faculty be extended to Dr. George Elliott in his recent terrible bereavement, and that a copy of this resolution be forwarded by the secretary to Dr. Elliott."

Personals.

Dr. Fred. Grasett, of Toronto, sailed for England, March 26th.

Dr. Thomas G. Roddick has retired from the deanship of the medical faculty of McGill University.

Drs. J. Algernon Temple and Allen Baines, of Toronto, expect to sail for Liverpool from New York, June 28th.

Dr. Thomas McCrac, of Baltimore, visited Toronto and read a paper before the Toronto Medical Society, March 21st.

Dr. J. Orlando Orr, of Toronto, went to New York, March 15th, to procure novelties for the next Industrial Exhibition.

Dr. Albert A. Macdonald, of Toronto, has removed to his new residence, corner of Bedford Road and Prince Arthur Avenue.

Dr. James Lyons Biggar, of Tillsonburg, expects to go out to the North-West and commence practice in Edmonton about May 1st.

Much sympathy is expressed for Dr. George Elliott, of Toronto, in the terrible calamity which befell him through the death of his wife and infant child.

Dr. Thomas S. Cullen, of Baltimore, visited Toronto, March 18th, and delivered an address on "Uterine Myomata," before the Post-Graduate Society at the residence of Dr. Herbert Bruce.

Dr. Herbert A. Bruce, of Toronto, expects to sail from New York for Cherbourg, May 14th. After spending two or three weeks in Paris he will go on to Breslau and Vienna. He intends returning to Toronto about August 1st.

Dr. W. H. B. Aikins leaves Toronto for New York, April 1st, and anticipates sailing for Europe on April 4th. He will visit the hospitals in Paris, and some of the noted health resorts in France, and then spend some time with Professor Schott in Nauheim, Germany.

Dr. W. W. Keen, of Philadelphia, has resigned from his position as Professor of Surgery in the Jefferson Medical College, with which he has been associated for twenty-seven years. The trustees of the college accepted his resignation, and at the same time appointed him Emeritus Professor of Surgery. Dr. Keen's resignation took effect on March 15th. He has left on an extended tour, and will probably return in about one year.

Obituary.

Apr 1907

GEORGE ARMSTRONG PETERS, M.D., F.R.C.S. (Eng.)

We have to announce with most profound regret the death of Dr. George Peters, which occurred at his residence in Toronto, March 13th. From five to ten years ago Dr. Peters was generally considered one of the strongest, and one of the most healthy physicians of his age in Canada. He has always lived in a careful and temperate way, especially as to such matters as eating, drinking and smoking. In one respect, however, he was never quite temperate; he lived an exceedingly strenuous life, and did an enormous amount of work between the ages of 15 and 45.

About three years ago his health commenced to fail, and he became seriously ill during the winter of 1904-5. In the summer of 1905 he took a prolonged rest, and received much benefit therefrom. The following winter he did a fair amount of work. During the summer of 1906 he spent a holiday of a few weeks in England, and returned to his home much improved in health and spirits. During this last winter he did a great deal of work in both the practice and teaching of surgery. A few weeks before his death his friends noticed that he was commencing to fail again, and were quite anxious about his condition. He was "in harness," however, up to the day before his death. He performed an operation on the morning of March 12th, and was suddenly seized with severe pain at 3 o'clock that afternoon. He suffered much during that night, seemed better on the following forenoon, but had another seizure that afternoon, and died in a few minutes. His last illness lasted about twenty-four hours. The cause of death was angina pectoris.

Dr. Peters was born on July 16th, 1859, in Eramosa Township, County of Wellington. He received his preliminary education in the Public School and Collegiate Institute of Fergus, from which he matriculated into the University of Toronto in 1882. He received his medical education in the Toronto School of Medicine, and graduated, M.B., from the University of Toronto in 1886. After graduating he continued to work, especially in the University laboratories and the Toronto General Hospital, and at his own home, frequently

through many hours of the night. Only his very intimate friends knew what that work meant, but the result was highly appreciated when Dr. Peters, after a comparatively short visit to the Old Country, came back with the Fellowship of the Royal College of Surgeons of England. He was then made Associate Professor of Surgery in the Medical Faculty of the University of Toronto, and became a full professor in the same subject a few years after.

He always took a great interest in military matters, and, entering the Governor-General's Body Guard as lieutenant, soon became a captain in that regiment. Later he organized the Toronto Light Horse, being appointed first a major, and subsequently lieutenant-colonel in command. He was exceedingly fond of horses, was one of the best horseback riders in the city, an enthusiastic member of the Hunt Club, and was also a well-known member of the Lambton Golf Club.

From a professional standpoint it is difficult, if not impossible, to do full justice to Dr. Peters. He possessed a rare combination of all the qualities which are requisite for a scientific and practical surgeon. He had signal ability, good judgment, great manipulative skill, marked individuality and originality as an operator, and untiring energy—all combined with conscientious devotion to his work and his patients.

The public and the profession lose a great surgeon through Dr. Peter's death, but the members and students of the medical faculty of the University of Toronto lose more—they lose one of the best teachers of surgery in the world. His death has proved a stunning blow to the medical staffs and the medical students of the University and the General Hospital of Toronto.

We offer our loving sympathy to Mrs. Peters, Miss Mary Peters, and Miss Ruth Peters. May God ever bless them!

The funeral, which was one of the largest and most impressive ever witnessed in Toronto, took place March 15th, when the remains were conveyed to St. James' cemetery. As it was a military funeral, the casket was laid on a gun carriage furnished by the Royal Canadian Horse Artillery. Next came Dr. Peters' horse, led by the orderly. The boots reversed were hanging beside the saddle.

The funeral services were conducted partly at the house and partly in the cemetery chapel. The casket was then lowered into the receiving vault, after which three volleys were fired.

The following somewhat pathetic little incident shows that "In the midst of life we are in death." A coterie of fifteen or sixteen friends were accustomed to go out frequently together, horseback riding, during the last few months. On Saturday, March 9th, a few of the party decided to present to Dr. Peters a gold-mounted crop as a souvenir of their many pleasant meetings. Captain Arthur Kirkpatrick was to act as secretary-treasurer, and sent out his letters on Monday, March 11th. He received his replies promptly, and telephoned Colonel Campbell Macdonald, March 13th, that he had completed his work. "Very well," said the colonel, "I'll arrange with Peters, and try to get him to meet us next Saturday." While they were talking George Peters was dying.

ALEXANDER E. MACDONALD, LL.B., M.D.

For thirty-five years Dr. Macdonald had been intimately associated with the insane. He commenced the study of medicine at Toronto University and graduated M.D., Medical Department, New York University, 1870, LL.B., Law School, New York University, 1881. Lecturer upon Medical Jurisprudence in 1874; subsequently, Professor of Medical Jurisprudence, Professor of Psychological Medicine and Medical Jurisprudence, and was Emeritus Professor at the time of his death. House Physician Hospital for Epileptics and Paralytics, Blackwell's Island, 1870; chief of staff, Charity and Allied Hospitals, Blackwell's Island, 1871. Resident physician, New York City Asylum for the Insane, Ward's Island, 1874. Medical superintendent of the same from 1874 to 1904, the title of the asylum having been changed in the meantime to Manhattan State Hospital, East Ward's Island.

In 1901 he established the tent treatment of the tuberculous insane, removing them from all communication with any unaffected patients. The principles underlying this undertaking are now universally accepted by the medical profession here and abroad.

His splendid administrative abilities made him familiar with every detail in the care of the insane, seven thousand at one time being under his direction. He possessed the rare gift of attracting to himself experienced, trusty and loyal officers and friends.

Dr. Macdonald was one of the most distinguished alienists

of this country, and a man of striking force of character. He had a hatred of cant and pretence. His far-seeing powers, his unswerving integrity and great executive ability qualified him in an extraordinary degree for his responsibilities. At all prominent medical meetings his activities were conspicuous. His commanding presence and lofty sense of duty will always be remembered by those who had the privilege to be acquainted with him, and his pupils in all parts of the country will pay many tributes to his memory. He died Dec. 10th, 1906.—
Alienist and Neurologist.

WILLIAM LANE, M.D.

Dr. Lane, a graduate of Victoria University of 1861, who practiced in St. Catharines for some years, then in Lockport for a time, and finally in New York for a few months, died in the latter city, March 14th. Heart failure was said to be the cause of death.

SAMUEL PRESCOTT RICHARDSON, M.D.

Dr. Richardson, a graduate from Toronto and Victoria Universities in 1871, and a practicing physician in Eglinton for about thirty-five years, died at his late residence, March 26th, aged 65. We are told that he had an attack of typhoid pneumonia early in the winter. He appeared to be on the road to recovery for a time, but took a turn for the worse early in March and failed somewhat rapidly till death came.

Mary Matheson Skirving, wife of Dr. James H. Richardson, 36 St. Joseph Street, Toronto, died March 16th, aged 82.

Book Reviews.

A TEXT-BOOK OF OPHTHALMIC OPERATIONS. By Harold Grimsdale, M.B., F.R.C.S., and Elmore Brewerton, F.R.C.S. Published by Kegan, Paul, Trench, Trubner & Co., Limited, Dryden House, Gerrard Street, London, England. Price, 12 shillings.

This is a well-printed and very readable book of three hundred and forty pages. The plan of the authors is first to refer to the surgical anatomy of the region of operation, then to the pathological anatomy of the condition to be relieved. Now follows a discussion of the particular uses and advantages of the different operations, and a careful description of each operation in stages. The already clear text is made still more so by the use of many excellent illustrations, to explain each step in the operation. Of particular excellence are the chapters on the Operations on the Ocular Muscles, on Cataract, and on the Operative Treatment of Glaucoma. Quite early in the book is described the method recommended by Landolt, for facilitating the understanding and remembering of the action of the ocular muscles.

The book is full of common-sense, and is delightfully free from fads, and one can heartily recommend the volume as an excellent reference for anyone doing ophthalmic operations.

DIET IN HEALTH AND DISEASE. By Julius Friedenwald, M.D., Clinical Professor of Diseases of the Stomach in the College of Physicians and Surgeons, Baltimore; and John Rubrah, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Second Revised Edition. Octavo of 728 pages. Philadelphia and London: W. B. Saunders Company. 1906. Cloth, \$4 net; half morocco, \$5 net. Canadian agents: J. A. Carveth & Co., Toronto.

The above is a most comprehensive account of all that relates to food, its division into classes, modes of administration, methods of preparation and the therapeutic value of special dietaries in disease.

It is above everything, also, eminently practical, taking up, as it does in a systematic manner, the diseased conditions of the body, and discussing thoroughly their relations to the vari-

ous foodstuffs, and finally a series of rapid reference diet lists are appended for the more common complaints.

We note with interest chapters on composition of American food materials, including every article of diet in common use; on the preparations of soups, beverages, jellies, etc.; infant feeding; beverages and stimulants, and the Weir-Mitchell routine.

Lists of the dietaries in a large number of public institutions and hospitals, and the American army and navy rations are enumerated and discussed.

We cannot do less than accord to this work unqualified praise, and we congratulate the authors on its production.

WOMAN, IN GIRLHOOD, WIFEHOOD AND MOTHERHOOD. Her Responsibilities and Her Duties at all Periods of Life, and a Guide in the Maintenance of Her Own Health and that of Her Children. By M. Solis-Cohen, A.B., M.D., Instructor in Physical Diagnosis, University of Pennsylvania; Visiting Physician to the Hospital for Diseases of the Lungs, Chestnut Hill; Assistant Physician to the Philadelphia General Hospital; Physician to the Children's Dispensary of the Jewish Hospital, Philadelphia, Pa. Profusely illustrated with color-plates, scientific drawings and half-tone engravings and Manikin Chart printed in colors, with an index. Philadelphia, Chicago and Toronto: John C. Winston Co.

Written for popular reading, this work is one of the best of its class, and any physician may safely place it in the hands of his patients. In striking contrast to so many books of this kind, it avoids all prurient subjects, and the advice given in all cases is most excellent. It deserves to have a large sale.

THE PRACTICE OF GYNECOLOGY. New (third) edition. Thoroughly revised. A Text-Book on the Practice of Gynecology, for Practitioners and Students. By W. Easterly Ashton, M.D., LL.D., Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. Third edition, thoroughly revised. Philadelphia and London: W. B. Saunders Co. 1906. Toronto: J. A. Carveth & Co. Cloth, \$6.50 net; half morocco, \$7.50 net.

More than a thousand pages and more than a thousand illustrations are comprised in this handsome and complete volume

by Prof. Ashton. The fact that it has been necessary to issue three editions within a year of the date of the original appearance of the book speaks well for its reception by practitioners and students. We have nothing but praise for this book. Matters of importance are dwelt upon, nothing is omitted, everything is clearly expressed and well-arranged. We have looked up several questions that occurred to us in the management of certain gynecological cases now under treatment, and in every case the result has been that satisfactory information was readily obtained. This is a book of great value and will, we think, be of practical importance to the general practitioner.

A MANUAL OF NORMAL HISTOLOGY AND ORGANOGRAPHY. By Charles Hill, Ph.D., M.D., Assistant Professor of Histology and Embryology, Northwestern University Medical School, Chicago. 12 mo. volume of 463 pages, with 312 illustrations. Philadelphia and London: W. B. Saunders Company. 1906. Flexible leather, \$2.00 net. Canadian agents, J. A. Carveth & Co., Toronto.

This excellent little volume is intended to be a laboratory guide in histology, and is admirably adapted for the purpose. The chapter on the teeth is especially good and full of points which should be familiar to every medical student. The flexible cover makes it practical in the class-room.

We have received a handsome illustrated programme of European travel. Free copies will be sent on application to the Rev. Dr. Withrow, Toronto.

Selections.

SURGICAL HINTS.

Benign growths are so infrequent in children that any existing tumor is very likely to be malignant, and especially of a sarcomatous character.

Nasal catarrhs in children rarely affect the accessory cavities, although in infants the inflammation frequently extends to the eustachian tubes.

Frequent bathing of the penis in hot water greatly aids the use of injections in the treatment of acute gonorrhœa, and also materially promotes the comfort of the patient.

Pain during and after defecation in children may be due to anal fissure. In the case of older children the pain may lead them to avoid having a stool, and thus give rise to obstinate constipation.

Two of the most characteristic symptoms of pyloric stenosis in children are vomiting immediately or shortly after feeding and obstinate constipation. The feces also differ from the normal stools of infants in being dry, dark colored, and sometimes consisting of firm pellets.

Some cases of tuberculous of the kidneys are attended with so marked irritation of the bladder as to greatly obscure the diagnosis. Under these circumstances the case may be treated for a time as cystitis. In renal tuberculosis the urine, however, is generally acid, contains only small amounts of pus, and microscopic examination often reveals tubercle bacilli.—*International Journal of Surgery.*

Superstition in Teratology.

The belief in maternal impressions affecting the fetus is vigorously attacked by E. T. Shelly, Atkinson, Kan. (*Journal A.M.A.*, January 26th). While the ancient notions regarding monstrous births, which he mentions have been given up by modern authorities, he quotes from a number of recent textbooks showing that the belief in maternal impressions is by no means entirely abandoned. It has, however, he says, only one argument in its support, that is, that of *post hoc ergo propter hoc*. Against this we have the scientific fact that the relation of the fetus to the mother is, not one of continuity, but simply

of contiguity, the mother being the host and nourisher of the developing child. The physiologic relationship between the mother and embryo is so slight that but for the practical difficulties involved the impregnated human ovum might be transferred from one womb to another without interrupting its development, as has actually been done in some of the lower animals. Even the blood of the mother can only reach the child by osmosis through a membranous barrier, and there is no direct nervous communication whatever. The unfortunate structural aberrations originate very early in development and often before a woman is aware of her condition, and practically always before the maternal impression, to which the anomaly is ascribed, takes place. The great objection to the superstition, however, is the baleful effect on the expectant mother, to say nothing of the bad effect it has on the study of teratology, cases which should receive careful scientific study being relegated to idle speculation on maternal impressions and fancied resemblances.

Detection of Semen.

Galto (*Rif. Med.*, November 3rd, 1906) has carried out a series of experiments in the detection of semen and seminal stains by the method introduced by Barterio. This depends on the fact that when a saturated solution of picric acid is mixed with semen (whether fresh, or dried, or in solution) and then examined under the microscope, certain crystals can be seen. These crystals are very slender, and have an average size of 10 to 15 μ ; they present themselves as rhomboid needles, with obtuse angles, often crossed longitudinally by a refragent line. They may appear as round ovoid corpuscles when the angles have been much rounded off. The author has tried many other fluids besides human semen (for example, saliva, urine, blood, pus, milk, and many others), and the results were always negative whilst with semen (even in stains 22 years old) the characteristic crystals were always present. Semen from the horse, rabbit, dog, and ox, did not give the reaction, nor could it be obtained from fluid taken from the seminal vesicles, epididymis, testes, or prostate. The exact method or substance from which the crystals are produced is uncertain; the author suggests that in the ejaculation of semen some process not altogether unlike that of the formation of fibrin in the blood, may occur, for apparently the crystals are not present when testicular fluid is mixed with the

picric acid. It has been suggested that the substance may be of the nature of a protamin, but there are some objections to this.—*British Medical Journal*, Feb. 23rd, 1907.

Tattoo Marks.

Variot, of Paris, proceeds as follows: "Apply under anti-septic precautions a concentrated solution of tannin to the skin and work it in as in tattoo operation. Then rub skin with pencil (or solution) of silver nitrate until the tattoo marks stand out as black points on the silver tannate. Excessive fluid should be removed; the surface turns black and moderate inflammation follows. In fourteen days the eschar drops off, leaving a red superficial cicatrix which fades in seven or eight weeks." This plan is safe and sure—but painful and tedious. Ordinary slight tattoo marks (powder marks, etc.) may often be removed by pricking in peroxide of hydrogen. Another plan is to tattoo well over mark with needles dipped in a solution of chloride of zinc thirty parts, distilled water forty parts. Eschar drops in two weeks. Then dress area with simple cerate. The fact that the insoluble substances which are used in tattooing become encapsulated explains the difficulty experienced in their removal. Under the microscope excised portions of tattooed tissue show large particles of pigment situated part in the corium, but more generally in the subcutaneous connective tissue itself. In the method by electrolysis the needle is attached to the negative pole of a battery with a current of from two to ten milliamperes and inserted at various points about the periphery of stained area till reaction is marked enough to insure destruction of involved tissue. The dry superficial eschar falls in a few days and the process may be again employed over the adjacent skin.—*The American Journal of Clinical Medicine*.

Importance of Abstinence from Alcohol in Treatment of Cardiovascular Affections.

Galli comments on the wide difference in the views entertained by physicians in regard to the use of alcohol in treatment. The sudden suppression of alcohol, in persons addicted to its use, in the course of pneumonia may entail serious symptoms. The metabolism is exaggerated in this disease, and the excessive drain on the albumin and fats cannot be met by rational feeding, so here alcohol answers a purpose. With affections of the heart and vessels the conditions are entirely

different. Patients with failing compensation, edema and pronounced arrhythmia, habituated to the use of alcohol, can drop it suddenly and completely and benefit enormously thereby. His experience with 60 cases has been decidedly favorable to the absolute suppression of alcohol in case of any tendency to cardiac incompetency, even for hard drinkers, and Hjernung says the same from an experience with 1,450 cases. Galli comments on the idea that alcohol gives strength, citing researches which prove that it is detrimental to literary work and that soldiers and others taking alcohol, even in small amounts, feel fatigue more readily. Galli's own special research at Baccelli's clinic has demonstrated that alcohol has a tendency to induce dilatation of the heart while lowering the blood pressure. This is noticeable even in healthy persons. Roentgen examination by the orthodiagraphic method shows that the diameter of the heart may increase by 2 cm. in the course of a few hours, even when the patient is in complete repose. The sphygmomanometer and tonometer show that during the first 10 minutes the blood pressure rises, but then it falls, the difference in the pressure reaching 30 mm. at times. It is this first rise in the blood pressure which has been the cause of the general and mistaken impression in regard to the strengthening action of alcohol, and has led to the abuse of small doses of alcohol in physical and nervous exhaustion or depression from any cause. This abuse forms a grave vicious circle, as larger and larger doses are required each time to produce the desired effect. Even when a stimulant is really needed the physician should not use alcohol, but some other tonic or some external manipulation which would answer the same purpose. If physicians would do this, they would aid greatly in abolishing the popular prejudice in regard to the tonic action of alcohol and further the solution of the great and serious problem of alcoholism. The need of a stimulant is not so frequent as many suppose. In persons addicted to the use of alcohol the supposed need is merely the effect of the depression resulting from the preceding dose. Suppression of alcohol raises the resisting powers so that operations can frequently be undertaken which had little prospect of success before. Even in elderly persons with heart affections, Galli has been able to withdraw as much as 2,400 gm. of effusion from the pleura and then have the patient stand for orthodiagnostic examination, without any modification in the pulse or respiration or tendency to faint. In cardiovascular affections, the preceding use of alco-

hol may have been the principal or at least an adjuvant factor. He ascribes the increasing number of cases of heart weakness and heart failure to the increasing use of alcohol. Patients on the road to recovery from pneumonia or the like succumb suddenly to heart failure, as the heart muscle has been weakened by the use of alcohol. He urges physicians to study the effects of what he calls "small alcoholism" in their hospital patients, and to separate them into two groups, those treated with and without alcohol, to study its pathologic action on a large scale.—*Riforma Medica (Naples) and J.A.M.A.*

Gastric Hyperacidity and Gastric Symptoms.

The writer, with a view to confirming Stockton's theory that the symptoms credited to gastric hyperacidity are due mainly to a hyperesthesia of the gastric mucosa, and to ascertain what other factor might also be effective, has studied thirty cases under his observation. In about one-half of his cases the cause of the irritation and pain lay in the existence of decided gastric motor insufficiency or of hypersecretion. In fourteen, however, no cause could be demonstrated for the hyperesthesia, but in nearly all of these the gastric symptoms were directly connected with overfatigue or worry, or were part of a general nervous irritability. All the patients were benefited and ultimately cured by treatment directed to the nervous condition. This, with the fact that the symptoms do not appear to depend necessarily on the amount of acidity and may be absent when it exists to a very high degree, seems to indicate that in these cases it was the local manifestation of a general state of nervous irritability. This was the view taken by Kaufmann, Stockton and Musser, each of whom have reported similar cases. The practical bearings of this on the treatment are obvious, as that for the neurosis must differ from that of cases due to ulcer, retention, or hypersecretion. Steele finds a liberal mixed diet non-irritating to the sensitive mucosa, and the use of nerve sedatives, together with agents to relieve acidity, most useful. His experience also agrees with that of Musser as to the value of nux vomica, in doses slowly ascending to the physiologic limit, in the treatment of these cases.—*J. D. Steele, Journal of the American Medical Association.—Medicine.*

The next Congress of American Physicians and Surgeons will be held at Washington, May 7th, 8th and 9th.

Miscellaneous.

Medical Inspection of School Children.

In a letter published in the *British Medical Journal*, Dr. Helen MacMurehy, of Toronto, speaks as follows:

"I beg to thank you for your courteous reference to two points mentioned by me in a paper on the medical inspection of children attending elementary schools. These are the only schools attended by many of the children of the empire, and it seems as if school were the only place to teach many of these citizens of to-morrow certain facts. How many young mothers know that the chances of life are 15 to 1 in favor of the baby nursed by its mother, as compared with the baby not nursed by its mother? How many people have a saving sense of the fact that a baby's chance of life depends directly on warmth, cleanliness, and good air to breathe? How many people really know when it is safe to give a baby solid food, or fruit? These things should be part of "the foundation of education," and a girl of 12 years old had far better learn these things, and have the beginnings of a health conscience, than be taught certain geographical and mathematical facts.

"Last year, travelling from Kingston to Toronto, I had as fellow passengers a mother and her little daughter, 7 years old. The little girl had a doll, and the doll was provided with a glass feeding-bottle, with rubber mouthpiece and all, quite complete! I think the manufacturer of dolls' feeding-bottles is 'an enemy to the republic.' That was a bad object-lesson for the little girl, and it would have been well to have it corrected when she went to school.

"In regard to the second point, 'the man in the street' has not time to learn bacteriology; but he has time to learn that when a man gets typhoid fever the cause was in the water or in the milk or other food that he put into his own mouth himself a short time before he was taken ill. When he once has mastered this fact he will probably be as careful as are the Japanese soldiers, or he will insist on having his supplies of these necessaries of life above suspicion. He should know that there is such a cause for every case of typhoid, and it does not need a Sherlock Holmes to find it out.

"Not long ago I sat at dinner beside an eminent Canadian lawyer. He turned the conversation on typhoid fever. 'The real cause is bad drains, isn't it?' he said, vaguely. I thought it was my duty to tell him that typhoid was caused by a certain-germ, and unless that germ was in his water or in his food or on his fingers he would not likely get typhoid fever from drains."

TO THE EDITOR:

I take the liberty of sending you a statement of the requirements for admission to the Medical Department of the University of Pennsylvania, which have recently been adopted by the Board of Trustees.

According to the plan finally adopted, the requirements will be increased gradually, beginning with the annual session in September, 1908, and reach the maximum, September, 1910. The present requirements cover four years graded course in a High School or its equivalent. The essential points in the new requirements are as follows:

I. For the session 1908-1909, in addition to the present requirements, either one of two foreign languages, French or German; (2) Physics; (3) Inorganic Chemistry, including qualitative analysis; (4) General Biology or General Zoology.

II. For the session 1909-1910, in addition to the requirements of 1907-8, the candidate must have completed successfully work equivalent to that prescribed for the Freshman Class in colleges recognized by this University.

III. For the session 1910-1911, in addition to the requirements of 1907-1908, candidates must have completed successfully work equivalent to that prescribed for the Freshman and Sophomore Classes.

IV. Candidates who have successfully completed at least three years of an accepted College Course, may be admitted with conditions in Chemistry, Physics and General Biology or Zoology.

The maximum requirement is two years of collegiate training, including Biology, Chemistry and Physics. The two additional years of Collegiate training are regarded as an adequate preparation for entrance into a professional school. The importance of the candidate having had instruction in subjects leading to the study of Medicine is so generally recognized that Biology, Chemistry and Physics have been added to the requirements. This combination of special and general training is without doubt a much more logical requirement than a Collegiate degree which does not imply any special preparation for medical studies.

Yours truly,

CHARLES H. FRAZIER.

The next meeting of the American Medical Association will be held at Atlantic City, June 4th to 7th.