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MOUTH-BREATHING.*

BY JOHN HUNTER, M.B., TORONTO.

ANY discussion of this subject involves some consideration of both the normal and abnormal conditions of the respiratory tract. The supply of air provided for animate life is practically unlimited. In the human race the respiratory passages under normal conditions are quite capable of conveying to and fro an adequate supply of air for the needs of the body. The quantity, the character, and the preparation of the air required in respiration are of even more vital importance than are the same factors in the food supply. A man may live for a few weeks without food, for several days without drink, but only for a few minutes without air. A supply of nutriment is called for three or four times in twenty-four hours, but a fresh supply of air twenty to thirty thousand times.

The respiratory tract consists of the two nasal chambers, of the nasal and oro-pharynx, of the larynx, trachea, bronchial tubes and air cells. The functions of this tract are varied and complex. Provision has to be made, not only for the passage of an adequate supply of air, but the air itself must be more or less radically changed before reaching its destination. The air must be purified, warmed and moistened. The projection of hairs—known as vibrissæ—into the vestibule, and the moist surface of the wide expanse of mucous membrane covering the turbinates and walls of the nasal chambers, arrest most of the foreign bodies in the air, whilst the two or three quarts of warm liquid serum and mucus secreted in the twenty-four hours warm and moisten the air. The accessory cavities—maxillary, frontal, and sphenoidal—act as reservoirs for maintaining a supplementary supply of air.

* Read at meeting of the Ontario Medical Association, Hamilton, Ont., May, 1908.

In about ten per cent. of school children there is more or less obstruction found in the nares and pharynx. When this obstruction is of a permanent character, e.g., too narrow nasal chambers, septal deflections, spurs or morbid growths, hypertrophied turbinates or tonsils, adenoids—an auxiliary respiratory route has to be provided, hence mouth-breathing. Even under normal conditions, the temptation to breathe through the mouth is a very insidious one. Watch a crowd hurrying past on a frosty morning, and notice the number of mouth-breathers. Most of these are quite unconscious of the act, and could stop doing it without inconvenience.

However the habit may have been acquired, the effects are most decidedly prejudicial to health. The earlier in life the practice is established, the more pernicious the consequences. In infancy and childhood, developmental changes take place so rapidly that any force exerting an abnormal influence readily causes deformity. If one nostril of a young animal—kitten or guinea pig—be occluded, well-marked deformities follow. Under normal conditions the jaws are kept in close apposition by the action of the muscles of mastication. This pressure, during the period of development, helps to spread the alveolar processes laterally, giving the jaw a semi-circular form, and thereby providing space for the normal dental alignment of each set of teeth. When the mouth is kept open, as in mouth-breathing, all counter-pressure from the lower jaw is removed, and the following morbid conditions are produced:

(1) The alveolar process of the upper jaw grows downward; (2) the tension of the muscles—which can be readily demonstrated by placing a finger between the upper lip and the jaw, and then opening the mouth—forces the posterior extremities of the upper jaw inward, giving to it an angular, instead of a semi-circular form; (3) this deformity crowds the upper incisor teeth forward, and causes a disfiguring dental alignment. In normal respiration, with the mouth closed, there is a small space between the dorsum of the tongue and the under surface of the palate. The warm air in this space exercises less pressure on the palate than the cold, heavier air in the nares. The negative pressure below the palate, together with the spreading out of the alveolar processes, during the period of development, gives to the palate its normal dome-like shape. In mouth-breathing the tongue falls to the bottom of the oral cavity, thus producing a large space for the reception of air that is colder and denser than that in the nares, and thus causing a positive pressure upwards on the palate. This force, together with the approximation of the extremities of the alveolar process, produces the high-arched palate so common in mouth-breathing. The so-called pigeon or chicken-breast, and

impaired hearing, are morbid conditions very frequently associated with this habit.

The changes produced by mouth-breathing greatly mar both the symmetry of the face and the expression of the features. The following characteristics are very much "in evidence": Drooping lower jaw, open mouth, upper lip retracted, projecting irregular incisor teeth, with cavities due to caries; poorly developed, inactive nostrils, lustreless eyes, partial ptosis, obliteration of the folds that give expression to the face, thus producing the more or less stupid, vacant, idiotic appearance so commonly seen during childhood and adolescence.

Were the pernicious effects of mouth-breathing confined to physical deformities, we would be fully warranted in seeking its prevention, but the evils are not thus limited. This habit can produce disease as well as deformity. The functions of the mouth are entirely different from those of the respiratory tract. The pint or two of saliva is all required for mastication and digestion. When this fluid is exhausted by the air, as it passes through the mouth, both of these processes are injuriously affected and the nutrition of the body impaired. This malnutrition gives rise to anemia, lassitude, flabby tissues, mental irritability and depression. The red corpuscles may fall from 5,000,000 to 1,500,000, and the hemoglobin be reduced fifty per cent. The resistance to pathogenic micro-organisms is very much lowered, hence the greater liability, in mouth-breathers, to contagious and infectious diseases, and the higher mortality from these.

The extremes in temperature between indoor and outdoor air are very imperfectly modified in mouth-breathing. The large volume of cold air that comes in direct contact with the mucous membrane of the mouth, pharynx, larynx, trachea, bronchial tubes and air-cells produces more or less shock. This affects the vasomotor system, in first producing pallor of the tissue, and secondly, hyperemia through the reaction. These sudden changes soon produce morbid conditions in the exposed mucous membrane, and in the serous and glandular structures. The mucous membrane becomes hypertrophied, and the secretions vitiated in character.

The morbid changes that mouth-breathing produces in the pharyngeal end of the eustachian tube interfere very seriously with the ventilation of the middle ear tract, hence the very intimate association found to exist between mouth-breathing and the suppurative processes, so frequently found in the tympanic cavity and in the mastoid cells.

The tonsils are peculiarly exposed to infection in mouth-breathing, hence the great frequency with which the lymphatic glands in the neck become involved.

The pitch, tone and other characters of the voice are seriously impaired by this habit.

If mouth-breathing can retard physical development, produce deformity, increase vulnerability to disease, and mar personal beauty, it can also produce equally great perturbations in the mental and moral conditions. There is a very intimate connection between the vascular and lymphatic systems of the brain, and the upper portion of the respiratory tract. The effects of strong mental impressions and emotions are reflected in the pallor or turgescence of the mucous membrane of the respiratory tract, and in the diminished or increased secretion of the serous and mucous glands. The psychic functions may be equally perturbed by morbid conditions in the naso-pharynx. Children and youths who were nervous, irritable, quarrelsome, mischievous, untruthful, dishonest, disobedient, indolent, ignorant, immoral, in brief, in Sunday School parlance, "possessed," when the respiratory tract was obstructed, have evinced, after normal conditions were restored by an operation, a complete change in mental and moral character, the malevolent characteristics giving way to the Christian graces. A stupid, backward, incorrigible boy may, by the removal of adenoids, enlarged tonsils or other obstruction, be transformed into a bright, intelligent, exemplary student, who, in due time, becomes the consecrated minister or the self-sacrificing medical missionary.

TREATMENT.

If medical science has one mission greater than any of the others, it must surely be the prevention of disease and of physical disability. If the medical profession has much to its credit, there is also much that can be justly charged against it. How often does the physician, who is practising in the country, after he is through with his professional call to the sick member of the family, go out with the farmer to inspect some of the prize animals amongst the flocks and herds—in the city he goes to inspect an auto, or perchance a thoroughbred pup—but in either case, how seldom does he make it his duty to inspect the physical condition of the children in the home? There are hundreds, if not thousands, of men and women in Ontario to-day who are more or less handicapped for life through the ignorance, indifference, or gross carelessness of parents. In many of these cases, we, as physicians, must frankly admit that we had many opportunities of educating these parents and helping their children, that we failed to avail ourselves of. Many a child is punished for delinquencies, when he should receive sympathy, whilst the father, and oftentimes the family physician, too, should receive the horsewhip.

The prevention of faulty habits, physical, mental and moral.

should be the work of both parents and physicians in dealing with children. The family physician should consider it to be a sacred duty to educate parents in the imperative need of normal respiration. Were parents properly informed of the pernicious influences of mouth-breathing, few, who have any common sense at all, would refuse to have enlarged tonsils or adenoids removed. When an efficient medical inspection of schools is carried out, most cases of mouth-breathing will doubtless receive proper treatment.

The attention of the parents should be especially drawn to the character of breathing when the child is asleep. The obstruction may not be sufficient to overcome the conscious effort to breathe through the nose, but quite enough to cause mouth-breathing when the child is asleep. The close association of mouth-breathing with middle ear and mastoid trouble should put parents and physicians on their guard when the slightest symptoms of ear trouble develop.

Treatment naturally divides into medical and surgical. The former consists in keeping the respiratory tract as free as possible. Children should be taught how to "blow the nose." This should always be done gently. The nostrils should not be held by fingers or handkerchief, or any violent expulsive effort used, lest infectious material be forced into the middle ear. In rhinitis, the excessive secretion should be washed away with a mild alkaline solution. The inflamed membrane, after being cleansed, can be protected by an oily solution composed of menthol and albolene. The general health should be carefully attended to; our children get altogether too much candy and food-stuffs containing a large amount of sugar. Children should occupy well-ventilated bedrooms, and should be taught to go to bed early.

The surgical treatment can be briefly summed up by saying that all obstructions that can be removed should be removed as effectively as possible.

To sum up briefly, let the family physician examine every member of the family, and whenever he finds morbid conditions that interfere with the ingress and egress of a normal supply of air, insist on the importance of proper treatment being carried out. It is not enough to dismiss a mouth-breather with the removal of adenoids or enlarged tonsils. The patient should be kept under observation for months until the habit of normal breathing be established. Many devices may be resorted to. Ask the child to walk or run a certain distance with the mouth closed, or to breathe through the nose for a specified time. Patience and discipline must be exercised. Two mottoes should be hung up in the home. One for the parents, "Keep your eyes open"; one for the children, "Keep your mouth shut."

BIER'S HYPEREMIC TREATMENT, WITH DEMONSTRATION OF TECHNIQUE.*

BY FREDERICK WINNETT, M.D., TORONTO.

CZERNY, of Heidelberg, in presenting Bier with the Kussmaul Prize, in August last, ranked the hyperemic treatment with Lister's discovery of antiseptics.

Although incredulous at first, surgeons have now adopted the method, and apply it in most hospitals abroad.

Willy Meyer says: "Experience has shown that this conservative treatment is by far the best means at our disposal for tuberculous joints and bones. I consider it the duty of every medical man to study, and thoroughly to master, the principle of Bier's Hyperemic Treatment, in order to bestow on his patients the great and manifold benefits of this truly wonderful discovery."

Rokitansky observed that, in hypertrophy of the heart or distortions of the spine, which produced hyperemia, or brown induration of the lungs, pulmonary tuberculosis is extinct, or does not occur. On the other hand, it had been noticed by Farre, Travers and others that, in pulmonary stenosis, causing anemia of the lungs, phthisis was usually found present at post-mortem.

From these observations, Bier was led to try the effect of an increased supply of blood to all tubercular foci.

In all efforts of the body to resist disease or injury, hyperemia is present. There are two forms of hyperemia—active, or arterial, and passive, or venous, hyperemia.

In treating acute surgical infections, Bier says we are to break with all our former iron-clad rules regarding the treatment of these affections, and in place of opposing its phenomena by rest, elevation, pressure, cold, incisions and drainage, he tells us they are the wise provisions of nature, to be encouraged and increased.

Meyer says he has demonstrated, beyond the shadow of a doubt, that his method is far superior to those formerly in vogue.

Notzel demonstrated the beneficial effects of hyperemia. He inoculated 67 rabbits with fatal doses of anthrax, and succeeded in keeping alive 51 by hyperemia. A few weeks later these animals succumbed to the same doses when the hyperemia was not used.

Various theories are advanced to explain this fact, but Bier prefers to generalize and believe hyperemia merely assists the natural inflammatory action when it has not been sufficient. It causes rapid cicatrization of granulation tissue and encapsulates bacteria.

* Read at the meeting of the Association of Physicians and Surgeons, Toronto.

Hyperemia has a solvent action on granulation and inflammatory material.

Water and all soluble substances are absorbed by blood vessels, while bodily elements, as fat, are absorbed by the lymph vessels.

Bone and cover epithelium are increased by hyperemia, and the passive form is preferable. Organs with active functions require other stimuli in addition, and as work is done by oxidation, arterial blood is required. Among many examples is one recorded by Helfreih, who, in a girl of 16, with an increase of 3 cm. in her leg from a chronic ulcer, by the aid of hyperemia, caused the other to elongate 2 cm.

Bier says: "As for myself, I have not the least doubt that arterial and venous hyperemia relieve pain; that both are solvents; that arterial hyperemia absorbs, and that passive cures infectious diseases, for I have seen this with my own eyes innumerable times."

To produce active, or arterial, hyperemia, Bier advises hot-air apparatus, at a temperature of 212 to 240 degrees F., one or two hours daily.

If applied to an extremity, the body temperature rises 2 degrees, and subsides in 1 1-2 hours.

Watery and bloody effusions are readily absorbed, and without immobilizing.

The treatment is advised in all forms of chronic stiff joints, but passive hyperemia is also effectual in these cases.

In eight rebellious cases of trigeminal neuralgia, five were cured with the hot air.

I have recently treated a gentleman for a tender stiff ankle, following a compound fracture of the leg one year previously. It and the foot were greatly swollen, tender, and almost immovable. Under chloroform, I was unable to move it. One hour daily at 240 degrees produced an astonishing improvement. In two days the weight could be borne without pain, and in ten days it had almost entirely regained its normal size and freedom of movement. After each application of heat and passive movement, the various joints were felt to move, and a grating noise was distinctly audible.

The hot-air apparatus gives instant relief in sciatica, lumbago and pleurisy.

A personal experience may be interesting. A sharp attack of pleurisy rendered me almost breathless, and the hot-water bag gave no relief. Hot air at 240 degrees gave complete relief in 10 or 15 minutes, and there was no return of pain.

Passive hyperemia, by means of a constricting bandage, was first used by Ambrose Paré to promote the formation of callus.

In 1886, Thomas reported 14 cases thus treated for retarded callous formation.

The stasis bandage is applied for one-half hour daily, being careful not to produce pain, but rather to relieve it; the temperature of the part should not be reduced nor the pulse affected. A bluish red should be produced, while vermilion spots signify too tight a bandage. When the time of application is limited to an hour or two the hyperemia should be intense.

For affections of the elbow, wrist or hand, the stasis bandage is usually applied to the arm. For the shoulder joint, a specially applied one is used high up. For affections of the knee, ankle and foot, one is applied to the thigh. It is not applicable to the hip.

Suction apparatus are used for the body, and are becoming popular in place of the stasis bandage.

If an abscess is present, the pus is evacuated by a half-inch incision. In one to three days afterwards stasis hyperemia is instituted.

Pain is quickly relieved, and active and passive movements are encouraged as soon as they are free from pain.

Bier stated that a stiff joint, following the healing of tuberculosis, was not a good result.

It was possible to restore the function of a joint in which the disease had progressed so far as to cause changes in the bone and cartilage, with the formation of multiple fistulae.

During the treatment, the swelling subsided, and the large fungous masses were transformed into hard connective tissue, which, by further hyperemia treatment, were absorbed.

Abscesses were opened without any fear of a mixed infection, if the cupping glasses were properly applied.

Treatments last from nine to twelve months. Bier's statistics of cured tuberculosis are, for wrist, 88 per cent.; elbow, 72.7 per cent., and of the foot, 61.5 per cent.

Each of these cases remained well and obtained a useful movable joint.

Willy Meyer records a typical case treated with the stasis bandage. A man, 45 years of age, came to his clinic with an advanced tuberculosis of the right elbow joint. On account of severe pain, he supported his arm with the other hand. It was flexed to an angle of 110 degrees. His friends were instructed how to apply the bandage, and no other treatment was used. Two weeks later he again entered the clinic, this time without supporting the hand. He had lately passed comfortable nights, and the pain had much diminished. In nine months the patient had a useful arm, and returned to his work as fireman.

Gonorrhoeal arthritis is at once relieved of pain, and motion

becomes possible. The stasis bandage should be applied eleven hours out of the twelve.

Bier says: "Stasis hyperemia has never failed me in the graver forms of gonorrhoeal arthritis, and the successes, as regards rapidity of cure and the function of the extremities, are brilliant, as compared with anything I have ever seen before."

In thirteen cases of facial erysipelas, the bandage was applied about the neck. Duration of disease four to nine days.

In acute surgical infections, the treatment is of still greater importance, and is limited only by the ingenuity of the surgeon. Meyer records the following case:

A young physician, 26 years of age, while wrestling, sustained a compound dislocation of the interphalangeal joint of his right thumb. Doctors are careless. Reduction is done on the spot, and a wet handkerchief wound around the finger. Shortly afterward, without further disinfection, a sterile dressing is applied. Six days later he comes under my care with an acute periostitis of both phalanges and a suppurating joint. The thumb is very much swollen. With our former methods of treatment, I should have rather despaired of saving the finger and joint. As it was, I made a short incision on the opposite side of the joint, and one short cut down to each phalanx, dividing the periosteum, and avoiding the tendons. Immediately, on the operating table, the elastic bandage is applied, and worn for 22 hours out of the 24, interrupting one hour at the end of every half day. The pain subsided within 24 hours. The temperature, which before had been 102, was normal on the fifth day, and the patient discharged on the twelfth with the finger much improved. The time of wearing the bandage was gradually reduced. It was applied in all for three weeks. In the fifth week a small sequestrum formed. To-day the finger is healed and motion of the interphalangeal joint is unimpaired. No other treatment that I am acquainted with would, I think, have produced an equally satisfactory result.

The bandage about the neck for eleven hours, twice daily, has been used successfully in various affections.

A parulis fistula of upper eye-tooth, with abscess formation over the respective nasal bone, in a young lady; cut in face avoided.

Willy Meyer treated a boy of 16, with fracture of the base of the skull, starting six hours after the accident as a prophylactic. Convalescence was astonishingly rapid. Lymphadenitis, parotitis, acute mastoiditis, frontal sinus and antral affections have been treated successfully.

Vorschuetz, of Cologne, reports six cases of tubercular meningitis, of which five were cured. Repeated lumbar puncture was also used.

In a case of periosteal whitlow, it was interesting to find the patient allowed the hand to hang over the side of the bed, and said it relieved the pain. A short incision allowed the pus to escape. A wet boracic dressing was applied, and a stasis bandage about the finger for eleven hours twice daily. In four days he was discharged convalescent.

A case of unguinal whitlow was incised, and the bandage applied about the finger. At first it was too tight and caused pain. Before leaving the surgery she said the pain had ceased and that she could move and use it. It was allowed to hang down. Next day she said she rested well, without pain, but shortly after the bandage was removed pain returned and kept her awake till it was re-applied. In three days she was discharged convalescent.

THE PLASMA SOLUTION IN AFFECTIONS OF THE EYE, NOSE AND THROAT.

BY MURRAY M'FARLANE, M.D., TORONTO.

IN addition to the many surgical and medical measures directed to the treatment of diseases of the eye, nose and throat, we are frequently confronted by the necessity of cleansing or irrigating these organs, and the question arising is "How may this be accomplished with the minimum amount of irritation to the diseased structures?"

Fifteen years since, becoming dissatisfied with the existing formulæ commonly employed as sprays or douches in nose and throat work, I considered what would best meet the existing indications for a non-irritating solution, which must be of an alkaline reaction and which could be used for an indefinite period, if necessary, as a means of removing crusts or secretion from these organs and their accessory cavities.

The mucous membrane of the nose, particularly, is very intolerant of even the slightest irritant, and I have found the combination of crude alkalies and antiseptics in common use very unsatisfactory and meeting no scientific indication, being in fact, a survival of the days when so-called "Catarrh" was treated by germicides of various natures. The solutions were not of sufficient strength to destroy the micro-organisms in any case, but were quite able to cause irritation and engorgement of the tissues if used for any length of time. Then we are also aware that when once a disease due to these organisms, attacks a mucous membrane and becomes manifest by increased secretion and swelling of the parts, as seen in acute rhinitis and influenzal attacks, they have penetrated to the basement membrane and live out their life history undisturbed by surface applications which cannot penetrate and destroy them without injury to the tissues. I am here speaking of solutions containing antiseptics used in the form and quantity of sprays and douches, not of local treatment of ulcers, etc., where drugs of sufficient strength can be employed without danger and under control of the surgeon. In ordinary chronic simple rhinitis very few organisms are to be found in the nasal cavities. The researches of St. Clair Thomson and others clearly establish this fact so well recognized at the present time. In acute conditions of a catarrhal nature sprays are, in the majority of cases, contraindicated, owing to the possible danger of causing extension of the disease to the eustachian tube and thence to the middle ear and mastoid.

After many trials of different salts, the alkalinity of the blood

plasma was considered to promise the best results, the blood being of such an alkalinity as kept the balance between exosmosis and endosmosis, and certainly was a typically non-irritating medium and incapable in a normal state of inducing any pathological cellular change.

Castaigne and Rothery (1) have demonstrated that a saline solution must be of a certain cryoscopic index, about 0.78C. If higher or lower it brings about histological changes in the tissues and they believe that under normal physiological condition the osmotic tension is maintained by the sodium chloride and other salts being in proper proportion in the blood plasma.

Achard and Paiseau (2) by intravenous injections of hypotonic and hypertonic saline injections .20 to 1.50C were able to set up epithelial changes in the kidney. Experiments by Roth-Schulz and deKarosy (3) are of interest as regards endosmosis and exosmosis. With blood upon one side of an animal membrane diffusion is much slower than when water is used, owing to the different diffusibility of some of the blood salts, the chlorides passing more readily than the others contained in the plasma.

All this shows us that any solution of the same cryoscopic index, the same osmotic index, having the same salines and the same specific gravity as the blood plasma, must of a necessity be the most scientifically adapted to the purpose of a cleansing spray, or where it is desirable to use a non-irritating injection into the tissues of the body.

Any solution stronger or weaker is capable of bringing about cellular change, and upsetting the normal osmotic balance so necessary to a healthy condition of the parts. In consideration of these facts, I had a tablet made by Parke, Davis & Co., containing the osmotically active salts of the blood which, added to 1,000 drops of water, made a solution of the same alkalinity, specific gravity and cryoscopic index as the plasma. For two years it was made up for my own use. Then, after sending samples to Europe and America, the firm got such encouraging reports that my permission was asked to place the tablets upon their public list. This was given and the Plasma Nasal tablet (Dr. Murray McFarlane) for use in the nose and throat may now be obtained from the above and several other firms of manufacturing chemists. They are year by year increasingly used in different parts of the world; and the writer has received many very gratifying reports from some of the most eminent men in the medical profession, telling of the satisfaction they had derived from their use in affections of the nose and throat especially; they finding it, as I have done, to furnish, where sprays are indicated, a cleansing medium which can be used for an indefinite period without the slightest irritation or engorgement of the tissues. The addition of 1/16 of a grain of menthol

to each tablet renders it very pleasant and aromatic, disguising the taste of the sodium chloride.

In diseases of the eye characterised by an increased secretion, the plasma solution has been found very suitable as a means of cleansing the cul-de-sac. It may be used instead of distilled water in collyria, containing remedies not incompatible with the sodium and potassium salts. It has also been used with good results either alone or containing cyanide of mercury, dionin and other drugs in subconjunctival injections.

Professor Darier, of Paris, in his "Ocular Therapeutics" (4) says: "Many liquids have recently been proposed for subconjunctival injection. A new physiological salt representing exactly the osmotically active salts contained in blood, has been used by Poehl apparently with excellent results." (It is described in *Merck's Annual*, March, 1900.) The same salts were introduced to the American profession in 1895 by the writer, 5 years prior to Poehl's investigations.

The solution can be used for irrigation purposes in any part of the body, and without the menthol has been of service instead of the Normal Saline, after general operations with shock, and per rectum, to relieve thirst where fluid cannot be taken into the stomach.

In conclusion, the writer would say that one tablet is to be added to four tablespoonfuls of lukewarm sterile water, or in proper proportion, if a less or greater quantity is desired, and used as a spray or irrigation whenever in the opinion of the surgeon such is desirable. For hypodermic or subconjunctival injection it is used without the menthol.

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4. *Ocular Therapeutics*, 1903, page 30.

Selected Articles.

STUDIES ON THE HYPNOTIC ACTION OF THE VALERIC ACID GROUP.

PROF. A. VAN DER EECKHOOT, of the Veterinary College in Brussels, reports a number of experiments made on animals, to determine the physiological action of "bromural." The report is from the Pharmacological Institute of the University of Heidelberg, and explains that quite recently monobrom-isovaleryl-urea has been synthesized by Dr. Saam, and introduced as an hypnotic under the name bromural $(\text{CH}_3)_2\text{CH}.\text{CHBr}.\text{CONH}.\text{CONH}_2$. It occurs in the form of white, almost tasteless, needle-like crystals, which are soluble in hot water, ether, alcohol, and alkalis, but with difficulty in cold water. Its melting-point lies at 146°C . Clinical tests showed that 0.3 to 0.6 grams will generally induce sleep in from five to twenty-five minutes. This sleep lasts from three to five hours, unless natural sleep supervenes or a second dose is given. The perfectly natural and after-effects have not been observed.

Before testing the drug clinically, its relative harmlessness was proven by experiments on animals. Deep hypnosis may here be induced without any deleterious action on circulation or respiration, so that the drug can be considered an efficient, non-toxic hypnotic.

Other similar compounds were also investigated. The isovaleryl-urea proved inactive. The bromine substitution product of ordinary valeryl-urea was also free from hypnotic effect, while that of methyl-ethyl-acetyl-urea showed about the same hypnotic action as bromural. Analogous amides of brom-isovaleric acid were also soporific but too toxic.

Experiments on frogs showed no signs of irritation. The depressive action affected first the cerebrum, then extended downward. The heart was influenced only with larger doses.

The action on rabbits was found to be about the same as on frogs. There was never irritation. Respiration was slowed early. The normal hypnotic dose for a rabbit is 0.2 to 0.3 grams per kilogram but the individual susceptibility varies. A dose of 1 gram per kilo is sometimes fatal. The animal will wake up, but refuses food and dies in several days. No lesions were found post-mortem.

Bromural was also demonstrated to have an hypnotic action on dogs. Therapeutic doses cause sleep without affecting respiration

or circulation; toxic doses give rise to a transient period of intoxication, with slowing of respiration. Nervous after-effects are observed only after toxic doses, and the stomach tolerates the drug well.

Conclusions.—Bromural acts promptly as hypnotic on frogs, rabbits, and dogs, and has no disagreeable by-effects in therapeutic doses. It shows an elective action on the cerebrum, and leaves the cord and medulla unaffected.

It is relatively harmless, and even large, toxic doses are seldom fatal, though they slow respiration considerably.

It seems to be free from cumulative action and does not irritate the stomach. While therapeutic doses hardly affect the respiration, the first toxic effect produced by somewhat larger doses is a slowing of respiration, with a diminution of the amount of inspired air. The blood-pressure remains normal at this stage. In this respect, the drug differs from all other haloid compounds of the fatty series (chloroform, chloral hydrate, etc.). With these, the disturbance of the vaso-motor centre is the most pronounced by-effect.—Archiv f. experiment. Pathol. u. Pharmakol., lvii, Nos. 5 and 6.

COMPARATIVE POTENCY OF HYOSCINE AND SCOPOLAMINE HYDROBROMIDE IN REFRACTION WORK; EVIDENCE AS TO UNMISTAKABLE NON-IDENTITY.

DR. WENDELL REBER, of Philadelphia, contributes an interesting article upon this subject in the *Journal of the American Medical Association* for April 25. His paper was read in the Section on Ophthalmology of the American Medical Association at its Atlantic City meeting in June, 1907. For some unexplainable reason this article, which bears so strongly upon the controversy concerning the alleged identity of hyoscinæ and scopolamine, has been withheld from publication for eleven months. This is of peculiar interest, inasmuch as the editor of the Association Journal, during this period, has been asserting and reasserting most vociferously through the columns of that journal that these two alkaloids are both chemically and pharmacodynamically identical. Dr. Reber's conclusions, which were based upon careful experimental work, made upon human beings, are diametrically opposed to the assertions of Dr. G. H. Simmons, Dr. H. C. Wood, Jr., and others in the *Journal of the American Medical Association* and its "anvil chorus."

Dr. Reber was led to these experiments by an experience reported in the *American Journal of Pharmacy* in 1889. At that time he found that when one drop of a 1/10-per cent. solution of

hyoscine hydrobromide was used in the right eye, and one drop of the same strength solution of the scopolamine salt in the left eye of a youth of 16 with normal eyes, the reaction of the ciliary muscle was decidedly different in the two eyes. This led him to the conclusion that there was a difference of action between the two alkaloids, in spite of their alleged identity.

Following up this earlier experiment, he says that "within two years three persons were found who were so doubtful about the acceptance of even a plus 0.25 D. sphere (under cycloplegia) as to fit them for these tests." These three persons were a 22 and 26-year-old female and a 20-year-old male. He accordingly made upon them the same experiments already recorded with the 16-year-old boy some years previously. In the right eye 1/10-per cent. solution of hyoscine hydrobromide (Merck) was inserted and in the left eye scopolamine hydrobromide (Merck) solution of the same strength, the solutions being especially prepared for experimental use by a reliable pharmacist. The utmost care was exercised in order to eliminate all possible sources of error. It was found that the average time of beginning action on the pupil was 10 minutes for both drugs and all the eyes. Full dilation of the pupil occurred in 30 minutes with the hyoscine in the two females and in 45 minutes with the male. (This difference was attributed to the more sensitive sympathetic nervous system in the females.) Under scopolamine full pupillary dilation occurred in 40 minutes in the females and in 60 minutes in the male. According to these findings, therefore, the average time required to produce full pupillary dilation under hyoscine was 35 minutes in the three cases, and under scopolamine 47 minutes.

The effect on the accommodation of each eye was also determined, and it was found that the average time for onset of full cycloplegia under hyoscine in four cases was 59 minutes, while the average time for onset of full cycloplegia under scopolamine was 92 minutes. So that, to quote Dr. Reber, "The relative pharmacodynamic power of hyoscine hydrobromide and scopolamine hydrobromide as used in ordinary office work may be said to be somewhere close to 59.92. Or to reduce it to the commoner form of statement, hyoscine in these test cases showed itself approximately 50 per cent. more potent than scopolamine in producing cycloplegia for refraction work," and he very pertinently adds, "So much for the academic phase of the matter which seems to be rather at variance with the claims which chemistry makes for these two drugs."

Dr. Reber follows with an interesting study of the chemistry of hyoscine and allied products derived from the Solonaceous plants. He shows that hyoscine hydrobromide and scopolamine hydrobromide were made official in the third edition of the German Pharmacopoeia (under the name of the latter), in which they were as-

served to be identical "through the influence of E. Schmidt," the authority most quoted by those asserting the absolute identity of these two alkaloids. Apparently this belief in their identity is a one-man dictum which has been passed from Schmidt to the German Pharmacopeia, and thence over to the makers of the U. S. Pharmacopeia.

To show that this difference in action between hyoscyne and scopolamine cannot be due to any difference in the purity of the two products, Dr. Reber quotes his correspondence with Merck & Company, to show that both the hyoscyne and scopolamine hydrobromide had a rotatory power of 20. In other words, they are chemically identical, of the same degree of purity, yet pharmacodynamically different.

An interesting fact brought out in a letter of Merck & Co. is the statement that there are on the market inferior qualities of scopolamine which test only 6 degrees, other products having been found as low as 2 degrees. This bears out the statements made by The Abbott Alkaloidal Company concerning the impurity of the commercial scopolamine upon the market.

Dr. Reber says: "This leaves the matter precisely where it was in the beginning, namely: That with two drugs, said to be absolutely identical as to clinical effect, pharmacodynamic power, molecular build and reaction with the polariscope, there should seem to be a more or less uniform difference in potency when tested by the delicate accommodation reaction."

He suggests also that there may be a pharmacodynamic difference between other substances which are known to be chemically identical, such for instance as caffeine and theine, cocaine and stovaine; the latter said to be chemical isomers, yet exhibiting wide differences in their action.

"In the last analysis," says Dr. Reber, "it is always the clinical phase of such studies that interests us most." With this we most emphatically agree, since in this important report the claims made by Abbott, verified by many practitioners, concerning the non-identity of the action of hyoscyne and scopolamine are upheld at every point. Dr. Reber shows that hyoscyne and scopolamine differ decidedly in their action upon the eye. If the slightest difference of action of these two substances is admitted the whole argument of the J. A. M. A. critics of Abbott must break down. Dr. Reber prefers the hyoscyne to scopolamine in his refraction work, just as many others prefer hyoscyne to scopolamine when the alkaloids are used for anesthetic or analgesic purposes.

The discussion of this article is interesting, since it bears out the contentions of Dr. Reber in most points. This discussion was taken part in by Dr. Albert E. Bulson, Jr., Fort Wayne, Ind., Dr. S. D. Risley, of Philadelphia, Dr. Chas. A. Oliver, of Philadelphia, Dr. G.

H. Price, of Nashville, Dr. Allen Greenwood, of Boston and Dr. S. L. Ziegler, of Philadelphia. Dr. Bulson, by the way, agreed with Dr. Reber that "hyoscine is more effective than scopolamine as a cycloplegic." This is interesting in light of the fact that Dr. Bulson is the editor of the *Indiana State Medical Journal* and has reprinted in part and expressed emphatic approval of the attacks upon the H. M. C. anesthetic, in which attacks the alleged identity of hyoscine and scopolamine is a most important part of the argument.

Some of those discussing the paper speak of the toxic action of hyoscine, but apparently none of them had made any effort to discriminate between hyoscine and scopolamine. Dr. Reber brought out the point that the worst case of toxemia he had ever seen had resulted from atropine (arrested secretion and excretion).

This paper is one of the most important contributions to the hyoscine-scopolamine controversy that has as yet appeared, and it, along with the facts it uncovers, should sink deep into the true heart of every fair-minded man—every real doctor.

ABSTRACTS.

Dionin in Affection of the Respiratory Organs.—The advantages of dionin, as previously discussed by Mayor and Hoff in connection with the affections of the respiratory organs, and especially in whooping-cough, have been emphatically confirmed by J. Winterberg's description of its therapeutic value. The author records cases of cough in which dionin adduced the desired results when all other remedies had proved unavailing. He emphasizes, moreover, the absence of unpleasant secondary effects, as well as the fact that dionin may frequently be taken daily for many weeks, without losing effect or inducing craving, which renders it unnecessary to increase the dose or to change the remedy. It is this property of the preparation which renders it so valuable in chronic affections of the bronchi; and, in addition, it exercises scarcely any influence upon the blood-pressure, and retards the respiration but slightly. It is accordingly one of the comparatively innocuous morphine derivatives, whereas morphine itself, and especially heroin, give rise to a considerable depression of the respiratory centre. This accords with the therapeutic observations of V. Vallerani, whose comparative experiments with dionin and codeine led him to formulate the following conclusions: Dionin can hardly be described as cumulative in its action, and loses but rarely its efficacy by long-continued use. At the same time it is a prompter sedative in cough than codeine. It is pref-

erable to the latter in that its prolonged use does not give rise to unpleasant secondary effects upon the organs of digestion, the heart and the nervous system. It surpasses codeine, moreover, as a hypnotic and analgetic in all painful forms of asthma and agrypnia. It is also a valuable aid in the treatment of the morphine habit. Deutsch combined in whooping-cough dionin with creosotal, and secured thereby very notable results. In numerous cases of laryngitis, tracheitis, and bronchitis of children he administered dionin in the following doses: At the end of the first year 1-6 grn., in the second year 1-2 grn., in the third and fourth years 1-2 to 2-3 grn., in the fifth to eighth year 5-6 grn. dionin per 3 1-3 oz. of aqua dest. (1 teaspoonful every three hours), or 1 1-2 grn. dionin per 3 1-3 oz. of syrugi simpl. (1-2 teaspoonful two to three times daily). He invariably found its use to be followed by a prompt alleviation of the cough and improved night rest. In conjunction with creosotal, it is prescribed thus:

Dionin	gr. $\frac{1}{2}$ to iss
Dissolve in	
Syrugi simpl.....	ʒi
Creosot. carbon.....	gr. xlv.
Ol. amygdal. dulc.....	gr. cl.
Gummi Arab. pulv.....	gr. lxxv.
Aq. dest	ʒiiss

Prepare as an emulsion. A teaspoonful to be taken several times daily.

—*E. Merck's Ann. Rpt., XIX., 1906.*

Hymenolepis Nana and Hymenolepis Diminuta.—Four additional cases of the occurrence of *Hymenolepis nana* to those already reported from the United States are published by W. H. Deaderick, Marianna, Ark. (*Journal A. M. A.*, December 22), and he describes the parasite and the method of its detection. It may require, he says, repeated doses of male fern, the only remedy of value, thoroughly to expel the worms, and they are often difficult of detection in the feces after expulsion. They resemble minute opalescent shreds of mucus and the greatest care is needed to avoid overlooking them. He examined for them in a large, flat baking pan, painted black, with perforations in one end so that the liquid feces could be retained or poured off without agitation. These cases were discovered during an investigation he was making as to the frequency of uncinariasis, and the finding of so many cases in a limited study leads him to think that the parasite may be of more common occurrence than has been generally supposed. He also reports a case of *Hymenolepis diminuta* in a child, the twelfth on record, discovered like the others while searching for the ova of uncinaria.

Clinical Reports, Etc.

TORONTO GENERAL HOSPITAL POST-GRADUATE CLINIC.

THE post-graduate clinic at the Toronto General Hospital on Saturday, April 18th, was conducted by Dr. Graham Chambers. He showed first a case of gout. There was great deformity, resembling arthritis deformans. Part of the deformity results from tophi, and part from thickening of the bone.

The second case was a woman, who complained of insects infesting the scalp. She dates the trouble from a day in which she had made a long wait in a dirty waiting-shed on a wharf. Although first attacking the whole body, she had, she said, been able to eradicate them from all parts but her scalp. Now, however, the insects come down on the body, bite, and then die. The reason she knows they are still present is that when she squeezes the small epidermal scales between her two thumb nails, she hears (or thinks she hears) a cracking noise. Dr. Chambers pointed out that the patient showed certain signs of degeneracy, and drew particular attention to the ridge running along the palate. The patient showed hallucination of ordinary sensation, illusions and delusions. The memory is good and the emotions normal. Her education was fair, the entrance examination having been passed. There was a defective heredity which, the speaker averred, had much to do with the causation.

Two cases of tic were then presented. The first was the ordinary type, of ten years' duration. Treatment: Iron and arsenic; also butyl chloral, gr. vii., with tr. gelsemium, minims x. per dose; the bowels being kept well opened by mistura alba. The patient shows a rather marked increase in spinal pressure—280 mm. instead of 150 mm., the normal.

The second case of tic was a patient who had had the Gasserian ganglia removed, but without cure. The probable reason for this is that other symptoms now show that he has locomotor ataxia—the Argyle Robertson pupil and Romberg's sign being present. The neuralgia is possibly only a symptom of the ataxia. If the cause is peripheral a severance of the nerve or obtunding locally by cocaine will relieve the condition. If the lesion is central, this will not occur.

Three hysterical cases were then shown. The first patient, aged 40, had suffered since she was 22. She had never bitten her tongue

in a fit, and does not know whether she is unconscious during one or not. An attack is brought on by any excitement, and usually by pressure on the big toe of her right foot. This was tried in the clinic, but did not cause any convulsion.

The second case was of three years' duration, having spent some time in the neurasthenic wards, with temporary recovery. A week since she returned to the general wards in a lethargic condition. She complained of great pain in the head and back, and showed much emotional disturbance. She has also relative anesthetic areas, is very suggestible, and craves for sympathy. These patients have defective will-power, show vasomotor disturbances and perversion of functions. Dr. Chambers seeks, in all these cases, to determine the psychological condition, and then tries to correct the deficiency. A great factor in the cure is suggestion, and that by discipline, particularly in young people. The performance of lumbar puncture to ascertain the spinal pressure has relieved the pains complained of in the back and head in two of these cases. A case of hysterical vomiting will be relieved by lavage of the stomach.

The patient requires to be re-educated. The holding-out of a prospect of cure, and the explanation of the condition to the patient, will be of benefit.

Another patient shown, a girl, had a contracted field of vision, paralyses and nearly all the stigmata of hysteria. Another patient had an hysterical shoulder, the pain in the joint being worse during the daytime. Under anesthesia, there were no indications of joint disease. Two of the cases exhibited showed the pathological palate. It must be remembered, however, that these palates may be due to adenoids.

In one of the leading medical centres in the United States, where psycho-therapy is much resorted to in these cases, a close analysis is made of the mental condition, the patient is taken into confidence, the condition explained, and their re-education undertaken.

A patient suffering from gastric ulcer was next presented. The pain complained of was seated some three inches higher than the usual spot—the end of the ensiform cartilage. After admission, there were two hemorrhages. Rectal nutrients were commenced about twelve hours after the bleeding. Twelve enemas a day are given—four nutrients, four salines and four cleansing. On the first day a cleansing, an hour after a nutrient, three hours after a saline. The rectum will stand this for about a week. In the patient shown it had been kept up eleven days. The nutrient enemas consist of yolk of eggs, milk, sugar, and frequently a little starch as an emollient. Glucose is absorbed very readily—about nine-tenths of the amount given. Of fats only about one-third

is absorbed, and of albumen about one-sixth. It is unwise to use too much proteid; the proteids are irritating. High nutrients are inadvisable, because they stimulate gastric secretion too much, something one must avoid. Peptones are very irritating. Pancreatin may be used.

After a week food may be given by stomach. In the case shown, gruels, made with water, were administered. Most men use milk.

The next case was that of a male patient, aged 55, with malignant disease of the stomach. A history of the use of alcohol in excess was given. This was accompanied by hyperchlorhydria and acid catarrh. Twelve years ago gastric hemorrhage ensued. This was frequently the previous history of these cases of gastric cancer. The growth was quite palpable. There was marked tenderness. The liver was somewhat enlarged, and jaundice was marked during the last two weeks, due probably to an enlarged lymph gland in the fissure of the liver. Hydrochloric acid (both free and combined) and lactic acid absent.

A man with rodent ulcer of the orbit was next shown. Dr. Chambers recalled several cases of this disease he had seen recently where no ulceration was present. He gave blackboard illustrations, showing the progress of rodent ulcers, calling particular attention to the edges, which should be scraped off before giving the X-ray treatment.

The next case was that of a young man with tubercular peritonitis, and with fluid in both pleural cavities. Calmette's reaction was positive. The temperature has been up to 104, with a hectic appearance. Treatment: Fresh air. Operative procedure in these cases on the peritoneum is helpful, more particularly in mixed infections.

J. N. E. B.

Laryngology, Rhinology

IN CHARGE OF
PERRY G. GOLDSMITH, M.D.
TORONTO.

and Otology

THE RULE OF SYNCOPE IN HEMOPTYSIS.

DR. BOSVIEL (Parisian Society of L. O. & R., November, 1907), after tonsillotomy made by himself with a cold snare in an adult, found an abundant arterial hemorrhage from the inferior part of the anterior pillar. The hemorrhage resisted all the ordinary means employed, and only stopped at the end of four hours, when syncope came on. He draws the conclusion that tonsillotomy with a cold snare ought to be carried out with slowness, lasting a minute and a half, and that in severe hemorrhage it is better to welcome syncope than to fear it.

MASTOIDITIS AND DIABETES.

DR. FURET (Parisian Society L. O. & R.) narrated notes of five genuine diabetic cases affected with mastoiditis following acute suppurative otitis. The five patients were operated on and cured. One of them appeared to have become diabetic in the thirty-six hours following operation, as if the operative traumatism had determined its occurrence. Dr. Furet had not followed any special rules as regards the operative proceedings. After having opened the antrum he was guided by the lesions he found. The sequelæ of the operation were very simple and call for no particular mention.

PROTECTIVE SPRAYS IN NOSE AND THROAT WORK.

MANY of the bleached or white fluid cosmolins and vaselines for sale on the market are bland and unirritating, while others are very sensitive to mucous membranes. The surgeon should assure himself of the bland and unirritating qualities of such preparations before using them in his office practice or prescribing them for the use of his-patients. Certain gums and camphors, nearly insoluble

in water, may be dissolved in fluid vaseline or alboline, and used with advantage as applications to mucous membranes. Probably the most useful of such substances are menthol and camphor. Menthol and camphor, 10 grains of each to the ounce of liquid vaseline, is sedative and slightly astringent. (Many mucous membranes cannot tolerate more than half this strength.) A solution of menthol and oil, 10 grains to the ounce, produces at first a sensation of irritation, followed by decided sedative effects and a sensation of cold, but analgesic in acute coryza are decided. Frontal headache, as a result of a cold in the head, is promptly relieved by spraying the nasal mucous membrane with this formula. Camphor and menthol, with or without a small amount of eucalyptol or oil of pine, is a very useful combination for injection through a catheter into the middle ear.—*Gleason.*

DR. PERCY JAKINS (*Journal of Laryngology*, January, 1908) details the notes of a very interesting case.

Patient 19 years of age, and suffered from a chronic discharge of the left ear for two years. A sinus was present over the left mastoid of fourteen days' duration. Sixteen years previously a mastoid operation had been performed. Patient was not particularly ill, but had a considerable amount of tenderness over the mastoid region. He had tubercular disease of the left knee, and had wasting of the muscles of the calf of that leg. A complete radical mastoid operation was performed, and very extensive caries of the antrum and attic was demonstrated. The lateral sinus was exposed, and also the middle cerebral fossa. The morning after the operation the temperature rose to 101, and gradually fell for the next week, when it again rose to 101 and then to 102. The patient now had a slight rigor and vomited twice, also constant headache. The sinus was then opened, and it was expected to find a thrombus. The vein, however, was quite healthy and pulsating. A markedly fluctuating temperature took place for the next few days, varying from 99 to 102. Three weeks after the operation, when the temperature had risen to 103, lumbar puncture was performed and 15 c.c. of cerebro-spinal fluid was removed under moderate pressure. This fluid, which was examined by Dr. Wyatt Wingrave, contained a gram staining diplococcus, but no tubercular bacilli. The presence of a large number of leucocytes clearly indicated an acute meningitis. The case recovered with only a slight rise of temperature subsequent to the lumbar puncture, and rapidly regained capital health.

P. G. G.

The Canadian Journal of Medicine and Surgery

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Editorials.

A MODEL MILK SUPPLY.

CHICAGO is determined to have a milk supply which shall be as free as possible from disease-producing defects. On and after May 1st, 1908, the beginning of the new license year, a license to sell milk will not be issued by the Chicago Health Department to any person whose premises are insanitary, or to any person or firm whose past record is bad.

The Chicago Health Department has begun the testing of all milch cows within the city limits for tuberculosis. The use or sale of milk from a tuberculous cow is strictly prohibited. Permission to keep a cow will be cancelled if the owner's premises are not kept clean, if manure is allowed to accumulate, if flies breed or congregate therein, or if the place becomes or is allowed to become a nuisance.

The Department of Health is analyzing the well water of all farms from which milk is sent to Chicago. Up to April 18, 1908, more than twenty wells had been condemned, and notice served on the owners that new wells must be dug, or, in the event of failure to comply with this regulation, their milk will be excluded from the city. The water of the condemned wells, in every instance, showed marked evidence of contamination.

Every dairy farmer is instructed to send to the Department of Health, on the 1st and 15th days of each month, a written report, stating the presence or absence of contagious disease on his premises. If such notice is not received in due time, the milk supply from dairies failing to report will be regarded as suspicious, and will be excluded from the Chicago market until an investigation can be made.

It is believed that the farmer will make correct reports concerning the presence or absence of contagious diseases, when he is compelled to place himself on record in this manner.

These regulations are well framed to secure the desired ends—a healthful milk supply and the prevention of the extension of contagious diseases through milk.

It is very satisfactory to know that the application of the tuberculin test to dairy cows will provide for the elimination of tubercular animals from the dairy herds, and against the probable extension of tuberculosis to man.

Rigorous as the law appears to be, its enforcement will vastly improve the well-being of dairy cattle. The Chicago dairyman will have to go further than selling his tubercular cattle to the butcher. He will have to purchase tested cattle, in the first place, and he will have to treat his cattle in such ways that they will not develop tuberculosis. That is to say, he must let them live a natural, instead of an artificial life, and he must feed them on food adapted to their physiological as opposed to the commercial

necessities. To secure these essentials, dairy cattle must receive an unlimited supply of fresh air, and must not be shut up in unventilated byres, where they constantly breathe a vitiated atmosphere. Neither must they be fed on mush, in which the indispensable elements have been destroyed by boiling. Feeding cattle with brewery grains, we are pleased to see, is strictly forbidden in Chicago dairies. Cattle are not constituted to live and thrive on cooked food, and when such food is used one of the results is diseased milk.

J. J. C.

VARSITY VERSUS HOSPITAL.

“But there’s someone always kicking
In the Lard of Heap Too Good.”

ACCORDING to the correspondence department and the editorial overflow columns in our daily press, the old hen has refused to gather all her brood under her wings, because some of the chickens are ducks. In other words, the University of Toronto, as a University, is not properly represented on the new Hospital Staff, so someone says; another remarks that every second man on the staff is attached in some capacity to the University. Someone else states that the University gave a grant with the understanding that it should have proper representation and special opportunity for clinical work. The reply is voiced by a member of the Board that the money given as a grant by Varsity was given to that institution by the Government out of the Succession Dues from estates, which dues should have been paid directly toward the “maintenance of hospitals and other charitable institutions.” So the pros and cons go to and fro, and the interest deepens as the puzzle of reserved seat coupons twice sold diverts the attention of the audience from the larger interest of the Building drama.

We are told that the personnel of the actors will be changed every two years. If so, why not let old Father Time adjust all differences, and in the meantime keep the curtain down and let stage whispers prevail during the setting—and then, amid the unanimous plaudits of pit and gallery, let the play end, as all plays should, with the survival of the fittest.

W. A. Y.

HOW DOES ALCOHOL PRODUCE TUBERCULOSIS ?

THAT alcohol produces tuberculosis is acknowledged by some medical writers; the method by which it produces it deserves elucidation. In an address, delivered at Dublin, Ireland, October 11th, 1907, Dr. Osler expressed the opinion that alcohol is one of the agents which produce an excessive tubercular mortality in Ireland. In his "Practice of Medicine," 6th edition, p. 371, Dr. Osler writes: "It was formerly thought that alcohol was in some way antagonistic to tubercular disease; but the observations of late years indicate clearly that the reverse is the case, and that chronic drinkers are much more liable to both acute and pulmonary tuberculosis. It is probably altogether a question of altered tissue-soil, the alcohol lowering the vitality and enabling the bacilli more readily to develop and grow."

In "L'Alcohol et L'Alcoholisme," p. 167, a work written by Drs. Triboulet and Mathieu, and published in 1900, a physiological explanation is given of the means by which alcohol hurts the tissues of the chronic drinker. "In all cases, alcohols and essences (absinthe, etc.), on the one hand, by diminishing organic combustion in the living tissues, on the other hand, by their elimination through the lungs, create simultaneously a general predisposition, as well as a local one, which provide for the bacilli tuberculosis a tissue-soil suitable for their development." It is also shown in the same work that the phthisis of chronic drinkers presents peculiar characteristics of its own, both in its localization and in its evolution. Differing altogether from classic data, in which tubercular invasion of the lungs is described as appearing in the front portion of the apex of the left lung, the phthisis of the chronic drinker is located in the back portion of the apex of the right lung, in the form of granulations, which produce diminished elasticity on percussion. An attack of hemoctysis may give the first inkling of the lung lesion, and the disease then lessens in violence. If, at this stage, the chronic drinker has the good sense to renounce his bad habits, give up alcohol and take proper food, he may, in most cases, recover his health. Unfortunately, it rarely turns out this way. A second and a third attack supervene, and the drinker's

phthisis, which at first caused but little trouble, assumes dangerous proportions, owing to the extension and dissemination of tubercles. In some cases of alcoholism, tubercles invade, concurrently, the lungs, the peritoneum, the meninges of the brain, and cause death rapidly. In France, such results occur principally among market porters, coopers and draymen, who are exposed to the excessive use of alcohol on account of their occupations.

It would be of immense benefit to the public health if physicians, particularly the younger members of our profession, were to form definite views about the effects of alcohol on individuals, both in health and in disease. The public has changed the point of view as regards alcohol. It no longer looks at it from the point of view of the pulpit or the philanthropist, but from the point of view of the educated physician. The physician, being the private adviser of the family, and in some cases the official adviser of the people, should be perfectly clear in his own mind, and irreproachable in his own conduct as to the effects of the beverage use of alcohol. Vested interests, though powerful, individual preferences, though not inconsiderable, should have little weight in deciding the question: Is alcohol a menace to the family and the nation? If it is so, let it go.

J. J. C.

A VINDICATION.

AGAIN, just ere going to press, we feel bound in justice to one (although personally unknown to us) to refer to an unfortunate subject long enough to offer a word of congratulation to Dr. A. G. Ashton Fletcher upon his happy release from the suspicion of the law courts and the condemnation of the people's tongues who glory in wagging on the evils of our times.

Our noble profession contains as a whole a class of fine, upright men, who hold its honor dear, and it is a relief to all to know that from the name of even an obscure member of the great whole a foul blot of unmerited disgrace has been removed. Discussed, as this case has been in the lay press, far and wide, it has brought the whole medical profession into the detestable limelight, and endeavored to put it under the ban of ignorant calumny. As a whole the profession has nothing to do with an individual case, but, to their credit let it be known that they have shown their belief, by many

strong words, in a man's innocence until proven guilty. It would, indeed, be a mean spirit and a contemptible fraternity whose

"only aim was to keep afloat,
While a brother may drown with a cry in his throat."

W. A. Y.

THE PREVENTION OF CANCER IN CANADA.

WE do not know of any public efforts to prevent cancer in Canada. The Provincial Boards of Health issue printed instructions to the public, showing the precautions necessary to prevent the catching of tuberculosis. Philanthropists and preachers urge the people to war against the curse of alcoholism. No aid, in the way of published advice to the people, is given to prevent the access of cancer, or stay the work of that destroyer.

In Germany, the struggle against cancer is openly made in newspapers and scientific journals. Physicians and midwives, whom the people consult for their bodily ailments, are strongly urged to make complete clinical examinations of the patients. If cancer is suspected or discovered, the benefits derivable from an early operation are urged.

In a statistic of cancer of the uterus, published by Winter, of Konigsberg, that surgeon urges the reasons why cancer is so rarely cured. Of 404 women affected with cancer of the womb, 253 sought advice at an early date; of 380 physicians consulted in cases of cancer of the womb, 57 *did not make a digital examination*; 14.6 per cent. of the patients consulted midwives. Of 1,062 women affected with cancer of the womb, only 135 consulted physicians during the first month of illness, 283 waited for three months, 118 six months, 126 nine months, 81 one year. All the facts in connection with the successful treatment of cancer point to the benefit to be derived from an early operation. To physicians, this is a truism; but the public should be told of it. Any legitimate means by which sufferers from cancer, many of whom are women, can be induced to consult physicians at an early date will accomplish the best results for the patients, and will strengthen the position of operative surgery.

There is no cancer hospital in Canada, operations for cancer

being done in general hospitals. Statistics would seem to show that there is room for a special hospital for malignant diseases. According to the Canadian decennial census of 1901, the cancer mortality of Canada was 42.11 per 100,000 of population. The cancer mortality of Ontario for 1905 was 55.42 per 100,000 of population. Thus we see that many lives are destroyed every year by cancer, not in childhood, early youth or young adult life, as by tuberculosis, but at the period of mature intellectual and physical vigor.

Some cancer patients from Canada find their way to the cancer hospitals of the United States. At New York, there is the General Memorial Hospital for the Treatment of Cancer and Allied Diseases, a magnificent public charity, founded by private benevolence, at an outlay of \$1,000,000. St. Louis possesses the Hospital for Cancer and Skin Diseases; Philadelphia has the Oncological Hospital. At all these hospitals research work is prosecuted. Research work in cancer is also done by the Harvard School of Medicine, the task being in charge of the Caroline Brewer Croft Fund Cancer Commission, which has now issued its fourth report. Buffalo, our neighbor, has a good laboratory, devoted exclusively to the study of tumors, under the charge of Drs. Roswell Park and Gaylord. There are doubtless other schools and laboratories in the United States, in which cancer research work is carried on.

It would be a good thing if a committee of the Toronto Academy of Medicine would take up this life-saving specialty. The Pathological Section might, on its own initiative, or, preferably, in co-operation with the Ontario Board of Health, issue circulars to physicians, asking for the number of their cancer patients, so that data might be compiled for a statistic, showing the actual amount of cancer among human beings in this Province.

The circular would serve as a gentle reminder. When physicians become more thorough in their methods of examining female patients, operable cases of cancer will multiply in Canada, as they have multiplied in Germany. If the investigation of cancer is once started in Ontario, other methods of reaching the public will doubtless suggest themselves to the committee which will undertake the work.

J. J. C.

EDITORIAL NOTES.

Sleeping Sickness Caused by *Glossina Palpalis*.—Colonel Prince, F.R.S., who is regarded as one of the most earnest and original investigators of the nature and causes of obscure tropical diseases, delivered a lecture on Sleeping Sickness, March 18, 1908, before the members of the African Society at the Royal United Service Institution, London, England. He said, among other things, that this disease was carried by the tsetse fly (*Glossina palpalis*), and that there was no proof that it could be carried by any other tsetse fly. In discussing preventive measures, he said it was best to remove the natives from the region of the fly, the habitat of which was on the lake shores, where there were clear water, rivers and forests. It was there that the natives gathered in large numbers, and the conditions for the spread of the disease in the Sleeping Sickness area were as favorable as they could possibly be. Many attempts had been made to discover a drug that would cure man of the disease created by the trypanosomes, or render him immune to the attack of the parasite. Arsenic had held its own as probably the most useful one in this malady. At first it was used in the form of arsenious acid, dissolved in an alkaline solution; but, later, other preparations, such as atoxyl and orpiment had been experimented with. Some of the experiments, in the cases of the lower animals, had been followed by a complete cure, but, up to the present time, there was no single instance of a well-authenticated cure having been effected in man, although thousands of cases had been treated. The effect of the treatment was often marvellous, the patient regaining the appearance of health in a very short time, but, eventually, the trypanosomes returned to the blood and the patient died. All attempts to render man immune to the trypanosomes by some antitoxic serum, or vaccine, had been fruitless, and there did not seem to be any likelihood of anything being found out in that direction for a long time to come.

To Secure Safety in Administering Chloroform.—W. H. Home Fleet Surgeon (*British Medical Journal*, April 4, 1908, p. 840), attributes his success in administering chloroform to two circumstances: (1) To securing complete anesthesia as quickly as possible, in order to avoid vomiting and its dangers. (2) To prevent the

patient's tongue from falling backwards against the posterior wall of the pharynx. To secure complete anesthesia he gives plenty of chloroform; to prevent swallowing of the tongue, he puts a couple of pillows beneath the patient's shoulders, in order that the head may hang right back. When suffocation occurs, he hooks forward the root of the tongue by placing one or two fingers in the pharynx. The fingers are insinuated well behind the tongue, which is lifted forward and then there is generally a crowing respiration, which shows at once that all is well. Mr. H. ne does not approve of the use of the tongue forceps. If applied to the tip of the tongue when its base has got wedged in the pharynx, the forceps is apt to stretch the tongue and give the anesthetist an erroneous impression that everything possible has been done. Regarding the tongue forceps Dr. E. Lanphear writes in *Surgical Therapeutics*: "The man who wants to use a tongue forceps is one never worthy of trust as an anesthetist. In extreme cases a finger wrapped in gauze may have to be inserted into the throat to unroll the tongue, but it should not be once in a thousand cases; in all others elevation of the jaw is all that is required. The patient's chin is raised by placing a thumb on each side of the face, above the angle of the jaw, and three fingers on the neck, below the angle, when, by pushing upwards and forwards, the larynx will be straightened and the tongue drawn forward out of the pharynx."

The Feeble-Minded in Ontario.—Dr. Helen MacMurchy, who at the request of the Provincial Secretary, continued her investigations into the condition of feeble-minded persons in Ontario, gives her opinions on this subject in a second report, recently issued by the Provincial Government. The report is lengthy (31 pages), but is interesting and instructive. It appears that, besides feeble-minded children or young persons living at home, there were in Ontario, January 31, 1908, 612 feeble-minded persons distributed among charitable institutions, county houses of refuge, jails, the Andrew Mercer Reformatory and the Orillia Asylum for Idiots. Their maintenance cost \$50,124.85, and, at present, there is no return for this expenditure. If properly trained in a special institution, feeble-minded persons could do remunerative work, viz., laundry work, gardening and the care of conservatories, dairying, the work of the institution itself, sewing, lace making, weaving, basket making, etc. Instruction should be begun at 6 years of age

and feeble-minded children should be separated from normal children as soon as possible. A medical inspection of schools would definitely settle the number of feeble-minded children in Ontario and should, therefore, be the first step towards providing the special training and care which feeble-minded children require. Reference is made in the report to the care of the feeble-minded in England, and descriptions are given of visits made to the Starcross Institution (Western Counties Asylum) and the Sandlebridge Schools (Lancaster and Cheshire Society for the permanent care of the Feeble-minded). It is noted that observation by the After-Care Committees, who look after the scholars trained at these English schools, shows that trained feeble-minded persons are unable to make a living if left to their own resources, and that they require supervision all their lives; the care of the feeble-minded must be a permanent care. Considerable stress is laid on the importance of preventing the procreation of fresh imbeciles, by confining male and female feeble-minded persons in an institution. Dr. MacMurchy makes out a good case for the establishment in Ontario of a school for the training and subsequent care of feeble minded persons.

A Chemical Test for Functional Albuminuria.—In functional albuminuria, Sir A. E. Wright noted a lessened coagulability of the blood, causing diminished viscosity. Calcium salts reduce the coagulation-time and increase the viscosity of the blood. He found that calcium salts would control functional albuminuria, whereas, through their operation, organic albuminuria would not be diminished and might be increased. The subjects of functional albuminuria have often been growing rapidly, so that there is an extra demand for calcium on the part of the tissues. He, therefore, considered this condition hematogenous in origin and allied to a serous exudate, such as occurs in urticaria. Fifteen grains of calcium lactate, given three times a day in water, should control the albumen in such cases. Dr. Langdon Brown (The Clinical Observer), observed that the administration of calcium lactate controlled the albumen in our cases of functional albuminuria, whereas in organic albuminuria there was no effect. Dr. Hingston Fox tried this salt in seven cases, which he thought were functional, and in all the albuminuria ceased, whereas in nine cases, apparently organic, the albuminuria persisted. This action of lactate of calcium may be of great importance in relation to examinations for life insurance. It seems

that so simple a test should be applied before an adverse decision is given in cases of albuminuria. The general practitioner who knows the condition of a patient about to stand the test may fortify him against the ordeal by the administration of calcium lactate. In doing so he will be unable to secure the acceptance of persons affected with organic nephritis, but only of those who will almost certainly be free from albuminuria when adolescence is past. It is noted in *The Prescriber* that calcium lactate cannot be administered as tablets or powders, since, though soluble in water when freshly prepared, it soon becomes insoluble. The best method of giving it is in solution, as follows:

R. Precipitated calcium carbonate..... ʒj
 Lactic acid..... gr. cxxx
 Water enough to make..... ʒvi

Solve.—One tablespoonful contains fifteen grains of calcium lactate.

J. J. C.

PERSONAL.

DR. E. STANLEY RYERSON begs to announce to the profession that after May first, nineteen hundred and eight, he will devote himself to the practice of surgery.

Correspondence.

The Editor cannot hold himself responsible for any views expressed in this Department.

THE NEW VITAL STATISTICS ACT OF ONTARIO.

J. J. CASSIDY, M.D., EDITOR CANADIAN JOURNAL OF MEDICINE AND SURGERY:

Dear Doctor,—I have much pleasure in enclosing herewith an outlined memo., re the "Vital Statistics Act," which will be of interest to the medical profession of this Province.

The amended Act will, it is hoped, facilitate the collection of vital statistics, and be useful to the public in permitting of the registration of, more particularly, deaths, and also enable them to secure more readily than has heretofore been possible certificates of either births, deaths, or marriages of recent date.

The provisions of the Act have been extended to the Indian districts, they being deemed territories, and the Div.-Registrar of the same, appointed by Order-in-Council, being paid for his services in a formal manner, as has heretofore been the custom in the unorganized portions of the Province.

Much confusion has existed in the past in reference to definition of a search. This, according to section 7, sub-section 4A, refers to one county or district, covering a period of not more than three years, the fee for searching being 25 cents; while, for a search for one registration, extending beyond one county, or for more than three years, the maximum fee is placed at \$2.00. The fee for a certificate, as issued by the Registrar-General (which is prima-facie evidence in any court), is 50 cents, the same as heretofore.

Duties of Div.-Registrars.—The officers will now be provided with schedules, in duplicate, of Births, Marriages and Deaths, and returns have to be made to the Registrar-General on or before the fifteenth days of January, April, July and October, and not half-yearly as heretofore, together with original returns as received from clergymen, physicians and householders. According to sub-section 6 of section 11, if a Div.-Registrar has reason to believe that any birth, marriage or death has not been registered, it is now his duty to inform the proper person, and on failure of such person to make the registration, information has to be sent forthwith to the Inspector of Vital Statistics.

For the convenience of the public, the Div.-Registrar, upon application and upon payment of a fee of 25 cents, shall give a certificate in the prescribed form, which has not been included in

any quarterly return made to the Registrar-General; and the statute distinctly states that the fee is for the personal use of the Div.-Registrar issuing the same.

Section 14 provides that every legal medical practitioner who attends at the birth of a child, shall forthwith give notice on the prescribed form to the Div.-Registrar. And section 22 provides that the duly qualified medical practitioner last in attendance during the last illness of a person who dies shall, before interment, supply to the Div.-Registrar all the particulars required to be registered of such and such death; and in order that there may be no uncertainty as to these requirements on the part of medical practitioners, when other parties notify of either a birth or death, sub-section 3 of section 31 provides that in no case is the doctor relieved of these responsibilities; and it is the intention of the department to enforce these two important provisions.

The notification of a birth, section 15, is given by:

(a) The father, if living; or
(b) In case of his inability, or if he is dead, by the mother, if living.

(c) In case of the inability of both parents, or if neither be living, by the person standing in the place of the parents of the child.

(d) If neither of these can notify, then by the occupier of the house in which the child was born, if he has knowledge of the birth, and by the nurse or midwife present at the birth.

These notices to be given within thirty days after date of birth. And in the case of a new-born child, found exposed, it is the duty of any person finding such child to register such information as is required with the Div.-Registrar.

Section 20 provides for the altering or inserting of a name after the registration of a birth has been made, up to a period of ten years after the occurrence of the same.

As to the notification of a death, the order is as follows:

Section 22.—The occupier of a house in which a person dies, or if the occupier be the person who has died, then every adult person residing in the house in which the death took place. Where a death does not take place in a house, then every person present at the death, or having any knowledge of the circumstances, or the Coroner who views the body.

In order to facilitate interment of the dead, sub-section 2 of section 22 provides that, where the death has occurred in a township or territory without municipal organization, the return may be made to the nearest Div.-Registrar, who, upon the payment of a fee of 25 cents, shall register the same and issue a certificate of registration of death, the fee in this case being for the personal use of the Div.-Registrar. And where the duly authorized Div.-

Registrars are remote from any particular section of the Province; the Registrar-General, upon proper presentation of the facts, may appoint Sub-Registrars for the purpose of issuing certificates of registration of death. The fee being paid by the applicant, the Sub-Registrar must make his return direct to the Div.-Registrar of the district in which the death occurred, and to the Registrar-General.

A very important amendment is that contained in section 25. The first part reads as follows: "The removal for burial or the embalming of any body shall not take place, and an undertaker, clergyman, sexton, householder or other person shall not engage in the burial of a body unless a certificate of registration has been previously obtained from the Div.-Registrar. The importance of this in criminal cases is quite evident to the medical profession.

Under section 27, caretakers, owners of cemeteries or burying grounds are required to transmit to the Div.-Registrar of the division in which the cemetery is situated, quarterly returns, which are subsequently transmitted by that officer to the Registrar-General.

Yours truly,

O. A. HODGETTS,
Deputy Registrar-General.

Toronto, May 12th, 1908.

News of the Month.

CANADIAN MEDICAL ASSOCIATION.

THE 41st Annual Meeting of the Canadian Medical Association opens at Ottawa on the 9th inst. and continues in session on the 10th and 11th, under the Presidency of Dr. F. Montizambert, Ottawa.

The opportunity to visit the Capital when Parliament is in Session presents itself for the first time in the history of the Canadian Medical Association. The Forty-first Annual Meeting is the first under the New Constitution. Come and help consolidate the profession all over Canada, and get better acquainted with the Canadian Medical Association and also with the Canadian Medical Protective Association.

The standard certificate plan prevails in every Province, no one requiring any certificate from the General Secretary. This means that all delegates, on purchasing single first-class tickets to Ottawa, for themselves, their wives and their daughters (no others) should ask for, and get, at the same time a standard convention certificate from the ticket agent for each. These should be left with the Treasurer when registering, to facilitate the signing and returning of same by the General Secretary. When signed they will entitle the holder thereof to reduced transportation, which in all cases must be arranged for at Ottawa. If three hundred are present holding these certificates, all will be returned home free; one-third rate if fifty are present with certificates.

The Canadian Pacific Railway, the Grand Trunk Railway, the Intercolonial Railway, the Canadian Northern Railway, the Richelieu and Ontario Navigation Company, and all lines in the Eastern Canadian Passenger Association, are included in the transportation arrangements.

Delegates from points west of Fort William will be permitted to use the Upper Lake Route, Fort William to Owen Sound, or *vice versa*, on extra payment of \$4.25 one way, or \$8.50 both ways, when travelling on the standard certificate plan.

Tickets will be on sale in the Eastern Canadian Passenger Association territory—Fort William to Halifax—three days before the first day, Sunday not counted a day, and three days' final return limit after the last day, Sunday not counted. If through ticket cannot be purchased at starting point, purchase to the nearest point where such through ticket can be obtained, and there purchase through to place of meeting, requesting a standard certificate.

West of Port Arthur, tickets will be on sale—Port Arthur to Moose Jaw—June 5th to 8th; west of Moose Jaw to Laggan and Coleman, June 4th to 7th; all certificates to be honored for return journey up to July 9th, 1908.

The meeting place will be St. George's Parish Church Hall, Metcalfe St.—the business hall is just opposite—The Racquet Court. Sectional meetings will be held in Carnegie Library near by.

A special agent from the Eastern Canadian Passenger Association will be in attendance on June 10th to vise the Standard Convention Certificates. Each delegate must pay this officer a fee of twenty-five cents for visting same.

Delegates desiring to have hotel or lodgings reserved for them should apply to the hotels below, or to Dr. F. W. McKinnon, Elgin St., Ottawa:

Russell House—American Plan.....	\$3 00 to \$5 00	per day
European Plan.....	2 00 to 3 00	“
Windsor Hotel—American Plan....	2 00 to 3 00	“
Grand Union Hotel—American Plan	2 00 to 3 00	“
Cecil Hotel—American Plan.....	3 00	“
Alexandra Hotel—American Plan... 2 50		“
European Plan... 1 50		“

The fee for membership remains this year at \$2.00. It is payable to the Treasurer, Dr. H. Beaumont Small, Ottawa, at the time of registering. Those desiring to become members for the first time should get information as to procedure from the General Secretary. Transportation rates apply to them as to members.

On the first afternoon at 5 p.m. there is to be a reception, by local members, at the Ottawa Golf Club, Aylmer, P.Q.; on the evening of the first day a civic reception at the Carnegie Library. During the second day there is to be an excursion to Caledonia Springs; on the evening of the third day a Smoking Concert. The ladies of Ottawa will entertain the visiting ladies. There will be a visit to the laboratory at the Experimental Farm.

The Annual Meeting of this Association will take place at 12 a.m., June 9th; Dr. R. W. Powell, Ottawa, the President, will have a splendid report to present. The great success of this Association should encourage all Canadian practitioners to become members.

This year the Military Surgeons, under the Presidency of Dr. G. Sterling Ryerson, Toronto, meet as a section of the Canadian Medical Association.

Additional information of a local character may be obtained from the local Secretary, Dr. Wm. Hackney, 396 Somerset St., Ottawa. Any general information from the General Secretary, Dr. George Elliott, 203 Beverley St., Toronto.

PROVISIONAL PROGRAMME.

Presidential Address—Dr. F. Montizambert, Ottawa.
Address in Medicine—Dr. Risien Russell, London, England.
Address in Surgery—The Surgical Rights of the Public—Dr. John C. Munro, Boston, Mass.

MEDICAL SECTION.

Dr. John T. Fotheringham, Toronto, Chairman; Dr. Alex. J. MacKenzie, Toronto, Secretary.

Our Experience in Broncho-Pneumonia—Dr. C. S. McVicar, Hospital for Sick Children, Toronto.

The Differential Diagnosis of Some Forms of Mental Disease and a Note as to Treatment—Dr. G. J. Fitzgerald, Toronto.

Out-Patients' Clinics for the Tuberculous Poor—Dr. Harold C. Parsons, Toronto.

On the Choice of a Climate—Dr. Geo. D. Porter, Toronto.

Hæmoptysis in Pulmonary Consumption—Dr. J. H. Elliott, Toronto.

Spina Bifida Associated with Syringo Myelia—Dr. Colin D. Russel, Montreal.

Meningitis—Dr. A. E. Ranney, North Bay.

Some Interesting Complications of Pulmonary Tuberculosis and Their Treatment—Dr. J. K. M. Gordon, Gravenhurst.

Ergot—Drs. E. V. Henderson and W. H. Cronyn, Toronto.

Some Unusual Cases of Rheumatism—Dr. A. McPhedran, Toronto.

What Shall We Say to Our Neurasthenic Patients?—Dr. G. S. Young, Prescott.

Pernicious Anemia, Report of Cases in Country Practice—Dr. James Baird, Hemmingford, Quebec.

Some Further Observations on Pneumo-Thorax—Dr. W. F. Hamilton, Montreal.

Myo-Cardial Change in Valvular Disease—Dr. H. B. Anderson, Toronto.

SURGICAL SECTION.

Dr. Geo. E. Armstrong, Montreal, Chairman; Dr. Edward W. Archibald, Montreal, Secretary.

Title to be announced—Dr. James Bell, Montreal.

Congenital Pyloric Obstruction—Dr. F. J. Shepherd, Montreal.

Temporary Colostomy as a Curative Agent in Post-Operative Faecal Fistula of the Colon—Dr. J. M. Elder, Montreal.

The Administration of the General Anesthetic from the standpoint of the Operator—Dr. H. A. Beatty, Toronto.

Reports of Two Large Abdominal Tumors with Remarks—Dr. A. B. Atherton, Fredericton, N.B.

Title to be announced—Dr. A. Primrose, Toronto.

Diagnosis and Treatment of Ureteral Calculus, accompanied by Case Reports—Dr. A. E. Garrow, Montreal.

Exhibition of Cases to Show Result of Operations Reported at the London Meeting, 1903. Advanced Hip-Joint without Shortening—Dr. R. P. Robinson, Ottawa.

Calculus of Ureter Removed per Vaginam—Dr. Walter McKeown, Toronto.

COMBINED MEDICAL AND SURGICAL SECTION.

Discussion on General Peritonitis.

Carcinoma of the Buccal Cavity, Etiology and Treatment—Dr. A. R. Robinson, New York.

Subdural Hemorrhage and Its Surgical Treatment—Dr. E. W. Archibald, Montreal.

On the Use of the Ortho-Diagraph in Medicine—Dr. Robert Wilson, Montreal.

PUBLIC HEALTH SECTION.

Dr. Chas. A. Hodgetts, Toronto, Chairman; Dr. Robert Law, Ottawa, Secretary.

Address by the Chairman, Dr. Hodgetts.

Title to be announced—Prof. Starkey, Montreal.

Title to be announced—Dr. J. D. Lafferty, Calgary.

Title to be announced—Dr. Seymour, Edmonton.

The Medical Inspection of Schools—Dr. John Hunter, Toronto.

LABORATORY WORKERS.

Dr. W. T. Connell, Kingston, Chairman; Dr. A. R. B. Williamson, Kingston, Secretary.

Anesthesia in Laboratory Work—Dr. V. E. Henderson, Toronto.

Chorion Epithelioma in the Testis—Dr. C. B. Keenan, Montreal.

A Criticism of the Ammonium Nitro-Molybdate Method of Detecting Organic Phosphorus in the Tissues—Geo. G. Nasmyth, M.A., Ph.D., and E. Fidler, B.A., M.B., Toronto.

The Bio-Chemical Characteristics of *Bacillus Influenzæ*—Dr. Handford McKee, Montreal.

Title to be announced—Prof. J. George Adami, Montreal.

Title to be announced—Prof. J. J. Mackenzie, Toronto.

Title to be announced—Dr. C. W. Duval, Montreal.

Contribution to the Pathology of Tumors of the Lung—Three cases of Sarcoma: (1) Primary, (2) Secondary—Dr. E. St. Jacques, Montreal.

On the Technique of the Study of Complement Deviation—Dr. A. H. U. Caulfeild, Toronto.

COMBINED PUBLIC HEALTH AND LABORATORY WORKERS.

Water Supplies and Water Analysis—Dr. J. A. Amyot, Toronto; Dr. T. A. Starkey, Montreal; Dr. Gordon Bell, Winnipeg; Dr. W. T. Connell, Kingston; and others will contribute to this discussion.

SECTION ON EYE, EAR, NOSE AND THROAT.

Dr. H. S. Birkett, Montreal, Chairman; Dr. Handford McKee, Montreal, Secretary.

New Therapeutic Notes—Dr. Wilfrid Braupre, Quebec.

Title to be announced—Dr. G. H. Mathewson, Montreal.

Title to be announced—Dr. Roy, Quebec.

Some Points in the Technique of Sub-mucous Resection of the Nasal Septum—Dr. C. M. Stewart, Ottawa.

Ulceration of the Cornea, Etiology and Treatment—Dr. Handford McKee, Montreal.

(1) Calcified Fibroma of the Orbit; (2) A Case of Bilateral Lardaceous Infiltration of the Buccal Mucous Membrane, not hitherto classified—Dr. J. N. Roy, Montreal.

SECTION ON MENTAL AND NERVOUS DISEASES.

Dr. W. H. Hattie, Halifax, Chairman; Dr. J. C. Mitchell, Brockville, Secretary.

Some Clinical Considerations of Dementia Præcox—Dr. Elbert M. Somers, Ogdensburg, N.Y.

Hydrotherapeutics when applied to Mental and Nervous Diseases—Dr. A. T. Hobbs, Guelph.

The Differential Diagnosis of some forms of Mental Diseases, with a note as to Treatment—Dr. Gerald Fitzgerald, Toronto.

Title to be announced—Dr. E. W. Archibald, Montreal.

Title to be announced—Dr. Colin Russel, Montreal.

Some Points in the Etiology of Progressive Muscular Atrophy, with Especial Reference to Heredity—Dr. D. A. Campbell, Halifax.

A Study of Thomsen's Disease (Myotomia Congenita)—by a sufferer from it.

Insanity and the General Practitioner—Dr. Moher, Brockville.

Hysterical Manifestations Occurring After the Removal of a Brain Tumor—Dr. D. A. Shirres, Montreal.

SECTION ON GYNECOLOGY AND OBSTETRICS.

Dr. F. A. L. Lockhart, Montreal, Chairman; Dr. D. Patrick, Montreal, Secretary.

Title to be announced—Dr. Wm. Gardner, Montreal.

Some Cases of Cæsarian Section—Dr. R. E. Webster, Ottawa.

Pregnancy and Heart Troubles, with Report of Cases—Dr. J. C. Cameron, Montreal.

Title to be announced—Prof. de L. Harwood, Montreal.

Cases of Vicarious Menstruation—T. Blakeman.

Uterine Inversion, with the Report of a Case—Dr. D. Patrick, Montreal.

The Role of the Gonococcus as a Factor in Infection, following Abortion or Full Term Delivery—Dr. Fraser G. Gurd, Montreal.

Report of Second Case of Chorio-Epithelioma—Dr. F. A. L. Lockhart, Montreal.

Thoroughness in Abdominal Surgery—Dr. A. Laphorn Smith, Montreal.

Pubiotomy—Edward D. Farrell, Halifax, N.S.

Title to be announced—Dr. D. J. Evans, Montreal.

MILITARY SURGERY.

Dr. G. Sterling Ryerson, Toronto, Chairman; Dr. T. H. Leggatt, Ottawa, Secretary.

Address by the President of the Association of Medical Officers of the Militia of Canada, Colonel Ryerson, M.R.D., Toronto.

On the Advisability of Forming a Canadian Ambulance and Red Cross Association—Lieutenant-Colonel Jones, D.G.M.S., Ottawa.

Title to be announced—Lieutenant-Colonel Cameron, A.M.C., No. V. Field Ambulance.

The Territorial Army Medical Corps, and the Canadian Medical Services—A Comparison—Lieutenant-Colonel Sponagle, A.M.C.

Title to be Announced—Captain H. A. Kingsmill, 7th Fusiliers.

Some of the Difficulties met with in Camp Sanitation—Captain G. M. Campbell, 7th C. A.

Title to be Announced—Lieutenant-Colonel Maclaren, P.M.C., M.D. No. 8.

The Present Aspect of Military Sanitary Work—Major L. Drum, P. A. M. C.

Ready and Simple Tests for Water, Milk and the Detection of Disease in Animals—Captain L. M. Murray, A.M.C., No. 1 Field Ambulance.

Since above Programme was put in type, we have been requested by the Secretary to add the following papers:

Treatment of Meningitis with Flexner's Serum—Dr. F. G. Finley and Dr. P. G. White, Montreal.

The Diagnostic Value of Perversion of Gastric Secretion—Dr. Graham Chambers, Toronto.

The X-Ray as a Therapeutic Agent, Its Indications and Untoward Effects, having Special Reference to Its Action upon the Generative and Internal Secretary Organs of the Body—Dr. Omar Wilson and J. Harold Alford, Ottawa.

MEETING OF THE ASSOCIATION OF AMERICAN TEACHERS OF THE DISEASES OF CHILDREN.

THE Association of American Teachers of the Diseases of Children will hold its annual meeting in Chicago at the Great Northern Hotel, corner of Jackson Boulevard and Dearborn, on June 1st.

Requirements for membership in this Association are somewhat unique. To be eligible one must be a regular physician resident in the United States, Canada or Mexico, who is in good professional standing and membership in his county or local medical society and actively engaged as Professor or Associate Professor or Clinical Professor of Pediatrics, or as adjunct to such a chair, or who holds the position of Lecturer on this branch or an equivalent position in a recognized medical college, or who is a member of a properly organized hospital or dispensary staff actively engaged in the treatment of children. All such are invited to join the Association; and all physicians and surgeons interested in children are invited to attend the meeting. Its objects are the study, the teaching and the practice of pediatrics.

The officers of the Association are as follows:

President.—Samuel W. Kelley, M.D., Professor of Diseases of Children in Cleveland College of Physicians and Surgeons, Medical Department of Ohio Wesleyan University.

Vice-President.—Chas. Douglas, M.D., Professor of Diseases of Children in Detroit College of Medicine.

Secretary.—John C. Cook, M.D., Professor of Diseases of Children in Post-Graduate Medical School and Hospital of Chicago (deceased).

Secretary Pro Tem.—Robert A. Black, M.D., Chicago.

Treasurer.—George G. Cattermole, M.D., Professor of Diseases of Children in Colorado School of Medicine.

Senators.—W. C. Hollopeter, M.D., Professor of Diseases of Children in Medico-Chirurgical College of Philadelphia; H. M. McClanahan, M.D., Professor of Diseases of Children Medical Department of the University of Nebraska, Omaha; F. R. Gilbert, M.D., Professor of Diseases of Children Kentucky Medical College, Louisville, Ky.

The programme for the Chicago meeting is not completed, but in part it is here presented:

“Address of Welcome,” Arthur D. Bevan, M.D., Prof. of Surgery Med. Dept. Univ. of Chicago, Chairman Council of Education A.M.A.

“Address of the President,” Samuel W. Kelley, M.D., Prof. Dis. of Children, Cleveland College of Physicians and Surgeons,

- Med. Dept. Ohio Wesleyan University, Cleveland, Ohio.
- "The Teaching of Pediatrics as Seen by an Inspector of Medical Colleges," Frederick C. Zapffe, M.D., Secy. American Medical College Assn, Chicago, Ill.
- "The Fallacy of Attempting to Teach Pediatrics in the Chair of Practice," John A. Witherspoon, M.D., Prof. Practice of Medicine, Vanderbilt University, Nashville, Tenn.
- "The Teaching of Pediatrics in the European Schools," H. E. McClanahan, M.D., Prof. of Pediatrics, Univ. of Medicine, Omaha, Neb.
- "The Teaching of Pediatrics in the Medico-Chirurgical College of Philadelphia," W. C. Hollopeter, M.D., Prof. Pediatrics Medico-Chirurgical College, Philadelphia, Pa.
- "The Doctrine of Difficult Dentition," Theodore J. Elterich, M.D., Diseases of Children, Western Univ. of Penna., Med. Dept., Pittsburg, Pa.
- "Anatomical Peculiarities of Infants and Children," Richard B. Gilbert, M.D., Prof. Diseases of Children, Louisville Univ., Louisville, Ky.
- "Uncinariasis in the Southern States," J. Ross Snyder, M.D., Birmingham, Ala.
- Paper, Wm. W. Butterworth, M.D., Associate Prof. Diseases of Children, Tulane Univ., New Orleans.
- "Some Points on Infants' Clothing," Alfred C. Cotton, M.D., Prof. Diseases of Children, Rush Med. College, Chicago.
- Paper, Robert A. Black, M.D., Chicago, Ill.
- Paper, Wm. J. Butler, M.D., Chicago, Ill.
- Paper, J. W. Van Derslice, M.D., Chicago, Ill.

THE ONTARIO MEDICAL ASSOCIATION.

AS our June issue will be out before The Ontario Medical Association meeting is over, it is obviously impossible for us to give our readers any report of the meeting at Hamilton until July 1st. This we of course regret; but merely mention the fact so that our readers will not think our present issue lacking in interest. Judging from the efforts put forward by President Ingersoll Olmsted and his associates for months past, everything points to the 1908 meeting of The Ontario Medical Association being one of the most successful, both scientifically and otherwise. The President, Secretary Dr. Lusk and the different Committees have worked hard and consistently in this direction, and we hope to be able to announce in our next number that the Hamilton meeting outstripped all former years in point of attendance of members and actual work accomplished.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

THE thirty-fourth annual meeting of the Mississippi Valley Medical Association will be held in Louisville, Ky., October 13, 14, 15, 1908, under the presidency of Dr. Arthur R. Elliott, of Chicago.

Announcement has just been made of the selection of the orators for the coming meeting by the President. The address in medicine will be delivered by Dr. George Dock, Professor of Medicine in the University of Michigan, Ann Arbor, and the address in surgery by Dr. Arthur Dean Bevan, Professor of Surgery in Rush Medical College, Chicago. The mere mention of these names is enough of a warrant that this feature of the program will be in every way first class.

The local Committee of Arrangements in Louisville has selected the Seelbach Hotel as headquarters, the general sessions and the section meetings being held in the hotel's large auditoriums.

One of the features of the entertainment projected is a smoker in the famous Rathskeller of the hotel—the finest of its kind.

The McDowell button, so much admired at the 1897 meeting in Louisville, will be reproduced in bronze for this meeting.

ITEMS OF INTEREST.

American Medical Editors' Association.—The annual meeting of this Society will be held at the Auditorium Hotel, Chicago, on May 30th and June 1st. An extensive and interesting programme has been prepared and every member of the Association is urged to be present, and editors of medical magazines, not now affiliated with this Society, are also invited to meet with them. Do not forget the date, Saturday, May 30th, and Monday, June 1st.

L'Association des Medecins de langue francaise de l'Amerique du Nord.—The Tercentennial anniversary of the founding of the City of Quebec is to be marked by a series of festivals beginning July 20th next. The Association of the French-speaking physician of North America is going to convene in the ancient capital on that occasion. The sessions will be held in the buildings of the Laval University, on the 20th, 21st and 22nd of July next.

Correction.—In our report of the Post-Graduate Clinic held at Toronto General Hospital on Saturday, March 28th, 1908, and which report appeared on pages 286, 287, 288 and 289 of our May issue, we regret that, through a printer's error, Dr. Duncan Ander-

son was reported to have administered to one of his patients nine centigrammes of Stovaine. This should have read six centigrammes, and Dr. Anderson tells us that he has never administered in any one case a larger preliminary dose than seven centigrammes of this drug. We regret the error made.

Muskoka Sanatoria Medical Staff.—W. B. Kendall, M.D., C.M., L.R.C.S., L.R.C.P., Physician-in-Chief of the Muskoka Cottage Sanatorium, has been appointed Physician-in-Chief of both the Cottage Sanatorium and the Muskoka Free Hospital for Consumptives, and C. D. Parfitt, M.D., M.R.C.S., L.R.C.P., Physician-in-Chief of the Free Hospital since its opening in 1902, becomes Resident-Consultant of the two Sanatoria, each giving his entire time and effort to these institutions. The medical staff will also include a trained resident pathologist and two assistant doctors, together with a staff of specially trained Nurses.

The All-Conquering Kimono.—The old-fashioned wrapper has been succeeded by the all-conquering kimono, both in the seclusion of one's bedchamber and in the semi-privacy of home in the forenoon; notes *The Delineator*. The tea-gown, while equally conducive to ease and comfort, is a step nearer formality. Like the shirt-waist, the kimono develops in staying power as the seasons pass. It is convenient to slip on and off; it is comfortable to luxuriousness; and in the Americanized form it is certainly graceful. The pointed sleeve is the latest development, and the arm-hole revers, or mandarin strap, as it is sometimes called, adds an effective touch.

Special Number of the Boston Medical and Surgical Journal.—The *Boston Medical and Surgical Journal*, of May 7, in doing honor to Dr. Heber Reginald Fitz, Hersey Professor of the Theory and Practice of Physics in Harvard University, has taken a graceful and commendable course toward one whose contributions to medical literature have been both numerous and important. In keeping with its dedication, the communications in this number of the *Journal* are made by Professor Hersey's House pupils at the Massachusetts General Hospital, and deal in a scientific manner with many of the newer subjects now finding their way into medical literature. There being twenty-six such articles, the *Journal* is veritably a report of recent advances in medical science.

Medical Emergencies.—The National Volunteer Emergency Service, instituted in 1900, has recently been re-organized by the election of Dr. James Evelyn Pilcher, the distinguished editor of *The Military Surgeon*, as its Director General, and Dr. F. Elbert Davis, of New York, as its Adjutant General. Its work will be

conducted along military lines, the details being worked out in three separate Corps, a First Aid Corps, a Public Health Corps, and a Medical Corps—the latter consisting of physicians, with rank from Lieutenant to Colonel, according to length of service, to whom are afforded special opportunities for emergency training. It includes among its personnel a large number of notable personages, and is rapidly extending its membership throughout the country. Full details regarding the Service and its great work may be obtained by addressing Director General Pilcher at Carlisle, Pa.

Summer Courses.—The only holidays recognized at the Philadelphia Polyclinic are Christmas and the Fourth of July, and the dispensary work never stops during the summer. In some of the departments, notably clinical medicine, surgery, dermatology, diseases of children, and diseases of the ear, the attendance is quite as heavy as during the winter months, and affords plenty of opportunity for clinical study. The classes are small and the teaching in the dispensaries is, therefore, carried on in the most informal manner, in order to bring the student into close touch with his work. Although, owing to weather conditions, the operative courses have to be discontinued during the summer, the laboratory of clinical pathology and the pathological laboratory are open during the early part of the summer, and courses in these branches are given until August 1st.

The Physician's Library.

BOOK REVIEWS.

Surgical Therapeutics. By EMERY LANPHEAR, M.D., Ph.D., LL.D., St. Louis, Mo., Professor of Surgery, Hippocratean College of Medicine, Formerly Professor of Operative Surgery in the Kansas City Medical College, and Professor of Surgery in the St. Louis College of Physicians and Surgeons. Chief Surgeon to the Woman's Hospital of the State of Missouri. Chicago: The Clinic Publishing Company. 1907.

We have not followed the advice of the author and read his book through, because there were other things to do, and also because, as the subjects treated of vary, as soon as curiosity about one theme was sated, we hied to another and proceeded to extract the honey from it, without reference to its position in his book. Dr. Lanphear's book contains a lot of good things—is not a lexicon, nor a compend of predigested food for surgical weaklings, but a tonic to the brains of men who have travelled along some of the same roads as the author. J. J. C.

Diseases of the Breast with Special Reference to Cancer. By WILLIAM L. RODMAN, M.D., LL.D., Professor of Surgery in the Medico-Chirurgical College of Philadelphia; Professor of Surgery in the Women's Medical College of Pennsylvania; Surgeon to the Medico-Chirurgical Hospital, The Women's College Hospital, The Philadelphia General Hospital, The Jewish Hospital, and to the Presbyterian Hospital; Fellow of the American Surgical Association; Membre de la Societe Internationale de Chirurgie, etc. With 69 plates, of which 12 are printed in colors, and 42 other illustrations. Philadelphia: P. Blakiston's Son & Co, 1012 Walnut St. 1908.

In this work there is a large collection of useful and interesting matter regarding the breast and the various conditions met there. The anatomy of the breast, and especially of its lymphatic connections, is carefully gone into by Charles W. Bonney. His statistics collected with regard to carcinoma, and his method of operating hold out considerable hope to the unfortunate who finds herself afflicted with this dread malady. He is hard on the physician who undertakes to scatter the tumor by internal medication, and is likewise caustic in his remarks regarding the trypsin-amyllopsin

and is not less severe on the treatment by X-rays before operation. This certainly is as it should be, for oftentimes valuable time is lost which makes the possibility of cure very much smaller. The work is readable and well written, although occasionally one meets with something that grates upon one's finer feelings, for example, when he speaks of Sir James Paget as "Sir George." It makes one think that the proof-reading was not as carefully done as it might have been.

At the present day it appears that a book on a medical or surgical subject must, in the eyes of the public, cost five dollars or nothing, and it usually is the five dollars, whereas this particular book might have been condensed into a much smaller space. This is one of the faults of the text-book of the present day, that there is a tendency to padding and particularly to large spacing.

Dr. Rodman was impressed with the value of work along this line when interne to the late Dr. Gross, and naturally after 25 years his opinion should be one worth following. s.

Proceedings of the Royal Society of Medicine. Vol. I., No. 6. April, 1908. Longmans, Green & Co., New York, Calcutta, Bombay. 1908. Price, seven shillings and sixpence net.

The April issue of this excellent monthly journal is a worthy successor to the preceding numbers. It includes the same sections as referred to in past reviews, some of the articles being particularly good. Among the contributors we find such men as G. W. Dawson, F.R.C.S.I.; W. S. Fox, M.D.; H. Radcliffe Crocker, M.D.; J. H. Sequeira, M.D.; J. Goodwin Tomkinson, M.D.; E. G. Graham Little, M.D.; J. Dundas Grant, M.D.; Arthur Latham, M.D.; F. Parkes Weber, M.D.; H. MacNaughton Jones, M.D.; Donald Armour, F.R.C.S., and J. Milne Bramwell, M.B.

We have just received word from the Secretary of the Royal Society of Medicine that the criticism which appeared in this *Journal* (and which we offered in the kindest spirit) when we reviewed Vol. I., No. 1, of the *Proceedings*, viz., that we considered it unwise that the *Proceedings* be offered for sale to the lay public, has had effect and that the Society never intended that the volumes be sold to any but members of the profession, the error occurring through a misunderstanding with the publishers.

The Everyday Diseases of Children and their Rational Treatment. By GEORGE H. CANDLER, M.D. The Clinic Publishing Co., Chicago, Ill.

The author has noted many practical points in his professional career, which he gives to the profession as useful hints to treatment. Many may find it useful.

A. J. H.

Practical Dietetics. With Reference to Diet in Disease. By ALIDA FRANCES PATTEE, Graduate Boston Normal School of Household Arts; late Instructor in Dietetics, Bellevue Training School for Nurses, Bellevue Hospital, New York City; Special Lecturer at Bellevue, Mount Sinai, Hahnemann, and the Flower Hospital Training Schools for Nurses, New York City; St. Vincent de Paul Hospital, Brockville, Ont., Canada. 12mo, cloth. 300 pages. Price, \$1.00 net; by mail, \$1.00; C.O.D., \$1.25. New York: A. F. Pattee, publisher, 52 West 39th Street.

Thoroughly practical and comprehensive, about describes Miss Pattee's book on dietetics. It is written *by a nurse for a nurse*, and should be adopted by the different hospital training schools without hesitation. It puts in attractive form the result of up-to-date and scientific nursing.

Hypnotic Therapeutics in Theory and Practise, with numerous illustrations of Treatment by Suggestion. By JOHN DUNCAN QUACKENBOS, A.M., M.D., author of "Hypnotism in Mental and Moral Culture," "Practical Physics," etc. New York and London: Harper & Brothers, Publishers. 1908.

Most physicians and men of broader views cannot but stop at times and wonder where the "demarkation line" which separates sanity from insanity will stop. It is simply appalling the multitudinous phases which characterize mental conditions of human beings at the present day. They are so numerous and blend so delicately one into another that every observer has added some new disease name to the already overstocked vocabulary. That Hypnotic Therapeutics or Suggestive Therapeutics is making vast strides is evidenced by the abundant literature that is being published and circulated at the present day. That a great many neurotic ailments can be and are cured by suggestion is true, but I am a little skeptical yet as to whether organic disease, such as diabetes mellitus, can be cured. The author has compiled a book of over three hundred pages which will interest many.

A. J. H.

Minor Medicine. By WALTER ESSEN WYNTER, Middlesex Hospital, London. Sydney Appleton, publisher.

This is a most valuable book on the lesser ailments, which, after all, make up the major part of one's practice. The initial chapter deals with such subjects as "A Bilious Attack," "Heartburn," "Hiccough," "Constipation," "Fissure and Hemorrhoids." The second chapter includes, "Baldness," "Freckles," "Warts," "Pimples," "Chilblains," etc. Chapter IX is on Diet, including "Alcohol," "Tea," "Coffee" and "Milk." The

author concludes with a formulary and an index. The text is carefully written and is admirably adapted to the wants of the young physician.

E. A. M'C.

The Halo. By BETTINA VON HUTTEN, author of "Pain," "Pain Decides," etc. With frontispiece by B. MARTIN JUSTICE. Toronto: William Briggs. 1907.

The readers of Bettina Von Hutten's charming novels are unanimous in praising her latest tale, "The Halo." The story is built on society life in England, and is full of dramatic situations. These features, coupled with its excellent literary form, make it a very readable novel.

J. J. C.

The Horse: Its Treatment in Health and Disease, with a complete guide to breeding, training, and management. Edited by PROF. J. WORTLEY AXE, M.R.C.V.S., ex-President of the Royal College of Veterinary Surgeons; late lecturer at the Royal Veterinary College and at the Agricultural Colleges of Downton and Wye; Chief Veterinary Inspector to the Surrey County Council; Consulting Veterinary Surgeon to the British Dairy Farmers' Association; Author of "The Mare and Foal," "Abortion in Cattle," "Anthrax in Farm Stock," "Examination of Horses as to Soundness," "Glanders: Its Spread and Suppression," "Swine Fever," "Lithotomy, or the Removal of Stone from the Bladder of the Horse." Published in nine volumes. Divisional Volumes VI. and VII. London, England: The Gresham Publishing Co., 34 Southampton Street, Strand. 1907. Canadian agents: D. T. McAinsh & Co., Bay and Adelaide Streets, Toronto.

Vol. VI. has as its frontispiece a splendid colored plate of the Clydesdale stallion, "Holyrood," owned by the Marquis of Londonderry. It is a wonderfully good picture of a noble animal. Other full-page plates are given throughout the book, of the Deep Muscles of the Neck and Trunk, Malformation of the Legs, Dislocation of the Patella, Laminitis, the Arab stallion, "Mesaoud," and the chestnut hunter gelding, "Artist." Volume VI. completes The Muscular System, considers Dislocations, Diseases of the Feet, Defective Action and Injuries arising out of It, Wounds and Their Treatment, Ulcers, First Aid to the Sick and Injured, the volume closing with 50 pages on Medicines and Drugs. Divisional Volume VII. includes 14 full-page plates, of which 4 are colored. It also has throughout it a large number of text illustrations, adding materially to its value. The first thirty pages are devoted to Medicines, Prescriptions, and their administration. The author then deals with such subjects as The Nurse, The Sick Box, Invalid Food, Poulticing, Mustard Plasters, Bandaging, Blistering and

allied subjects. He then goes into Poisoning, Corrosive and Narcotic Poisons, after which he considers at some length Veterinary Hygiene; Stables and Their Construction, Lighting, Ventilation, etc; Food, Its Selection and Preparation, Digestion; Water, and Individual Hygiene. Prof. Axe closes Vol. VII. with 30 pages on Operations, including Neurotomy, Tenotomy, Castration, Passing the Catheter, Ovariectomy, etc.

Woman. A Treatise on the Normal and Pathological Emotions of Feminine Love. By DR. BERNARD S. TALMEY, Gynecologist to the Yorkville Hospital; former Pathologist to the Mothers' and Babies' Hospital. For Physicians and Students of Medicine and Jurisprudence, with 23 drawings in the text. Second enlarged and improved edition. Practitioners Publishing Company, 55 West 126th St., New York.

This is, no doubt, one of the best books that has come out dealing with the sex problem, and will be of great use to the physician in giving pointed advice on a subject regarding which they are frequently consulted. Price, \$3.00. Sold only to the medical and legal profession.

A. J. H.

An Index of Treatment by Various Writers. Edited by ROBERT HUTCHISON, M.D., F.R.C.P., Physician to the London Hospital, and Assistant Physician to the Hospital for Sick Children, St. Ormond Street, and H. STANSFIELD COLLIER, F.R.C.S., Surgeon to St. Mary's Hospital; Joint Lecturer on Surgery in St. Mary's Hospital Medical School, Surgeon to the Hospital for Sick Children, St. Ormond Street. Revised to conform with American usage by WARREN COLEMAN, M.D., Professor of Clinical Medicine and Instructor in Therapeutics in Cornell University Medical College; Assistant Visiting Physician to Bellevue Hospital, New York. New York: Wm. Wood & Co. 1908.

The authors have accomplished at least one thing in writing this book, and that is to present the busy practitioner with a volume of reasonable size covering a wide subject. Too few writers of medical literature realize how important it is not to make the volume too large and cumbersome, but to present their subject so digested and boiled down as to be readable and therefore attractive. The editors of "An Index of Treatment" are to be congratulated upon the outcome of their labors. They include in their volume the work of quite an army of contributors, including, among others, such men as Sir Thos. Clifford Allbutt, Byron Branwell, Chas. W. Cathcart, A. H. Cheatle, Thos. S. Clouston, Geo. A. Gibson, Wm. J. Gow, L. G. Guthrie, Jas. E. Lane, Wm. Hunter, Edmund Owen, Robert W. Philip, Robert Saundy, Sir

Jas. Sawyer and Norman Walker. The book is arranged alphabetically as to subjects, though we think that the publishers have made a mistake in using such small type. W. A. Y.

The Diagnosis and Treatment of Pulmonary Tuberculosis. By FRANCIS M. PORTENGER, A.M., M.D. Professor of Clinical Medicine University of Southern California. Pp. 377. 42 charts and illustrations. William Wood & Co. New York. 1908. Price, \$3.50.

We must confess to having read this work with pleasure. It is a capital monograph, covering well the clinical aspect of the disease. The diagnosis of the disease in early and advanced stages is treated in separate chapters. The various methods of diagnosis are clearly stated, and as in other chapters throughout the book the author's personal experience is brought prominently before the reader. In these chapters more space might have been given to Kromp method of percussion of the apices. The diagnosis on page 20, which illustrate both this and the lowering of the apex from infiltration are very poor, giving one the impression of being photographed from a normal chest which is slightly asymmetrical through muscular action. One gathers that the author is familiar with Turbau's work on diagnosis, and yet he states on p. 89 that he has seen no reference in the literature to the occasional difficulty in locating the apex beat in cases of advanced tuberculosis. Turbau ascribes this to interposition of the left lung, when the left thoracic viscera are drawn to the right through contraction of the right lung.

There is a very practical paragraph on thermometry in diagnosis. The use of the X-rays in diagnosis is dismissed in a few words in spite of the value placed upon it by many clinicians.

Careless copying from another author has given us, on page 112, a startling table of deaths from consumption in the village of Falkenstein, of 5 to 33.3 per 100 population, when the figures should read as percentages of deaths from all causes. On the same page he gives the mortality from consumption in Davos as 9.7 per thousand population, as compared with 22.5 per thousand in Germany. This should read per ten thousand.

Tuberculin therapy is discussed at length. The author shows a wide knowledge of the various tuberculins and their clinical application. The work of Wright and Bulloch is quoted at great length, though the author does not consider the estimation of the opsonic index at all necessary in the administration of tuberculin. Dosage and intervals are both considered, making these chapters a safe guide to the practitioner wishing to use tuberculin therapeutically.

His initial dose of old tuberculin, 1-10 to 1 milligram, is

larger than most therapeutists care to use, and in many cases would produce a reaction.

Portenger expresses himself strongly against the use of breathing exercises in any form while disease is yet active.

A work on pulmonary tuberculosis which goes fully into the administration of the tuberculins is most acceptable at present, and we bespeak for this a wide circle of readers. J. H. E.

La Pratique de la Médecine. Par WILLIAM OSLER, Professeur Royal à l'Université d'Oxford. Traduction Française sur la 6e Edition par les docteurs M. Salomon, Chef de la Clinique à la Faculté et Louis Lazard, Ancien Interne de l'Hopital de Rothschild. Préface de Pierre Marie, Paris: G. Steinheil, Editeur, 2 Rue Casimir-Delavigne. 1908.

In glancing through more than one of the chapters of Dr. Osler's work, in its French dress, one is favorably impressed with the elegance of the translation. An occasional lapse is noted, which simply proves that a Frenchman, no matter how scholarly he may be, cannot be perfect in the peculiarities of the English language. In the article on Berí-beri (p. 264, 8th line from the bottom of the page), "*Neuf* se sont produits parmi les 200 employés de l'hopital," should have been *Aucun cas ne s'est produit parmi les 200 employés de l'hopital.*

Words of some importance are omitted, viz., in the same chapter, the words "Nearly all among the Philippine Scouts" are omitted and not translated.

These, and some other little blemishes will, doubtless, cease to be visible in a second edition which, we hope, may soon be required as a reward for the very laudable enterprise of the French publisher, M. G. Steinheil.

Dr. P. Marie, in a highly complimentary preface, praises Dr. Osler for his ability as a medical teacher. The two volumes, bound in paper, sell for 25 francs (\$5), bound in one volume, the work is well worth \$6, and should be welcomed by physicians who read the French language. J. J. C.

The Abdominal and Pelvic Brain with Automatic Visceral Ganglia. By BYRON ROBINSON, B.S., M.D., Chicago, Ill. Hammond, Ind.: Frank S. Betz.

This bulky volume is essentially a collection of papers published in various journals, within the last fifteen years. The enormous amount of work which their preparation must have entailed, the tireless industry and the originality of the investigator, the ample opportunities at his disposal and the logical arguments by which his views are sustained stand out prominently and impress even the most casual of readers.

How it could have been possible to spin out to nearly 700 pages a study of the anatomy, physiology and pathology of the solar plexus and of the cervico-uterine ganglia might prove a difficult problem to one even with the pen of a ready writer. If the said ready writer were disposed to be critical he might find it in his heart to ask if the practical results attained are in any fair proportion to the labor expended upon them.

To this we would make reply that science, for its own sake, is good, and that the grim utilitarian takes rank below the honest and accurate investigator. Interesting as Dr. Byron Robinson always is, we have sometimes thought that he stopped just a little, a very little, short of success in dealing with the questions which have so long engaged his attention and upon which he has written at such learned length.

A profusion of original wood cuts assist in making clear the text and add materially to the interest of the book. N. A. P.

The Operations of Surgery. Intended especially for the use of those appointed recently on a hospital staff, and for those preparing for higher examinations. By W. H. A. JACOBSON, M.Ch. (Oxon.), F.R.C.S., Consulting Surgeon Guy's Hospital; and R. P. ROWLANDS, M.S. (London), F.R.C.S., Assistant Surgeon and Surgeon to the Orthopedic Department, Guy's Hospital; Joint Teacher of Operative Surgery in the Medical School. Fifth Edition. With seven hundred and seventy-seven illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1908.

Those who are working for higher examinations or have recently been appointed to important hospital positions have long considered this splendid work as fulfilling a very great want. The book is essentially written for this class of practitioners, and is one which they, as well as all those who follow surgery, will find of extreme value. The mere fact of there being seven hundred and seventy-seven illustrations speaks well for the desire of the authors to present everything in as clear a manner as possible. The authors again adopt the system of dealing with each region separately, even though former critics had found fault with this method. It is almost impossible in a work of this size to attempt any critical review. Practically everything known to modern surgery is given, and all the methods that experience has proved of value are discussed. The authors have been very careful in their endeavor to give due credit to the work of others, and have presented two large volumes, each of which contains over nine hundred pages, which will remain a monument to the surgery of English writers. We think the book will be found of far greater use to the average general practitioner, who is sometimes called upon to do important

operative work on a few hours' notice, than the authors seem to think. It is just the type of book a general practitioner in a small town wants to read the night before some operation has forced itself on him, the various methods of which he is not as familiar with as he wishes to be.

P. G. G.

Messrs. Reed & Carnrick, the well-known firm of manufacturing chemists, at Jersey City, N.J., have recently sent out to the profession a most interesting pamphlet in celebration of the 100th anniversary of McDowell's operation for ovariectomy. The pamphlet is illustrated with original etchings of the home of Dr. J. Marion Sims, at Mount Meigs, Ala., 1836; Dr. J. M. Sims' Statue, Bryant Park, New York; Harvard Medical School, 1908; Holden Chapel; College of Physicians and Surgeons, 1813; Office of Dr. Sims, 1840-1853; Old Charity Hospital, 1815, and the Rockefeller Institute for Medical Research. The pamphlet is full of most interesting historical material regarding Dr. Ephraim McDowell, Dr. J. Marion Sims, the First Medical School in New York, opened 1767, and other subjects of equal interest. Any practitioner who does not receive a copy should write for one, as it is worthy of preservation.

Saunders' Forthcoming Books.—Messrs. W. B. SAUNDERS COMPANY, medical publishers, of Philadelphia and London, announce for publication before June 30th a list of books of unusual interest to the profession. We especially call the attention of our readers to the following: Bandler's Medical Gynecology, treating exclusively of the medical side of this subject; Bonney's Tuberculosis, Volume II. Kelly and Noble's Gynecology and Abdominal Surgery, Volume IV. Keen's Surgery, Gant's Constipation and Intestinal Obstruction, Schamberg's Diseases of the Skin and the Eruptive Fevers, John C. DaCosta, Jr.'s, Physical Diagnosis, Todd's Clinical Diagnosis, Camac's Epoch-Making Contributions in Medicine and Surgery. All these works will be profusely illustrated with original pictures.