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Original Contributions.

THE NEUROTIC AFFECTIONS OF THE RESPIRATORY SYSTEM.*

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Mr. Chairman and Gentlemen.—My purpose in presenting this paper is two-fold, first to discuss briefly this class of respiratory disease as a type distinct which perhaps has not received the general attention which its importance demands; and second, to emphasize the possibility, I will not say probability, of these neurotic conditions becoming an important element in the inflammatory diseases of the respiratory tract.

In dealing with a subject such as this, one cannot afford to be dogmatic, but fortunately we have much data from which we may draw safe conclusions. These respiratory neuroses manifest themselves as vasomotor disturbances, muscular spasm, trophic lesions and rhythmic irregularities, consequent upon a disturbance of the perfect nerve equilibrium of health, either an increased or lessened excitability of the generating or inhibitory centres, or excessive stimulation. Fortunately the range of activity of these important centres is considerable, but where an over-excitability of the cell exists, whether of generation or of inhibition, and its function is impaired, and we have superadded an over-stimulation, we may expect untoward effects.

Such pathological conditions of the nerve cells are found in the neurotic, the anemic, the ill-nourished, the over-wrought, those exposed to bad hygienic surroundings and unfortunate environ-

*Read before the Toronto Medical Society, January, 1907.

ment—all conditions, in fact, that tend to the production of nerve debility. On these or even on healthy centres, we have, for example, a deluge of toxins from the gastro-intestinal tract, irritating or paralysing the cells, and all sorts of nerve explosions occur—a vomiting, a polyuria, an urticaria, a migraine or a convulsion. In infancy or early childhood, owing to the late maturity of the inhibitory centres, they are more liable to occur.

The pneumogastric nerve—the afferent nerve, chiefly acceleratory, to the respiratory centre, the afferent inhibitory, to the cardiac centre, the afferent inhibitory to the vaso-motor centre, the sensory and motor nerve of the larynx, the motor nerve of the pharynx, the sensory and motor nerve of the esophagus and stomach and motor nerve to the intestine, forming largely, as it does, the great pulmonary and cardiac plexuses, intimately connected with the great sympathetic system and cerebral centres, both cortical and basic, the vagus becomes the active partner in the neuroses of the respiratory tract.

Most of the lesions are irritative rather than destructive ones, as evidenced by their transitory character.

If the irritation be peripheral, *e.g.* in the digestive tract, the discharge may be manifested there, perhaps as a colic or a diarrhea, but not necessarily so: Should the vaso-motor centre be irritated, peripherally or centrally, the discharge may take place through any or many of its efferent branches, following the lines of least resistance.

Again, the location of the lesion may be determined by some local irritation (Osler). For example, in the eczemas of infancy, during the dentition, when gastro-intestinal disturbances are common, the location of the manifestation is determined by the local cutaneous irritation, but if the local irritation be laryngeal or bronchial, then the manifestation of the neurotic disturbance will be a laryngeal edema, a laryngeal spasm, a turgescence of the bronchial mucosa or a spasm of the bronchial muscles, to which may be added an infection instituting an active inflammation.

It is a matter of common observation, that infants during the period of dentition are subject to alternating attacks of eczema and bronchitis, or eczema and diarrhea, and with the laity eczema is looked upon as a safety valve, during this critical period of child life.

There is more than a grain of truth in the proverb, and probably these are vaso-motor disturbances and their location determined by some coincident irritation.

This is illustrated very clearly in a paper on "The Visceral Manifestations of the Erythema Group of Skin Diseases," by

Osler, to which reference will be made later. Of trophic and spasmodic affections I wish only to speak for a moment.

Certain pneumonias have been observed to follow section of, or destruction of the vagus by tumor or other cause, and were supposed to be trophic in character, the vagus possibly containing trophic fibres; although by others they are thought to have been inspiratory pneumonias, from laryngeal paralysis.

The spasmodic affections are evident neuroses as seen in hysteria and epilepsy. The ordinary spasmodic croup, while there is a primary catarrhal irritation as the determining factor, is reflex, relieved usually by emesis or rectal flushing. Laryngismus stridulus, while commonly associated with rickets, is in no way a part of the disease, but dependent upon the mal-nutrition and irritability of the nerve centres, found in this and similar conditions; and all such spasmodic affections are simply localized manifestations of the condition of nerve instability which might result in general convulsive seizures in each individual case.

Respiratory *rhythmic* affections are essentially neurotic. The Cheyne-Stokes breathing in its three varieties is the most striking, and whether occurring in cardiac disease, uremia, cerebral disease, or meningitis, or as it occasionally does in the acute infectious diseases especially in children, is a central nerve affection, and due to the lessened excitability of the respiratory centre from toxemia or from pressure, the accelerated breathing being due to the over-stimulating qualities of the asphyxial blood; the centre maintaining its rhythmic function, only acting in a larger rhythm, working under altered conditions (Gowers).

The significance of the phenomenon is of more fatal import in cerebral lesions than in toxic ones.

A slow respiration is sometimes seen in pneumonia as in other toxic conditions, where toxemia is profound, from paralysis of the respiratory centre.

I well remember the case of a little child suffering from a sub-acute ileocolitis, who, although not apparently ill enough to cause her parents alarm, showed respiratory difficulty coming on in the early morning, during sleep. She was noticed to be breathing slowly and with visible effort, slight dilation of the alae nasi and slight heaving of the shoulders. She played about the nursery that day and made no complaint, but the respiratory difficulty persisted. The following day she went into collapse and died in the early morning of the third day after the onset of the respiratory distress. Physical examination of the nasal passages, the larynx and the lungs was negative. This was, I believe, due to the over-powering of the respiratory centre from acute ptomaine poisoning.

On the other hand we often see in children suffering from

gastro-intestinal or other febrile disturbance, with no pulmonary complication, a respiration rate of from 60 to 80 a minute, which can only be due to an irritation of the respiratory centre or, as suggested by Rachford, an attempt at heat dissipation through a polypnoeic centre. Both of the above contradict the dictum, that disturbance of the pulse respiration ratio means pneumonia.

Whether bronchial asthma be due to muscular spasm or vaso-motor turgescence, all are agreed that "it is a neurotic affection, that the attack may be excited by irritation of the mucosa in any part of the respiratory tract, and indirectly by reflex influences from stomach, intestines or genital organs" (Osler).

Hare, in the *New York Med. Jour.* of April 7th, 1906, argues strongly and at length in favor of the vascular theory.

Morrison, in the *Br. Med. Jour.*, Nov. 25, 1905, just as enthusiastically supports the theory of muscular spasm, of bronchioles and muscles of inspiration, with some tumefaction.

The great resemblance in many of their features between hay-fever and asthma, as pointed out by Sir Andrew Clark, is generally recognized, and the two diseases often alternate.

Accepting the neurotic origin of these diseases with their vaso-motor features, leads up to the consideration of other conditions, similar in character and similar in origin. They may be stated briefly as edema and turgescence of the mucosa of the respiratory passages, of reflex origin, due to direct or indirect irritation of the vaso-motor centre.

Time will not permit of the recitation of cases in detail, but permit me to cite in a summary way a few cases illustrative of these conditions.

Case I.—Urticaria, cutaneous, buccal, laryngeal and bronchial, from use of quinine.

E. R., aged 28. A teacher of nervous temperament, subject to attacks of migraine.

Having forgotten her idiosyncrasy, prescribed in the early morning sulphate of quinine in 2 gr. doses. Shortly after taking the first capsule, complained of itching of the skin, fullness of the throat, and some dyspnea, which soon became alarming to herself and to her friends. An hour later I found her decidedly cyanosed with marked dyspnea, hoarseness and some cough; the irritation of the skin was abating, but the rash was still evident on arms and chest; the fauces were red and turgid, and throughout the lungs were abundant sibilant and fine mucous rales.

The distress soon began to subside, but the cough continued with free expectoration of frothy mucus for some hours, disappearing entirely by evening.

Case II.—Faucal and laryngeal urticaria from eating strawberries. D. A. McD., a clergyman, aged 50, having had a similar

experience some 10 years previously, had refrained from eating strawberries absolutely. On being chided by his hostess, who volunteered to take all responsibility in the matter, he ate his share of the fruit set before him. Before leaving the table he had a feeling of constriction in the throat, difficulty in speaking and a sense of suffocation; the dyspnea became extreme and soon he became unconscious. A physician, one of the guests present, told him afterwards that he was deeply cyanosed, had remained in this extremely critical condition for nearly an hour, and was relieved by the effective administration of an emetic. Whether this was a laryngeal affection, purely, or whether the bronchial mucosa was involved, I cannot say.

Case III.—Evidently one of vaso-motor turgescence of the bronchial mucosa, only relieved by free purgation. Recurring attacks.

M. J., aged 20 months, a large, well-developed child, but somewhat anemic, mother decidedly neurotic, and indulgent to her child in the matter of appetite. February 10th, 1902, at 7 p.m., child coughing, an occasional, dry, short cough. At 9 p.m., when first seen by me, cough incessant, but child running about the room, apparently quite comfortable. Pulse 96, temp. per rectum 98.6 F. Respirations 28. On physical examination, nothing could be heard, save a few moist and fine sibilant rales. Thought the case to be one of simple bronchitis, of no severity. Before preparing to leave the house noticed the respirations to be more rapid and examined again. Pulse 120. Respiration 40. Fine, moist rales more abundant, with slight cyanosis. Ordered a soap and water enema to be given at once, which emptied the rectum of a large load of fecal matter. Applied warm mustard packs about the thorax, improvised a tent over the cot for the using of benzoin vapor, administered 2 grs. of calomel, to be followed by repeated doses of mag. sulph. Ordered also belladonna and strychnine. By this time, 10 p.m., the child was decidedly worse, becoming drowsy and indifferent. Pulse 150. Respirations 80. Marked cyanosis, but no laryngeal stridor or asthmatic breathing. Abundant, small, moist, almost crepitant rales to be heard over the whole lung area. Had recourse to active stimulation, with aromatic spirits of ammonia and whiskey. By midnight the child could hardly be roused and it was with great difficulty that we could administer the saline. The face was pale and the surface of the body felt cold and clammy, respirations 90 to 96. Temp. per rectum below 100 deg. F. Pulse from 180 to 240, that is from 30 to 40 to the 10 seconds. The little one began to respond somewhat to the stimulation, but her condition remained much the same till 4 a.m., when she had a copious, offensive bowel movement. She began to improve at once, respira-

tions became slower and her pulse rate abated. At 10 the following morning she was bright, no cyanosis, respirations 40, pulse 130. Abundant mucous and sonorous rales were to be heard, but there was no evidence of consolidation. Her improvement was rapid. By the following day all physical signs had practically disappeared.

Three weeks later the child had a recurrence, very similar in its onset and progress, but of shorter duration. The same medication was adopted, the attack subsiding after free purgation with calomel and salines, which were administered early.

A third attack a week later was aborted by purgation alone, assisted by a large flushing enema, given high up in the bowel, but not before it had become alarming.

Having learnt by painful experience, the mother exercised more discretion in the feeding of her baby and was saved further repetition.

Case IV.—Angio-neurotic edema frequently recurring, affecting face, hands, fauces, palate and larynx, with one attack of extensive cutaneous urticaria, one attack of laryngeal edema with bronchitis and severe colic.

E. L. aged 45, remarkably neurasthenic, a morphia taker, acknowledges taking 8 grains a day, moderately alcoholic, an excessive candy eater, anemic, flabby, irregular in his habits and leading a most unnatural life. In April 1906 had an extensive cutaneous urticaria lasting some days, with considerable edema of face, especially left side. May 15. Was called hurriedly by his wife, who said her husband had a convulsion. Found it to be a violent colic; there was marked facial edema and dysphagia; the fauces were pale and edematous, the velum palati and uvula extremely so. There was a definite bronchitis with slight hoarseness which increased as the day went on, so that during the succeeding night there was marked dyspnea. Medication consisted of free purgation with calomel and sulphate of magnesia cold to the larynx and the use of an astringent spray with strychnine and atropine hypodermically.

The following morning the dyspnea was less, and in the course of a day or two had with the faucal edema entirely disappeared. The bronchitis was of moderate severity, but of no unusual character. He has had several similar attacks and invariably consequent upon more than usual dissipation, with digestive disorder.

Case V.—A physician of this city reports to me a case of three successive, alternating attacks of asthma and urticaria, the former being relieved as the latter appeared, and due on each occasion to eating unwisely of old cheese.

That these conditions are vaso-motor disturbances and of neurotic origin, in my mind, there is no doubt. Case III., that of

the little child with the three severe bronchial attacks, is one of comparative rarity. It is one of these cases called by Holt "Attacks Resembling Acute Bronchitis," by Rotch "An Unusual Form of Acute Bronchitis" and closely resembles, and, I believe, is identical with what Nothnagel refers to as "Asthma Dyspepticum." The rapid onset, the prostration, the cyanosis, the stupor, the rapid breathing (unlike asthma), the physical signs and the rapid subsidence, make a very typical picture. Nothnagel attributes it to gastro-intestinal disturbance, but is not prepared to say whether it is of purely reflex origin, as maintained by Henoeh, or due to the action of toxins upon the vaso-motor centre, toxins absorbed from the gastro-intestinal canal, or auto-intoxications from disturbance of the metabolic processes. He does not recognize it as an asthma and regrets the term. Rachford, unhesitatingly, pronounces certain asthmatic attacks of children due to vaso-motor turgescence of reflex origin from the upper air passages or to auto or other intoxications, and refers to these very cases spoken of by Holt as illustrative of this condition. In the case cited above the source of the irritant was the gastro-intestinal canal, either of reflex or toxic nature, as evidenced by the immediate relief, in the three successive attacks, by free purgation and cleansing of the tract.

Case IV., that of the angio-neurotic edema, with bronchitis, is another of those cases dealt with by Dr. Osler in the paper mentioned above, the third of a series of three, two of which appeared in the *Amer. Journ. of Med. Sci.* of 1895 and 1904.

He gives a series of 29 cases of all ages and of both sexes, and divides the complications into two groups, first, the angio-neurotic, to which belong the swellings of the fauces, the edema of the glottis, the changes in the bronchial mucosa, and the colic; second, the inflammatory, including endo- and peri-carditis, pleurisy, pneumonia and nephritis. In 17 of the cases there was urticaria; in 25 a colic, which he ascribes to localized edemas in the mucosa of stomach or bowel, in 2 a bronchitis, in 3 a pneumonia, one following immediately upon the erythema, in one a spasmodic croup, and one case of persistent catarrh of the small tubes, leading to emphysema. He refers to a list of 39 cases of erythema, by Dusch and Hoche, in which pleurisy was mentioned twice, bronchitis once and pneumonia twice (both fatal), and to the 70 cases collected by Lewin of erythema nodosum, in which were four deaths from pneumonia.

Hjalsted, in the same journal, of 1905, in writing of "Angio-Neurotic Edema of the Upper Respiratory Tract," reports recurring attacks of edema of the larynx in connection with attacks of urticaria and localized edemas in other situations, and quotes from the *Brit. Med. Journ.*, June 14th, 1902, the remarkable

Griffiths case, in which two persons, father and daughter, died of edema of the larynx in this disease, and refers at length to an unfortunate series of cases where death followed closely upon the injection of the prophylactic dose of antitoxin (which is frequently followed by cutaneous urticaria), and attributes the fatal result either to edema of the larynx or to a localized edema of the brain, paralyzing the respiratory centre. The late Dr. Packard, as noted by both Halsted and Osler, reported three cases in which cutaneous urticaria alternated with asthma, the one subsiding as the other developed.

Now, it appears to me that if these conditions exist as independent diseases or as complications of other affections, that it is quite possible, as I said at the outset, if not probable, that they may become a feature of no mean importance in the inflammatory diseases of the respiratory system.

In a pneumonia or bronchitis, as etiological factors we may perchance, have the neurotic temperament, the debilitated nerve cell, the disarranged nerve equilibrium, the marked hereditary tendency, as wonderfully illustrated in Osler's cases; and, if we allow, for example, toxic products, whether protein, toxin, or ptomaine, from the gastro-intestinal canal, or other viscera, to ride rampant, then, remembering the dictum that "local irritation determines the site of the lesion," surely it is possible that to the primary inflammatory trouble we may have added the neurotic one.

And again, is it not possible that a neurotic vaso-motor condition be present in the pneumonias, for example? Why the sudden onset of a lobar pneumonia? Why the crisis? Immunity cannot be established so suddenly as that. Why the rapid fall in respiration? Other inflammations do not subside so rapidly and, indeed, the physical evidences of inflammation—the dullness and bronchial breathing, etc.—persist long after the respiration rate subsides. Is not the herpes labialis suggestive in itself? Why the limitation of the disease to a lobe or a part of a lobe when the whole lung is exposed to the infection? May not the limitation be determined by nerve distribution, and may we not well be on guard against this possible weapon of a dangerous enemy?

THE BIRTHPLACE OF OPSONINS—NOTES OF A VISIT TO
SIR ALMROTH WRIGHT'S LABORATORIES AT ST.
MARY'S HOSPITAL, LONDON, ENGLAND.

BY M. D., TORONTO.

SEEING that the medical profession of the Province are watching with interest the progress of the work in the new laboratory for therapeutic inoculation, established in the General Hospital, Toronto, the following picture of the first opsonic laboratory in the world, as seen by two Toronto physicians recently, may be of interest to the JOURNAL readers:

One of the most interesting sights in the medical world of London is the laboratory of Sir A. E. Wright, at St. Mary's Hospital, where, surrounded by his assistants and students, Sir Almroth carries on his investigation of disease due to bacteria, and also puts into application his well-known methods of treatment.

It is interesting to recall that only five years ago did this movement begin, in a small, musty laboratory at the rear of the hospital; to-day Dr. Wright has so extended his work and demonstrated its usefulness to the cure of disease and the alleviation of suffering that he has now a considerable part of a large new wing of St. Mary's Hospital devoted to his particular work.

I was told that only a few years ago the attendance at his laboratory each week would be no more than a few dozen patients; now they are numbered by a few hundred; and these patients are drawn from all over the British Isles, and, in fact, from all parts of the world.

He now requires two separate rooms in which (with his staff) to carry out inoculation treatment in proper cases, and to incept the investigation of such new cases as may come from time to time.

The staff of each room consists of a chief, whose duty it is to see each new patient, begin the bacterial investigation necessary, to direct the treatment of such a case when the investigation is complete, and to carry out the line of treatment by inoculation with the appropriate vaccine. This chief has one or two assistants under his immediate orders.

Sir Almroth himself is in charge of one of these rooms for inoculation, and the patients are so alternated that he sees practically every patient once a week.

Of course, it is necessary for him to have a clerical staff to keep track of the histories of his patients.

He has what is called a routine laboratory, where four or five young men, thoroughly trained, carry out the ordinary blood and bacterial examinations required. Another large laboratory room is devoted to research, wherein the more advanced assistants and students are continually seeking for new knowledge and doing any

special investigations that may be required for a particularly difficult case.

The influx of students from all parts of the world demanded a further equipment for teaching purposes, and he has recently added another large laboratory, well equipped, which is in charge of his senior assistants, and a regular course of lectures and demonstrations is given for a period of six weeks to two months.

As adjuncts to such laboratories, he has special rooms for the preparation of bacteriological and chemical incepts—a so-called preparation room. He also has a room devoted to the preparation of vaccines, as well as several large incubator rooms.

Shortly, through donations of interested philanthropists, he will have at his disposal a dozen more beds, wherein he can take patients for observation or treatment.

It will thus be seen that St. Mary's Hospital is well leading the world in the development of this new branch of therapeutics, and it would seem to be an almost complete proof that the claims that Wright has made in respect to the successful treatment of bacterial disease by proper inoculation with vaccines was furnished by the large expenditure the authorities of St. Mary's Hospital have gone to in order to provide this immense plant for the carrying on of this treatment.

Perhaps the most striking characteristic of Wright's great clinics was the number of cases of disease that had resisted all other forms of treatment, and stood there before one's eyes restored to health.

It is difficult to go into detail with respect to these cases, if it were advisable, but we saw one-half a dozen or more terrible cases of extensive ulcerations of the limbs or the neck or the hands completely healed and apparently enjoying the best of health. Dozens of cases of infection, due to the staphylococcus, such as boils, sycosis, were apparently quite recovered. At the time of our visit they were working on one or two cases of glanders.

Numerous cases of tuberculous infection, such as epididymitis, cystitis, cervical adenitis, were under treatment.

In a general way, one could not help but be greatly impressed with the earnest conviction of Sir A. E. Wright himself, and of his numerous assistants and students, that they were carrying out thoroughly rational and scientific treatment—a treatment which from long experience with it, seemed a matter of course to them.

If you should visit Wright's laboratory at two or three o'clock in the morning, you would see anywhere from six to twelve men still working away, endeavoring to solve further mysteries in the treatment of disease.

One could not but feel that Wright's prophecy must ultimately be fulfilled, namely, that every hospital that calls itself a scientific institution must have attached to it some such laboratory as his for the rational, scientific treatment of bacterial disease.

THE CHILD-SNAKE.—MONSTROSITY WHICH HORRIFIES
—SENSATIONAL CASE.*

WITH these suggestive titles, we were furnished, by our esteemed representative at Bélen, through the *Provincia do Para*, date of 5th of August, the following story which was published, of a most surprising case of teratology.

A few days ago there was baptized at the Church of Alémquer, a child of four or five months, which represented a most curious and strange case of maternal suggestion, not only interesting, but a phenomena worthy of study. On the occasion of the baptismal ceremony, the small church was filled by the curious, among-whom was noticed Mr. Hector Araujo, of the well-known house of Goetschell, jewellers, of Conselheiro Joao, Alfredo Street, who also took this opportunity of observing this extraordinary child. A child with a perfect human form, but with the hide of the "gibois," or water-python, with its white, red, and black marks, also the scales of this repulsive reptile. The head is without hair, but covered with scales, which are quickly raised when in anger. This strange child is absolutely mute, it having never made a sound. The mother has constantly to wet the skin of the body, as the skin dries quickly, otherwise it would start to crack. Mr. Hector Araujo heard later the terrible details of the horrible phenomena, how the mother received the profound impression in the first months of gestation. Her husband, having gone fishing, quite a distance from their home, on the Arapiry River, tying his canoe to the bank, went to examine his nets. On his return to the canoe, he found an enormous python curled up inside, which he promptly killed and threw on the shore. Having done this, he re-entered his canoe, and on jumping on a board which was in the bottom of the canoe, he felt the sting of another python, the same size as the first one, which was partly hidden under the board. As is well known, there are times or seasons when the python is not a venomous snake. This happened to be to the contrary. The fisherman was in the habit of getting drunk while out fishing, so his wife the next morning started out to look for him, after having passed a disquieting night. Looking for him along the river bank she finally found him dead with the dead python coiled about him. It was this picture of horror and repugnance making such a profound impression on the mind of the woman, which made it impossible for her to forget the terrible spectacle. The birth took place under normal conditions, but there were still more desperate and unhappy moments to come to the victim of this awful occur-

* We are indebted for this translation to Dr. H. C. S. Elliot, Cobourg, Ont.

rence, to give birth to such a monstrosity, by the inexplicable and capricious mysteries of nature. There arrived yesterday afternoon, in company of the pharmacist, Mr. Alvaro Benicio de Mello, Maximiana Maria da Costa and her nine months' old son, the victim of this monstrous misfortune. He is called Manuel de Sant Anna Costa. Mr. Benicio de Mello, having read the facts in the *Provincia*, determined to make a trip to the place where the mother and this extraordinary child lived, with the intention of bringing them out and showing them to the medical profession for investigation. Having arrived in the city of Alénquer, the assistant pharmacist, Francisco Baptista, raised a subscription for the little one, amounting to 115 milreis. Mr. Benicio de Mello treated the child for its eyes, which were in horrible condition. The eyes responded to the treatment. Having arrived at Bélem, a number of reporters and other curious persons came aboard to see at close range the Child-Snake. Mr. Benicio de Mello, who is going to present the child for examination to Doctors Azevedo Ribeiro and Tertulliano Pacheco, specialists on diseases of the skin, gave out more interesting information. Whenever the child is about to feed it works the tongue, dry and vibrant, very much as is noticed in the snake. It seems perfectly happy and contented only when its mother wets a piece of cloth in cold water, and gently moistens the scales on its body. It lives as much as possible in a tub of water, and cannot stand the heat. The skin of the python is perfectly represented in every particular on the body of the unfortunate one, and does not seem to be a part of or adhering to the flesh of the child, being rather loosely attached and flaccid.

Selected Articles.

OSTEOPATHIC VERSUS DRUG TREATMENT.*

M. CLAYTON TIRUSH, PH.M., M.D., PHILADELPHIA.

A concise exposition of the important principles of osteopathy and their relation to scientific medicine:

"The most experienced surgeon knows nothing of anatomy in comparison with the educated osteopath."

"The osteopath is a physician and surgeon in the best sense of the term, thoroughly conversant with the anatomy, physiology, and pathology of the body."—*The A. B. C. of Osteopathy*, 1907.

During recent years a number of cults or sects have sprung into prominence, the cardinal features of the majority being an alleged cure of diseased states by the employment of other means or agents than drugs, which latter are decried and declared as poisonous and injurious.

Conspicuous among these is a system called osteopathy, and during the past few years, because of attempts to secure legal recognition, it has come into sufficient prominence to attract the notice of the members of the medical profession and the laity throughout the United States, as its disciples can be found in almost every village and hamlet in this country.

It has been one of the subjects for discussion at many of the local and state society meetings in the various states, especially since the osteopaths have been very active in legislative matters. There are now thirty-eight states that have laws recognizing and regulating the practice of osteopathy, and the medical profession, as a whole, has been disgracefully apathetic, and deserves no credit for permitting this official recognition without most emphatic protest.

I sincerely believe that the majority of the members of our profession possess but a vague and indefinite knowledge as to what osteopathy really is, and the great majority of us have a very imperfect conception of its so-called principles and the precepts based thereon.

Realizing this fact, the object of this paper is to present a concise, yet comprehensive, view of this alleged science of osteo-

* Read in the Section on Pharmacology and Therapeutics of the American Medical Association, at the Fifty-ninth Annual Session, held at Chicago, June, 1908.

pathy, as defined in their standard text-books and periodicals, so that, by being familiar with its tenets and principles, we can intelligently work together as a body, first for the protection of the public, and, therefore, indirectly, for the higher interests of medical science and its art, on which afflicted humanity relies for relief, cure, and the prevention of disease.

WHAT IS OSTEOPATHY?

Hulett, in his "Principles of Osteopathy," defines it as follows: "Osteopathy is a system of therapeutics, which, recognizing that the maintenance and restoration of normal functions are alike dependent on a force inherent in protoplasm, and that function perverted beyond the limit of self-adjustment is dependent on a condition of structure perverted beyond these limits, attempts the re-establishment of normal function by manipulative measures designed to render to the organism such aid as will enable it to overcome or adapt itself to the disturbed structure." Thus the pathology of osteopathy repudiates science and explains typhoid fever, tuberculosis, scarlet fever, pneumonia, smallpox, and other ills of humanity as due to misplaced tissues.*

Osteopathic training is claimed so to augment the sense of touch that the fingers are enabled to locate the exact spot of the dislocation, and, by osteopathic knowledge of anatomy, manipulate, as no one else can, the tissues back to their proper relationship, and thus cure the afflictions of humanity!

ORIGIN OF THE TERM OSTEOPATHY.

The term osteopathy is from the Greek words "oste" (bone) and "pathos" (suffering), and literally signifies "bone suffering." But this does not refer to "bone disease" or "bone treatment," as we might suppose, but has reference to the chief basal fact of the body, viz., the order and mechanics of the body. It is on this fundamental idea of order and mechanical relation in the body that the alleged science is based.

ORIGIN OF THE SCIENCE.

The founder of the alleged science of osteopathy was Dr. A. T. Still, who for (a few) years was a practitioner of the erroneously called allopathic school. He announced publicly the principles of the new science at Kirksville, Mo., in 1874.

* Dr. Andrew Still in the January, 1908, issue of the *Ladies' Home Journal*, writing on the subject, "How I Came to Originate Osteopathy," makes the following statement: "I do not believe, and I say this after forty years of close observation and experiments, that there are such diseases as fever—typhoid, typhus or lung—rheumatism, sciatica, gout, colic, liver disease, croup, or any of the present so-called diseases. They do not exist as diseases. I hold that separate or combined they are only effects of cause, and that in each case the cause can be found and does exist in the limited or excited action of the nerves which control the fluids of a part of or of the entire body. The therapeutics of osteopathy are independent and original, and as extensive as the entire medical and surgical fields."

OSTEOPATHIC EDUCATION.

The osteopathic schools, according to Dr. (never received M.D.) O. J. Snyder, president of the Pennsylvania Osteopathic Association, are well versed in general medicine, and they claim to have had originally four terms of five months each, but recently this has been changed to three terms of nine months each. The reason for this change has not been given. The total number of hours devoted to the complete course is about the same as in the average regular medical school. They claim to teach everything the same as the regular schools, except materia medica, for which they substitute the principles of osteopathy. These statements are published in the March, 1907, issue of their leading journal, entitled *Osteopathy*. As a matter of fact, they teach the fundamentals erroneously, especially anatomy and physiology.

Now, if these statements are true that they teach the same subjects in as thorough a manner and devote the same number of hours to the subjects, then why do they object to the graduates of their schools passing the same examination as do the graduates of the other medical schools, and then be left to practise whatever branches of therapeutics they may elect? Because, like all sects, they wish to have sole control; their existence depends on self-control.

In other words, why not place all medical graduates on an equality, as they should be then required to possess the same preliminary education, a similar medical course for their degree and the same state board examination, differing only in substituting osteopathic manipulation for drugs under the subject of therapeutics in their college and state board work? Is not this a just and equitable arrangement? On therapeutics only do the allopathic, homeopathic, and eclectic schools differ at present.

The only way to attain this end is one medical board made up of representatives from each system of medicine. This is what we desire the legislature of this and other commonwealths to grant for the protection of the educated physicians, no matter what the school, against the quacks, charlatans, and incompetents who pose as physicians. This is all that we desire, and such an arrangement would be just as advantageous and protective to the properly trained osteopath as it would be to the members of the regular school.

In an address to the members of the Legislature of Pennsylvania in 1907 by the Pennsylvania Osteopathic Association in support of the bill to regulate the practice of osteopathy, favorable consideration of their present bill is asked for the following reasons:

First.—Because osteopathy, as an accepted science in the prac-

tice of the healing art, has come to stay, as can be testified to by the thousands of its patients in Pennsylvania to-day.

Second.—Because of the great success and popularity of osteopathy as a method of healing, the public are demanding protection from impostors and frauds, who are endeavoring to practise the art without the proper educational qualifications, to the detriment of the health of the credulous and uninquiring.

Third.—Because all other forms of practising the healing art, allopathy, homeopathy, and eclecticism, are regulated and protected by the laws of Pennsylvania.

Fourth.—Because the osteopathic profession desires only fair play and a square deal with other schools of medicine, and this bill provides that applicants to practise osteopathy shall take the same examinations as are required of those wishing to practise medicine, and that the state medical council shall issue licenses to practise osteopathy in the same manner as it issues licenses to practise allopathy, homeopathy, or eclecticism.

Fifth.—Because a consideration of the present bill will disclose that the osteopaths are ready and willing to adopt the same educational qualifications as required by the other schools, both preliminary and collegiate.

Now, if these are their true reasons for official recognition, as they pretend them to be, having presented them as such to our Legislature, then why do they object to one medical board with proper representation? There can be but one explanation for an objection by the osteopaths: They do not intend to furnish the same qualification for licensure. Otherwise they would not have presented their bill providing for a distinctive board composed of osteopaths. The reasons for this are obvious to anyone.

THEORY OF OSTEOPATHY.

According to the statements of the leading osteopathic authorities the osteopathic treatment is purely mechanical, and consists of manipulations which seek to remove all obstructions to the vital forces of the body, and the theory on which it rests is that all diseases are due to some mechanical obstruction to the vital forces in the body, which may be removed mechanically without use of drugs. They claim that the method of treatment is based on a thorough knowledge of the normal and abnormal anatomy and physiology of the body.

THE CAUSE OF DISEASE.

Here the osteopath likewise differs from medical practitioners. The ideas held by osteopaths as to the etiology of the various diseases may be summed up as follows:

First.—Perverted Mechanics: That is, mechanical derangement

of the anatomic parts of the body. A very common cause of disease. Structure determines function. If the structural relations of the body tissues are all right, then the functions are normal; but if the structure is perverted in any way, then the function is also perverted, and this is what we denominate as the cause of disease. This is the Magna Charta of osteopathic declaration; the golden rule of osteopathic procedure.

Second.—Bacteria: Bacteriology is alleged to be taught in every osteopathic school with the same exactness as in the best regular schools.

The osteopath has always held to the germ theory as the cause of certain diseases, but the osteopath does not use the same means to recover the health of a patient so infected, yet he recognizes that such conditions exist. The osteopath, emphasizing that disease is primarily of mechanical origin, holds, therefore, that germs are generally a secondary factor in the cause, and he believes that so long as the tissues of the body are healthy no germs can infect the body. There must be a suitable soil for the bacteria to live in or the bacteria will not cause infection. He further believes that if any part of the body is infected, and he can restore a good circulation of pure blood to the part so as to restore a healthy condition of the tissues, the invasion of bacteria stops then and there. I should like to know what specific dislocations cause, respectively, the infections, as microbial diseases result from misadjustment of structure, according to osteopathy.

The osteopath recognizes that disease may be due to toxic or poisonous compounds which may enter the system, but you will notice that the cause of the presence of toxic products is due to a perverted function, which is the result of a perversion of structure.

In case of the ingestion of a fatal dose of a poison, the osteopath would give the usual antidote and treat accordingly. They have a course in toxicology in their college course, claimed to be properly taught.

OSTEOPATHY AS A SYSTEM OF MEDICINE.

The osteopaths state that osteopathy is not a part of medicine, and has nothing in common with it, other than the professed aim to cure disease. Its diagnosis and treatment are wholly unlike those of any other system of healing. The aim of medicine is to relieve symptoms, whereas osteopathy has for its object the removal of the cause. The regular physician treats symptoms, whereas the osteopath treats the lesion causing the symptoms.

OSTEOPATHY AS RELATED TO MASSAGE AND SWEDISH MOVEMENTS.

Osteopathy is claimed to be entirely distinctive from massage or Swedish movements, resembling them only in being an appli-

cation of a mechanical principle. Massage and Swedish movements are only systemic exercises, whilst osteopathy is adjustment. Osteopathy is not exercise, and it is not given with the object of giving exercise to a patient, although in taking the treatment the patient receives a variable amount of exercise according to the lesion requiring adjustment.

OSTEOPATHY AS A SCIENCE.

The osteopath looks on the human body as a machine, and if the machine is in perfect order and harmony within itself then a state of health prevails. The bones form the foundation and framework of the body. The muscles and ligaments are strung on the bones, and the bones have more to do in determining the order and form of the body than any other tissue in the body. The nerves become irritated by physical, chemical, traumatic, or other causes, and these irritated nerves cause the muscles and ligaments to contract, and this brings about more or less maladjustment in the body.

These maladjustments interfere with the function, and are termed lesions, or the seat and underlying cause of disease. All diseases are due to lesions, and these lesions may occur in any portion of the human body. The osteopath claims that with a proper knowledge of the anatomy of the body he can detect these lesions, and the purpose of his treatment is to remove them, and thus establish harmony and order in the body, which is the basis of health. The body being a vital machine, all it needs is to be able to perform its functions, and then it recuperates itself. Hence, by various manipulations, using the bones as levers, the purpose of the osteopath is to readjust a maladjusted body as structure determines function; and if we re-establish a normal structure, then normal function will result. To cause this adjustment may require only a single movement, as in reducing certain dislocations as around the elbow or hip joints by rotating the arm or leg and pushing into position; or it may require several weeks' treatment, as where certain of the vertebræ are involved, and in giving the treatment the practitioner may have in view either or both of two objects. He works to right the spine and to affect it alone, or he works on the spine to affect some other part of the body pathologically connected with the part of the spine in question.

In the treatment of the spine twenty-one different methods of manipulation are resorted to, according to the lesions present, as described in Hazzard's *Practice of Osteopathy*. I will merely mention two of them to show the kind of methods that are used.

For relieving contractures and toning up flabby muscles the patient lies on the ventral aspect of the body in a comfortable

position, the head is turned to one side, and the arms hang loosely down at the sides of the table. The patient relaxes all his muscles, and the osteopath stands at the side of the patient and uses the palm of the hand or the cushion of the fingers to thoroughly manipulate and relax all the spinal muscles. In treating the muscles on the side toward him he works from one end of the spinal column to the other in a direction at right angles to the general direction of the muscular fibres. He treats the muscles of the opposite side by spreading them away from the spinous processes.

In case of curvature or sagging of a portion of the spine or lateral deviation of the vertebrae, the patient lies on his side, and the practitioner stands at the side of the table in front of the patient. With one hand he grasps the uppermost arm of the patient, just above the elbow; the other hand he holds under the spinous processes, or any portion of the spine under treatment. Now, using the arm as a lever, he pushes it downward and forward, at the same time springing the spine toward him.

In order to have a practical demonstration of this treatment I consulted one of our prominent osteopaths, a member of the faculty of the Philadelphia College of Osteopathy, and, as expected, I had a slight curvature of my spine, etc., which he manipulated, using a number of their classical manipulations. He informed me that each osteopath has certain manipulations characteristic to himself in addition to the classical ones, and he also told me that all that they do is to stimulate the circulation and make people "feel good." "That is why osteopathy is so popular."

THE OFFICE EQUIPMENT OF AN OSTEOPATH.

The office equipment usually consists of a reception room and one or more booths or "work rooms," in which there are a leather-covered table and several chairs or couches. The patient, if a man, removes his top clothing down to his underclothes, except his trousers; and if a woman, after removing the outer garments in a similar way, she wears a loose gown during the treatment. "Their peculiarly sensitive sense of touch responds through two thicknesses of clothing, as they determine the lesions causing the disease with the X-ray tipped digital phalanges of their fingers, which show the maladjustments of structure and dislocations." They certainly possess supernatural powers of palpation, and, strange to say, it is all acquired in three years!

As a rule, their offices are attractive and handsomely fitted up, even in the country towns.

CHARACTER OF CASES TREATED.

The majority of the patients are from among the middle and upper classes, as their treatments are rather expensive for poor

people, although they have free dispensaries connected with their colleges. Their usual fee is \$25 for twelve treatments, some charging more, some less. The time required for a treatment varies from ten minutes to an hour.

Osteopathy will never interfere to a great extent with medical practice, as the great majority of the patients are treated in the offices for conditions that allow them to be around, and if they are really sick with some acute disease, a regular practitioner is called; so that osteopathy is a sort of gymnastic specialty, as it were, and not invoked as yet for illness which regular practice confronts. Of course, some osteopaths attempt to treat serious cases, but they are in the minority.

Thus we have a clear conception of what osteopathy really is and stands for, as stated by the leading authorities of their school.

Now, let us consider the relations between osteopathy and the various branches of medicine, remembering that they treat all these affections solely by manipulation, as they are opposed to the use of drugs in the treatment of disease.

OSTEOPATHY AND GENERAL MEDICINE.

The osteopath represents himself as a competent clinician, and treats all the various medical diseases, including the acute infectious diseases such as typhoid fever, tuberculosis, malaria, pneumonia, etc.

Diseases of Children.—The osteopath treats all the various diseases of childhood, including the contagious type, such as diphtheria, scarlet fever, etc., and he is opposed to the use of antitoxin in diphtheria and also to vaccination.

Ophthalmology.—The osteopath treats such diseases of the eye as granular eyelids, strabismus, pterygia, partial and total blindness, eyestrain, etc., and he does it by manipulation alone, for, according to their pathology, these conditions are due to maladjustments. They treat practically all the usual eye diseases.

Diseases of the Ear.—In the treatment of diseases of the ear the osteopath uses a head mirror and ear speculum. He treats various types of otitis, deafness, earache, etc. He uses and recommends antiseptic agents in solution, injected by means of an ear syringe, yet he claims to be opposed to drugs!

Diseases of the Nose and Throat.—They treat the various affections of these parts, including such diseases as laryngitis, tonsillitis, parotitis, pharyngitis, stricture of the esophagus, etc.

Neurology.—They treat the various nervous affections, such as chorea, epilepsy, locomotor ataxia, paralysis agitans, etc.

Diseases of Women.—Diseases of women are a most important part of osteopathic practice and they make vaginal examinations for the purpose of diagnosis, and in giving treatment they not only

treat the patient along the lumbar portion of the spine, but also treat through the vagina, especially in such conditions as uterine displacements and prolapsus. They treat various menstrual disorders, ovarian and tubal inflammations, leucorrhœa, uterine tumors, carcinoma, etc. Some of their treatments for gynecologic conditions are of especial interest, and they have special text-books on osteopathic gynecology. The following is a good example: In *Hazzard's Practice*, page 418, for the treatment of uterine hemorrhage the following procedure is recommended: "Often a quick, rather hard jerk at the hairy covering of the mons veneris is sufficient to contract the vessels and staunch the flow. Stimulation of the clitoris is also an important means."

Obstetrics.—Osteopaths treat and deliver pregnant women, and recommend special procedures to aid in the delivery of the child. A few of their special manipulations are of interest, as recommended on page 418 of *Hazzard's Practice*. To deliver the placenta "a quick pull at the mons veneris will aid in expelling it." "Desensitize the clitoris to stop after pains."

Genito-urinary Diseases.—They treat orchitis, varicocele, enlarged prostates, impotency and even gonorrhœa and syphilis. Gonorrhœa is usually readily cured without the usual sequels (page 422, *Hazzard's Practice*), and it is done by manipulations which "frighten the gonococcus."

Orthopedic Surgery.—Osteopaths make a specialty of reducing deformities and dislocations; hence they treat all the affections classified under this heading, such as spinal curvatures, Pott's disease, etc.

Diseases of the Skin.—They treat the common skin diseases, especially those of systemic character, including syphilis, etc.

Surgery.—Osteopaths recognize surgery as a branch of medicine at times necessary, but some of the treatments that they recommend before resorting to surgical means are particularly interesting. One will suffice to illustrate some of the barbarous and dangerous procedures that are advised in their text-books and carried out in actual practice among civilized people throughout the United States.

In *Hazzard's Practice*, page 174, we read under treatment of intestinal obstruction: "Some writers recommend thorough shaking of the patient. The patient is held by four men by the arms and legs, first with the abdomen upward, then downward, while the shaking is done. There should be much persistence in the treatment." This treatment would certainly relieve the obstruction, especially if the intestines are soft and gangrenous, but the undertaker's services would be required a little later as an adjunct to the treatment.

LIMITATIONS OF OSTEOPATHY.

Hence one can readily see from the above classifications that osteopathy has no limitations, as they claim to cure every disease that ever existed or ever will exist, as can readily be proved by an examination of Hazzard's work on the practice of osteopathy. They even treat pneumonia, typhoid fever, tuberculosis, acute nephritis, uremia, smallpox, parasitic diseases, such as those caused by various intestinal worms and even tumors melt away as snow under the midday sun, according to their authorities.

DO OSTEOPATHS USE DRUGS?

It is frequently stated that osteopaths condemn the use of drugs and are opposed to them. A few examples will prove the falsity of such statements. As stated before, in the case of acute poisoning the usual chemical antidotes are ordered, and they are taught these in their medical course. In *Hazzard's Practice*, page 390, we read under treatment of variola: "The ordinary methods of preventing pitting by keeping the face washed with a carbolic or mercuric chlorid solution and covered with clean cloths saturated with warm water should be used."

Again, on page 394, under worms: "For tape-worm the patient should then drink quantities of pumpkin-seed infusion or eat a gruel made of mashed pumpkin-seed."

On page 353, under myxedema, we read: "It seems that in these cases thyroid feeding, a treatment regarded as specific, would be necessary."

On page 227, under the subject of chronic cystitis, we find: "In this form and in septic cystitis, washing out the bladder is a valuable aid to the treatment. For the chronic cases, sterile normal salt solution (40 to 60 grains to a pint) or weak solution of mercuric chlorid (1 :50,000 or 1 :100,000) are recommended. For septic cases, a saturated solution of boric acid may be used." Their explanation of microbic infection is here overlooked.

On page 162, under cholera infantum, we find: "Hot injections are valuable measures, aiding in the removal of the irritant material from the bowel. A mustard plaster over the abdomen relieves pain." These statements are taken from one of their leading books on the practice of osteopathy. But how in the world anyone can stop the growth of diphtheria bacillus in a child's throat by raising the clavicle and pressing the first rib downward and forward, working at its central articulation to correct the position of its head, is beyond my comprehension. Or in the case of hemorrhage complicating typhoid fever, inhibition of peristalsis should be done by work from the ninth dorsal vertebra down along the lumbar region. How this checks hemorrhage I should be pleased to hear someone explain. In my judgment, it would increase it,

and if manipulation is very vigorous, the danger of perforation would be greatly intensified, yet this is the treatment recommended.

Also, where a child is suffering from infection with the oxyuris vermicularis around his rectum, how raising the lower ribs causes their expulsion requires a little Christian Science faith to comprehend, does it not? Their vasomotor arc explanation is disproved by the facts of physiologic science!

Several of the patients who have been treated recently at the Philadelphia College of Osteopathy have been advised to use certain medicaments at home when manipulations did not relieve them, as they have told me personally, yet the osteopaths state that drugs are poisonous and injurious, and they are opposed to them. I have seen prescriptions in drug stores written by osteopaths!

OSTEOPATHIC STATE BOARDS.

Now, what are the objections to the osteopaths receiving official recognition in the various states and being licensed as the result of examinations before state examining boards composed of osteopaths?

1. They are not required to possess the same preliminary educational requirements as members of other medical schools, some of their graduates not even possessing a grammar school education.

2. The course is completed in three years, while regular practitioners are required to take four years.

3. They represent themselves as physicians when using the title doctor, and they treat every disease that is known, whether they can do good or not, manipulation often imperiling the life of a patient when suffering from certain affections, like tubercular arthritis or intestinal obstruction, etc.

4. They treat anyone who applies to them, whether they are under the care of another physician or not; hence have no code of ethics, except to use a name and collect the fee.

5. They treat patients in conjunction with practitioners of other schools, illustrating that the commercial weakness of birds of a feather affects the medical profession as it characterizes man everywhere.

6. A number of them secretly treat patients who are under the care of a regular physician.

7. If a patient's condition becomes serious they promptly drop the case and have the family send for a physician. They do this only because they cannot fill out death certificates. License them and they can. That is what they desire.

8. They occasionally write prescriptions for drugs or give verbal orders for their use, notwithstanding their claim that they are opposed to the use of drugs as remedial agents.

9. They have not the slightest knowledge of the proper phraseology in the construction or writing of a prescription.

10. If they should become licensed, they will not confine themselves to manipulation, but will attempt to practise regular medicine as well, thus antagonizing their own statements by using drugs and baths. yet they claim to oppose them.

11. They presume to pose as expert witnesses in litigation.

12. They are opposed to vaccination, the use of serums, such as diphtheria antitoxin, and other agents, such as electricity, X-ray, and hydrotherapy.

Now, what is the cure for the present existing conditions in the medical profession throughout the United States?

1. A one-board bill with proper representation, the same educational requirements and equal recognition to the graduates of all the various medical schools, the examination being the same in all subjects, except therapeutics, on which questions relative to the particular system of medicine studied should be asked, or the subject omitted entirely, allowing each one who receives the licensure to practise whatever system of medicine he deems best - i. e., protecting the public from the fearful consequences of incompetent practitioners by requiring, by law that everybody who offers his services and assumes the responsibilities of treating disease, deformity, and injury, should qualify under one standard of knowledge, training, and ability, and this opportunity free for all alike. There are forty-four states at present that have a one-board bill in operation.

2. This standard to be the same in each and every state in the Union, so that proper reciprocal relations would be established which would enable a physician receiving the licensure in one state to transfer and practise his profession in any other state should he so desire, and at any time.

3. Any physician addicted to drugs or alcohol, or convicted of criminal or malpractice, abortion, or other practices contrary to the laws of his state, shall have his license permanently revoked, and said revocation to bar him from the practice of medicine in any other state.

4. A common standard of preliminary education should be exacted of every person desiring to enter a medical school anywhere in the United States, and every student should be required to pass this examination, no matter what his credentials are, not excepting a degree in arts or science; said examination to be about equal in standard to the present preliminary examination in law in Pennsylvania or New York or the equivalent of the present medical standard of the New York Board of Regents. This standard would debar a large number of students who do not possess

the proper preliminary education and who are a disgrace to the medical profession.

5. Every applicant should be of sound mind and body and of good moral character.

ABSTRACT OF DISCUSSION.

Dr. Alexander S. von Mansfelde, Ashland, Neb.: There are very few members in this hall, I am afraid, who have not been guilty, when their patients have asked: "Have you any objection to my taking a few osteopathic treatments?" of answering: "Oh, I don't suppose it will hurt you. It is just massage." I hope that members of the American Medical Association will not hereafter commit the wrong of saying that osteopathic treatment is massage.

Dr. John Kercher, Chicago, Ill.: I wish to quote from a booklet by W. Livingston Harland, an osteopath, a definition of osteopathy assumed to be authoritative. When I get through I shall be glad if anyone can enlighten me on the meaning, as I do not understand it yet, although I have read it several times: "Osteopathy may be formally defined as the science which consists of such exact, exhaustive, and verifiable knowledge of the structure and functions of the human mechanism, anatomical, physiological, and psychological, including the chemistry and psycho-physics of its known elements, as has made discoverable certain organic laws and remedial resources within the body itself, by which nature under the scientific treatment peculiar to osteopathic practice, apart from all ordinary methods of extraneous, artificial, or medical stimulation, and in harmonious accord with its own mechanical principles, molecular activities and metabolic processes, may recover from misplacements, disorganization, derangements, and consequent disease, and regain its normal equilibrium of form and function in health and strength." The volume is called "Osteopathy: The New Science." It stands as a sort of text-book for the osteopathic cult, and the author, in his introductory, says: "This little volume, which we believe is the first that has ever been published in book form on the science of osteopathy," etc.

Dr. R. A. Lyman, Lincoln, Neb.: The osteopath surrounds some of the newer methods in therapeutics by a system of graft which is not understood by the layman. This fact medical men should remember. To the layman's mind osteopathy and massage are one and the same. A short time ago a prominent member of the faculty of the University of Nebraska asked me what I thought of osteopathy. He had been treated by an osteopath, had been benefited, and now praised the "doctor" highly. I gave him the substance of the "system." He had supposed that osteopathy and massage were identical. When I took the trouble to explain that massage is but one of the methods of treatment that had been

used for years by the regular profession, he regarded osteopathy in an entirely different light. Psychotherapeutics and Eddyism are identical in the mind of the average layman. It is our duty to explain these fads to our patients. If this is properly done, the average thinking man will get the proper perspective. Such a procedure on the part of medical men will do more towards eliminating these systems of graft than all the legislation which might be enacted.

Dr. M. Clayton Thrush, Philadelphia: I presented this paper primarily for three reasons: First, to show in a concise way what osteopathy really is and what constitutes its important principles. I have talked with many physicians on this subject, and none could give me anything like a satisfactory explanation of the claims of osteopathy. Second, to show how dangerous it is. Everyone in this room has been asked by a patient whether he should try osteopathy. Often these patients have a disease in which the methods used by osteopaths will do harm and may even cause death. Third, to plead for a one-board medical law. We have only ten states in this great Union without such a law at present! Each man who practises healing, no matter what his cult, should be required to pass the same medical examination and with the same preliminary requirements, etc. We have only seven states which do not require every candidate to be at least a graduate of some reputable and chartered school of medicine; and with only seventeen states remaining which do not possess reciprocal relations, our work is almost, but not quite, finished. We want to get these seven states in line. When we do this we shall have this task complete. Do not forget the important facts which I have outlined in my paper, and which prove that in recommending osteopathy you are recommending to your patients procedures that may mean death, or at least harm, to your patients. *Journal of the A. M. A.*

OPERATION FOR UNDESCENDED TESTICLE.*

BY F. N. G. STARR, M.B., TORONTO.

From a brief scrutiny of the literature, it would seem that there is thought to be a small chance of help for non-descended testicle except by castration. Erichsen¹ says: "Any attempt to bring the testicle down into the scrotum would be ineffectual." He further adds, that if it is in some position in the canal where injury is likely to occur, it is preferable to remove it. Treves² says the undescended testis should be stitched to the bottom of the scrotum, and under certain circumstances should be removed. Pick³ thinks one should consider the feasibility of transplanting the gland and fixing it in the scrotum. If this cannot be done he recommends its removal. Bryant⁴, after describing a fascinating method, adds: "The successful attainment of these steps is not easy, nor finally as satisfactory as might appear from the description." Stonham⁵ describes an operation where he makes a long incision and transplants the testicle, suturing the tunica albuginea to the scrotum. Koehler⁶ recommends fastening the spermatic cord at its entrance into the scrotum, as well as fastening the testis to the bottom of the scrotum. Corner⁷ says that replacement in the abdomen is indicated in by far the majority of cases. Bevan⁸ describes an elaborate operation which necessitates opening the peritoneal cavity. Von Bramann⁹ advises strongly against removal.

From the foregoing remarks it will readily be seen that there seems little to choose from in the various methods recommended. Some other writers advise massage and manipulation, and no doubt, if begun early, and carried out persistently, some of the cases might be cured. Others have recommended a U-shaped truss to fit just above the testicle and force it down, while yet others have described various mechanical devices with the same object. Such methods have only to be mentioned to be condemned.

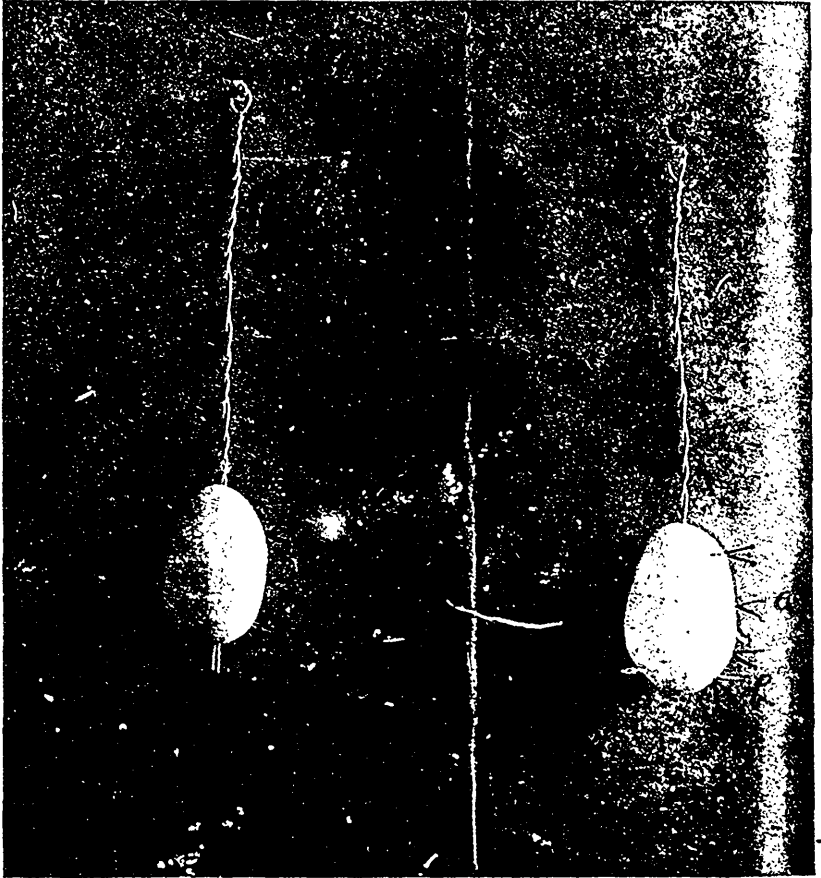
It would seem then that surgeons are divided between—suturing to the bottom of the scrotum, transplanting within the abdomen, and removal. This latter cannot be too strongly condemned, for no matter how atrophic a testis may appear, one has no means of knowing the possibilities of development under suitable conditions.

When it comes to the question of operation, no doubt there are some cases in which, with the testis at or near the internal abdominal ring, it may be wise to transplant the gland within the abdomen, to remove it from the possibility of injury. But, when the testis is in the inguinal canal, near the external ring, or is outside

* Read at the Surgical Section of the Academy of Medicine, Toronto.

the ring, the following operation which I have devised and carried out successfully, appeals to me as a reasonable means of securing a desirable result.

An incision about one inch long is made over the external abdominal ring, the testicle is secured and brought out of the wound. The finger is then carried down into the scrotum, and, by



FIGS. 1 AND 2.

Showing testis secured to loop of silver wire to act as splint for retaining it in scrotum.

means of blunt dissection, the scrotal sac is stretched to make a suitable resting-place for the testis. The cord is then dissected free of its coverings, and, if necessary to secure increased length, the cremasteric and spermatic arteries may be sacrificed, but the artery to the vas must not be interfered with. It is well now to see that the testicle can be easily replaced in the pocket provided with-

out tension upon the cord. It is again taken out and sutured by means of chromic catgut, No. 0, through the tunica albuginea to the loops of a piece of plaited silver wire, two or three inches long, as may be required (Fig. 1 (a)). The wire ends at (b) are then pushed against the bottom of the scrotum and cut upon to permit of their being pushed through. The free ends are then bent, as in Fig. 2 (b). To make assurance doubly sure, two horsehair sutures are passed up through the tiny opening in the scrotum, from which the wire projects, one on each side of the wire shaft, to catch the tunica albuginea. They are brought out again and tied over the projecting wire ends (Fig. 3 (b)). The loop of the wire shaft at (c) is now sutured by means of 10-day chromic catgut No. 1 to the periosteum over the os pubis (Fig. 3 (c)). The testicle is now securely placed in the scrotum and is maintained there by means

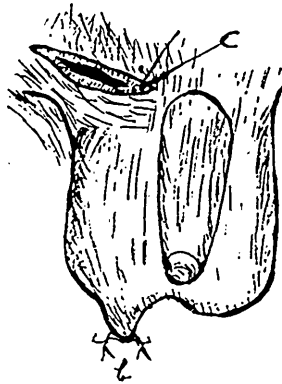


FIG. 3.

Diagram to show splint in position. (C) Catgut that secures loop of splint to periosteum over the os pubis.

of a silver wire splint. The operation is completed by introducing through the skin, at one end of the incision, a horsehair suture which travels sub-cutaneously, taking up the spermatic fascia and divided cremasteric muscle over the cord. It is brought out again through the skin, at the opposite end, carried over the top of a small roll of gauze, and continued along as an uninterrupted stitch, to bring the skin edges into apposition. The two free ends are tied over another small roll of gauze. The wound is carefully dressed with plenty of pads and a double spica applied. On the twelfth day the dressing is removed, and the cutaneous horsehair, snipped at one end, is then easily withdrawn. The two horsehair stitches at (b) are now cut and removed, when the end of the wire is grasped with a pair of forceps and the wire splint removed.

The result has been most satisfactory. Both testicles are on a

level, both are now of equal size, though the non-descended one was small at the time of operation. There was no pain or discomfort during healing, and I was surprised at the ease with which the wire splint came away.

This operation holds out some hope for the correction of an abnormality that heretofore has not been amenable to treatment, other than such as will lead to a greater deformity, even though it does succeed in relieving pain and discomfort.

REFERENCES.

- ¹Science and Art of Surgery, Erichsen, 1888.
 - ²A System of Surgery, Treves, 1896.
 - ³Surgery, T. Pickering Pick, 1899.
 - ⁴Operative Surgery, J. D. Bryant, 1901.
 - ⁵Manual of Surgery, Stonham, 1900.
 - ⁶Tillmann's Text-book of Surgery, 1898.
 - ⁷*British Medical Journal*, June 4, 1904.
 - ⁸*Journal of American Medical Association*, Sept. 19, 1903.
 - ⁹Von Bergmann's System of Practical Surgery, 1904.
- Reprinted from *Annals of Surgery*, September, 1908.

LONDON LETTER

It is an interesting speculation how far a novel method of treatment is indebted to the glamor of its newness for the notable successes attending the period immediately following its introduction. A colleague was recently telling me of an old Paris physician who actually induced many anemic women to go regularly to the abattoirs and drink a pint of fresh blood. His treatment had a sound basis in therapeutic rationality, and he triumphed over an imperfect pharmaceutical *finesse* by an appeal to the amiable weakness that delights in all that is novel, even if it be bizarre; even if, as in this instance, it be revolting. The therapeutic fashion of the day is "sour milk" or "lactic acid milk"; the dairies bombard us with notices of the care and exactitude with which they prepare and distribute treated milk at physicians' orders. The pian has a great vogue, and one hears on all sides of the beneficial results obtained. These are by no means limited to cases of intestinal fermentation or constipation; the mystical properties of the old pharmacopœial "alteratives" are re-embodied in the lactic acid bacillus, and it is in danger of becoming a panacea. The only wonderful results associated with the treatment that have come to my knowledge are in osteo-

arthritis. Cases of severe progressive polyarticular disease have not only become arrested, but have improved with celerity beyond all possible anticipation; pain has vanished; swellings and thickenings have diminished; movement has been restored. How much of this is due to the cessation of intestinal intoxication, how much to the ensuing release of recuperative energy, how much to a new sense of well-being, how much to suggestion, how much to coincidence?

For some remedies the span of popularity and term of success is the nine days of wonderment. Others die a too-early death by misadventure. Therapeutics suffered a serious loss when transfusion of blood was stopped in consequence of anomalous results due to an imperfect knowledge of the conditions of hemolysis. Just now there is a danger of the valuable work that has been done on vaccines being robbed of its due fruition by the anaphylaxis scare. It is not only the matter of Nicolle's work on anaphylaxis in association with glanders and mallein or the *B. Mallei*; other disquieting bits of evidence crop up now and then. A coroner's inquest was held not long since on a case of death shortly after an injection of antitoxin; Goodall relates the anomalous results of antitoxin used for recurrent cases, treated in the original attack by antitoxin; then Armit demonstrated some remarkable facts at the Lister Institute. He injected goat serum into a guinea-pig, and in what is presumably the "negative phase," a second dose, it was rapidly fatal. Moreover, the blood of this dead pig injected into the peritoneal cavity of another pig, even in very small doses, killed it in a few minutes. He made no attempt at an explanation of the phenomenon, and yet it demands elucidation, since it may be enough to check not only the indiscriminate exhibition of horse-serum, which is another of the present-day fashions, but also the progress of vaccine therapy. If it does no more than restrict light-hearted dalliance with noxious organisms, even dead ones, and confine their use to those in whom familiarity has bred a wholesome respect, no great harm will come of it.

The Wassermann reaction has been received in London with skeptical cordiality. The tendency at present seems to be in favor of demanding the demonstration of the spirochete as an accessory before the fatal deed of positive diagnosis. Mr. Keetley read a paper a little while ago at the surgical section of the Royal Society of Medicine that met with but an indifferent reception. His main proposition was that the surgeon should try to preserve the veriform appendix. He adduced Macewen's observations on its physiological utility as a plea, and even found a warrant for his thesis in Metchnikoff's proposals for the postponement of senility. The appendix, he maintains, has a high surgical value as a channel of ingress to and egress from the intestine. As indi-

cations for the operation of appendicostomy he tabulates: colitis of various kinds; certain forms of intussusception, chiefly to prevent recurrence; intestinal hemorrhage; typhoid fever and certain other cases in which enteritis occurs; cases of enterectomy and colectomy, as a safety valve; intestinal distention in toxic conditions; for the administration of nutriment *per appendicem*; and, finally, in intractable constipation. He justifies the transplantation of the appendix so that it lies embedded in the abdominal wall as a treatment of appendicitis, on the ground that it is the intra-peritoneal lie and not the nature of the appendix that is the danger; that many of the structural abnormalities can be righted by plastic measures and the appendix saved to be utilized later on should the unhappy possessor fall a victim to any of the above maladies. Almost the only sympathetic remark made by those who discussed the paper, apart from its reference to colitis, was that as a treatment of constipation it was preferable to Lancé's excision of the colon!

Mr. James Berry's communication on traumatic rupture of the intestine, to the same section, had the great value lent by analysis of successive cases. Previous writers have collected cases from the literature, and, therefore, probably included an undue proportion of successes. Mr. Berry's were collected from the records of ten London hospitals. Of 132 cases, 122 were males and 10 females; 14 were children under ten, 32 were between the ages of ten and twenty, and 79 were over twenty years of age; 51 of the cases were due to being run over, 24 to squeeze or crush, 23 to blows, 16 to kicks, and 11 to falls. The great majority of the ruptures affected the small gut; in 22 cases the rupture was multiple, and in 24 other severe injuries coexisted. The mortality was 87 per cent.; of the operated cases, 80 per cent. The conclusions reached were that rupture of the intestine is by no means so rare as is commonly supposed; the early symptoms are few and fairly characteristic; pain, local, severe, and continuous; tenderness, rigidity, and vomiting, together with the history of the accident, afford ample data for diagnosis. If operation be delayed until the abdomen is distended or the liver dullness absent, the patient has practically no chance of recovery; secondary rupture is not uncommon, the symptoms in these cases being often delayed for hours or even days. Rupture of the intestine is usually produced by direct crush and not by bursting or traction; finally, after operation the patient should be sat up in bed and treated with massive saline infusion.

I have mentioned before the close attention now being paid to the health of children in the compulsory education schools of the metropolis. A committee of enquiry have recommended the establishment of special school clinics near the schools, where cases of

defective teeth—and about 90 per cent. of the children are affected thus—eye defects and simple diseases, skin diseases such as ring-worm, favus, scabies, and pediculosis, ear defects, and simple diseases, especially “running ears,” should be treated. It is a sign of the times; we are coming more and more to the system of treatment by medical officers of great administrative bodies, and, of course, so far as state medicine is concerned, that is inevitable. It is a serious question, however, for the profession, whose average income has been dwindling for years, and, what is more important, a menace to the independence of effort and initiative essential in a progressive science and art.

The very sudden death of Dr. Charles Beevor, physician to the Queen Square Hospital for Paralysis, president of the Neurological Society, and sometime the associate of Sir Victor Horsley in investigations of the cortical centres, came as a shock to his many friends in the profession. Within a few hours of his death, which was due apparently to aortitis, he was presiding at the Neurological Section meeting and in the best of spirits.

Death has been busy, too, among the younger teachers in London. Why is it that so often those are taken whom we can least afford to lose?—*Boston Medical and Surgical Journal*.

ABSTRACTS.

“**Get-Well Tablets.**”—In the *Journal A. M. A.*, December 19, are published extracts from a “form” letter addressed to dentists. It was from the Anti-Corizine Chemical Company, offering a chance for investment, on the presumption that dentists would not object (as physicians would) to sharing large profits from the manufacture of patent medicines. From 400 to 600 per cent. profits are given as what may be normally expected from investments of this kind. The product, “Get-Well Tablets,” is stated to be so harmless that “even persons suffering from the severest form of heart disease can take them without danger,” and its virtues are due to our old friend, acetanilid, aided and abetted by another drug that is becoming increasingly popular with nostrum mongers—codein. They also contain a small amount of belladonna. A year or two ago the company marketed the same tablet by the name of Anti-Cori-Zine, which was sold and “advertised only to the medical profession” as “a definite synthetic chemical.” Evidently the medical profession is not taking so kindly to the acetanilid headache mixtures of the “definite synthetic chemical” type as it once did, and it is now found more profit-

able to advertise to the public direct rather than *via* medical journals and physicians.

Cholesterin in Pernicious Anemia.—First referring to a recent communication by Reicher on the use of cholesterin to combat hemolysins in pernicious anemia, C. E. Simon, Baltimore (*Journal A. M. A.*, December 19), reports his experience with its use in six cases of the disease. His trial of the substance was made, for the same reasons as that of Reicher, over a year ago, but the material being so limited he delayed publication until incited thereto by the appearance of Reicher's article. All six of his cases were typical cryptogenetic pernicious anemia, one being of the so-called aplastic type. In three advanced cases no effect was observed. A fourth patient was discharged unimproved after a three weeks' trial, and in a fifth death occurred before more than twenty-four grams had been administered. In the sixth patient an apparently beneficial effect was produced, but, as it was the first attack, one naturally hesitates in ascribing it to the drug. It is noteworthy, however, that the same effect followed its use in a relapse which occurred some months later. The patient is still living and in good condition. "When first seen the red cells numbered 1,744,000, while the hemoglobin was 46 per cent.; there was then marked anisocytosis with a distinct tendency to macrocytosis; there was poikilocytosis and extensive granular degeneration (so-called). Normoblasts with pyknotic and karolitic nuclei were fairly numerous; there were some free nuclei and a few mitotic cells; megaloblasts were scant. After a three weeks' course of cholesterin, the red cells had increased to 4,000,000 and the hemoglobin to 80 per cent. Anisocytosis was still noticeable, but less marked than before; granular degeneration was slight and there were no nucleated red cells. Subsequently the anemia became more marked again, but, as I said before, the patient improved and at the present time is well." Cholesterin is apparently non-toxic, but it is costly. So far as Simon's results show it would seem to have little value in advanced cases, but may have some utility in early cases.

Medical Jurisprudence and Toxicology.

IN CHARGE OF
A. J. JOHNSON, M.B., M.R.C.S. (ENG.).
W. A. YOUNG, M.D., L.R.C.P. (LOND.).

AGAINST MEDICAL EXPERTS

THE New York State Bar Association took action last month which may be the beginning of a reform in legal procedure, especially as related to criminal trials, of great interest to laymen as well as lawyers. This was the unanimous adoption of the report of the committee on medical expert testimony. The action came only after long argument and considerable opposition from those lawyers who believed either that the proposed reform did not go far enough or that it was not adapted to bring about the desired results. Judge A. T. Clearwater, of Kingston, chairman of the committee, scored so powerfully in his closing argument in favor of his committee's report that it was not only adopted but adopted unanimously.

Protesting against "the commercializing of scientific knowledge;" which lessens its accuracy and value, the report makes a plea for the insuring of such conditions that expert witnesses without regard to anything but justice and truth, may give their testimony without bias and without being subjected to improper and contemptuous cross-examinations, misrepresentations and other things tending to create an atmosphere in which the scientific mind cannot be expected to reason calmly and logically.

The committee's report included a proposed statute as a beginning of the desired reform. It provides briefly that Justices of the Appellate Division shall designate at least ten and not more than sixty physicians in each judicial district, who may be called as medical expert witnesses by the trial court or by any party to a civil or criminal action; when so called they shall testify and be subject, like other witnesses, to examination and cross-examination. They shall be paid out of the county funds on the order of the Trial Judge, who shall also decide the amount of the fee.

Judge Clearwater, in presenting his committee's report, laid stress upon the fact that eighteen physicians, representing the allopathic, homœopathic and eclectic schools of the State, agreed with six of the nine lawyers on the committee on the report as presented. This alone, he contended, was not only a noteworthy event, but one that should go far toward establishing the excellence of the recommendations of the report.

"Recent excavations," said Judge Clearwater, "unearthed an ancient scroll which showed that the doctors of Chaldea disagreed over the disease of their monarch. They have disagreed ever since, and I am presenting the first instance of an agreement by them on anything."

Judge John M. Davy, a member of the committee, opposed the adoption of the report in an extended speech. Simon Fleischman also objected to the proposed statute. The opposition had manifested much strength, and when Frederick Hinrichs, of Brooklyn, arose to move that the whole matter be referred back to the committee with full power to investigate and make recommendations to the Legislature, he was applauded. It was then that Judge Clearwater made a closing plea for the adoption of the report. The lawyers listened attentively, applauded enthusiastically when he sat down, and then adopted the report unanimously. The report in part follows:

"It is apparent to all that theoretically an expert is a scientist interested solely in facts, who should retain freedom of judgment and liberty of speech and should be free from the embarrassment of any personal relations to or with the parties to an action; that he should have no client to serve and no partisan interest or opinions to vindicate; that he should give his opinion as the advocate neither of another nor himself; that when he speaks he should do so judicially as the representative of the special branch of science which he invokes, governed by the opinion of the great body of scientists in this relation and in accordance with their most recent investigations.

"That no one should be permitted to distort, pervert or misrepresent his testimony; that when this is done and not until it is done shall we have expert testimony rescued from the disrepute into which it has fallen and thus elevated to its true position as the expression of the particular science for which it speaks; that by the adoption of some such system the mature judgment of the best minds could be obtained and the superficial opinions of quacks and mountebanks would not be thrust upon the jury to their confusion and the hindrance of justice; that such scientific open-mindedness is almost impossible where the expert entirely depends for his emolument upon the good graces of contending parties and largely is without the recognition and protection of the court.

"That the commercializing of scientific knowledge under the existing conditions lessens its accuracy and value. That the enormous modern development of special knowledge makes doubt and controversy among experts hired to create it inevitable and aggravates the evils of private expert hire, unscrupulous so-called experts finding it easy to lease themselves and their opinions to aggrieved and aggressive parties who may profit either fairly or

unfairly by the technicalities and doubts which they are able to inject into the case in full consciousness that no rebuke will be administered by the tribunal before which their testimony is given; that therefore the gravest abuses, not to say scandals, in the introduction of medical expert testimony have arisen until it has come commonly to be believed that such witnesses are so biassed if not corrupt that hardly any weight should be given to their opinions."

The report says it is within the power of the judges to require greater competence on the part of so-called experts and that if they will do this and are backed up by the Appellate Division justice "will be rid of corrupt and worthless so-called experts."

Accompanying this report was a draft of the proposed bill. It provides that experts shall receive merely witness fees at trial unless otherwise ordered by the court. A violation of this makes the violator guilty of a misdemeanor.

Not more than three experts shall be allowed to testify on either side except in homicide prosecutions, unless otherwise permitted by the court.

In a homicide case the court shall appoint "one or more suitable disinterested persons, not exceeding three," to investigate the issues and testify at the trial. The compensation for such witnesses is to be fixed by the court and paid by the county where the indictment was found.—*Exchange*. W. A. Y.

EXPERT MEDICAL EVIDENCE

RECENT Canadian and American acquittals of murderers on the ground of insanity have induced criticism of expert medical testimony. It is noteworthy that the New York State Medical Society has adopted a resolution favoring a limited and uniform system for the securing of expert medical evidence in civil and criminal cases.

A year ago a joint committee of the Medical Society and the State Bar Association instituted an investigation into the evils growing out of the employment of medical experts as court witnesses. This committee now advises that the Appellate Divisions be authorized by the Legislature to appoint not fewer than ten nor more than sixty physicians from their respective judicial departments to act as official medical experts.

But the important feature of the recommendation is that the county in which the action is tried shall bear the expense of the service of these qualified medical witnesses. The expectation is that medical testimony thus obtained is likely to be more trustworthy than when it is secured at the expense of the prosecution and the defence.—*Toronto Star*. W. A. Y.

TWILIGHT THOUGHTS

Moment by moment this month has dawned upon us, and moment by moment it will depart.

Moment by moment the Fall stole by, the skies grew grey and heavy, while the sun slipped the earlier to sleep.

Moment by moment the winds blew, the leaves fell and the limbs waved skeleton arms to the winds of winter.

Winter is here, but moment by moment 'tis stealing by, and spring will soon be knocking.

Life is only a succession of seconds.

Moment by moment we plod on, our lasting successes being accomplished gradually, and our failures in the same slow way.

We do not achieve at once, for no real success is made in a day, but moment by moment we strive to win.

We do not make our sweetest friendships in an hour, but moment by moment, day in, day out, we learn to love, and thus gradually dawn the new phases in the lives of our friends.

Our lasting hates are not the result of sudden conclusion, but of moment by moment.

All nature moves majestically to the rhythm of the eternal clock, moment by moment.

There is no running fast and slow, and we look to the skies, to the sun and stars to regulate our little clocks on our tiny towers.

Moment by moment January has fled.

Moment by moment we have missed our golden opportunities or made our gains.

The ways of nature that we like best are accomplished little by little.

The snowstorm came flake by flake, and the ingenuity of men planned to overcome the little crystals as they blocked the rails.

Tiny and beautiful they fell on a winter's day, but February will flee, and March will tick in and out again, and April will come with her welcome rains, drop by drop, to kiss the old earth, and make her laugh flowers.

Not by a sudden sweep will the warm winds come, nor by convulsions of the earth, but moment by moment, and Spring is here.

Then twig by twig will the robins build and thatch, and, lifting our eyes to the lovely skies, we will look to the sun as it sinks moment by moment to the horizon, and on from vision.

Then we will watch the swallows as they drop down the old mill chimney, one by one, and the night will still further deepen, moment by moment.—*Toronto Star.*

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Editorials.

NECESSITY OF PHYSICAL EDUCATION AND DRILL IN PUBLIC SCHOOLS, COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

During an address given at the University of Toronto, February 4, 1909, Major-General Lake, Inspector-General of the forces in Canada, declared that Canadians must be prepared to stand to arms in defence of not only their homes, but of all that goes to

make up civilization according to western ideals. He advocated the subject of national defence, the necessity of which depended on the great awakening going on in Japan, China and India. He thought that the desire for expansion on the part of those big Oriental nations would oblige not only the men of Canada, but every white man of America, to be prepared to defend this continent against the invasion of Asiatics. He said: "How far are we going to share this country with the Eastern peoples? Are their ideals, moral and religious, and their family life to obtain here, as opposed to western ideals? If mere argument will not prevail, we shall need force behind, and must prepare to fight for our ideals." Animated by the necessity of preparing the young men of Canada to defend it, he advocated physical culture in the public schools and military drill in the high schools. It may have occurred to him that, among the thousands of young men who attend the different courses at the University of Toronto, there would be the making of a smart rifle regiment, two batteries of artillery, and a company of engineers.

Even if Major-General Lake's opinion about the yellow peril is baseless, his advice as to the advantages of giving a military training to the youth of Canada holds good, from the standpoint of hygiene. But when we endeavor to apply his advice to existing circumstances in Ontario, difficulties present themselves. He advocates physical culture in public schools and military drill in high schools. Physical culture presupposes teachers, but women are not competent to teach drill and gymnastics to boys, and, as a matter of fact, 80.94 per cent. of the public school teachers of Ontario are women. As a large percentage of boys in Ontario do not enter high schools, but start, on leaving the public school, to follow some trade or business, their physical education would be neither more nor less than what they have received at the public school. The regulations of the Education Department of Ontario make it obligatory that drill, calisthenics and gymnastics shall be taken up in collegiate institutes; but, "in high schools having no gymnasium, drill and calisthenics shall be taken up at the discretion of the principal, as often as the weather, the accommodations and the adequacy of the staff will permit, and gymnastics may be omitted."

From the report of the Minister of Education, Province of Ontario, for the year 1907, we find that in Ontario there are

42 collegiate institutes, 34 of which have a gymnasium ; total attendance, 15,533 ; boys, 7,238 ; girls, 8,315 ; taking physical education, 12,448. There are 100 high schools, 8 of which have a gymnasium ; total attendance, 13,839 ; boys, 6,098 ; girls, 7,741 ; taking physical education, 2,316. Grand total attending collegiate institutes and high schools, 29,372 ; boys, 13,336 ; girls, 16,056 ; taking physical education, 14,764. In 36 collegiate institutes and high schools there is a drilled cadet corps ; 6 cadet corps belong to the Toronto Public Schools ; total, 42 cadet corps ; 1,896 officers, N. C. officers and boys. Physical education is provided for 80.13 per cent. of the pupils of collegiate institutes, for 16.4 per cent. of the pupils of high schools, the sex not being stated in either case. The cadet corps show, in a creditable manner, the effects of drill given to the boys in the schools. There is room for improvement in teaching physical culture to the boys in the public and high schools of Ontario. To leave the public school or high school with a knowledge of drill sufficient to enable him to take his place easily in the ranks of a volunteer company should be made possible to every lad of sound health in Ontario. Apart from the educational value of drill, young men in Ontario are fortunate in having a volunteer service open to them, wherein pleasurable exercise harmonizes with military duty and love of country. In many of our cities and towns volunteer regiments afford opportunities to young men for bodily exercise of the best possible kind. More efforts might be made by the officers of volunteer regiments to promote physical culture among the men, and the military service of Canada would be rendered more efficient if more drill sheds were supplied, in which exercise and drill could be practised by volunteers in winter.

A more efficient military training in company, battalion and brigade movements, a more practical knowledge of the use of the rifle, with, of course, a prime condition of health, would result from an extensive system of military camps in summer. Such action would call for a large expenditure of money by the Federal Government, but money so spent would yield a fruitful return in the improved vigor and strength of the youth of the country. Should any occasion for the services of the volunteers arise, the training of the men in the proper use of arms, their habits of discipline and fidelity to duty would be valuable assets to the nation.

J. J. C.

THE WORK DONE BY THE MILK COMMISSION OF THE ACADEMY OF MEDICINE.

PURE air, pure water, pure milk! As the man-made cities grow larger and larger, the cry of the children is for free air and sunshine, and the town dweller rivals Lazarus in his cry for a drop of pure water, for his usual beverage has been something akin to the quality of mercy—not strained. As for the city milk, the man who drinks it has been taking a sporting chance of being either embalmed or of acquiring tuberculosis. Now a better day is dawning in Toronto, with free playgrounds for the children assured, the rights of all citizens to pure water acclaimed, and the powers that be made to listen; and the demand for pure milk has been championed by a Commission appointed by the Academy of Medicine, and their work is being carried on successfully.

It seems almost fulsome in discussing this subject with physicians to speak of the need of pure milk in the diet of the sick and its usefulness in the nourishing of infant life. Even race horses trained on dried milk are said to possess great endurance. Enough surely has been written and spoken of the havoc wrought by impure milk and the mischief it has done in spreading the dread white plague. Some time ago the Academy of Medicine took up work in earnest by appointing a Commission, with Dr. H. T. Machell, as chairman, to enquire into the milk supply of this city.

The first meeting of the Milk Commission took place in October last, two days after its appointment, so that the members got to work without delay. The first thing the Commission did was to apply to the Honorable Mr. Hanna for the use of the Laboratory of the Provincial Board of Health, and, after a little delay, this permission was duly granted by the Department. The Honorable Minister found, however, that in so doing he would have to issue similar permission for the use of the Laboratories at London, Hamilton and Kingston. The Commission almost at once appointed their Veterinary Inspector and got to work in earnest. The members made a personal visit, first, to Erindale Farm, and inspected the byres there very carefully, going into every detail regarding the milk supply. After careful and long consideration as to the necessary requirements regarding milk in the City of Toronto and its supply to the public by the different

firms, the following requirements were settled upon and have thus far been agreed to by two of the large dairy farms.

Cows.—The cows must be tuberculin tested. The new ones to be tested before admission into the herd and the whole herd tested once a year.

Chemical Standard.—Milk must not contain more than 88 per cent. of water, not less than 12 per cent. of solids, must contain at least 4 per cent. of fat (with a variation of 1 per cent., according to the season of the year), must contain $3\frac{1}{2}$ per cent. of proteids (with a similar variation of 1 per cent.), the maximum degree of acidity not to exceed 2 per cent., the specific gravity to average 1.031. The milk must contain no preservative and there must be no heating.

Bacterial Standard.—The milk must contain less than ten thousand bacteria per cubic centimeter in the summer, and less than five thousand in the winter. There must be no injurious germs and no pus cells.

Temperature of Milk.—The cooling of the milk is to be commenced at once after milking. The temperature must be less than 45 deg. F. in half an hour after milking and kept at that temperature or less until delivered to the consumer.

Demand Exceeding Supply.—If milk is required by a physician, the holder of a physician's order must at all times be considered a preferred purchaser.

Delivery.—Milk must be delivered within twenty-four hours after milking.

It will, therefore, be seen that if a majority of the dairies in the City of Toronto agree to the requirements laid down by the Milk Commission of the Academy of Medicine, the public are guaranteed a supply of pure milk at all seasons of the year. The Veterinary Inspector appointed by the Commission shall visit the dairies at any time he so desires, and he shall have liberty to take a bottle of milk from the wagon of any such firm at any time for examination. The Commission insist that all the cows be clipped and must be scrubbed once daily. They have arranged, not only that all bottles shall be sterilized, but that every bottle shall be dated. Each bottle is first covered with a paper fibre cap, over which is placed a piece of parchment on which will be found the seal of the Commission. In more than one instance already certain cows in the different byres have been ordered to be

slaughtered, on account of their showing the presence of tuberculosis, and due credit must be given to the firms for consenting to this, notwithstanding the fact that the animals destroyed were valuable. In order to show the work already done by the Milk Commission in this city, one of the large hospitals had its milk supply examined, the result being that it was found to be very little short of sewage and contained between four and five million bacteria to the cubic centimeter. Needless to say, the contract for this milk supply was at once cancelled. Another firm whose milk showed over ten thousand bacteria to the cubic centimeter were able to put on the market milk, quite recently, showing a little over one hundred bacteria. We welcome the Milk Commission in our midst. May they, like good cream, always be proud to be men who have risen to the top.

W. A. Y.

THE LILY OR THE DEADLY NIGHTSHADE—WHICH?

GLANCING at an item in the daily press recently, the statement was noticed, that out in a city in British Columbia the Chinese were to help to build a university, by contributing a large amount of the money needed. The item went on to say that of course Chinese students would come there in large numbers, instead of attending the universities in the United States. What a pity! The little yellow man will first contribute, then dominate, and then perchance control. 'Tis a little way he has. Who among the men in the Great Last West are going to place their sons shoulder to shoulder in class room or clinic with colored men? What a joke for the gods a class dinner of the future would be—first, the white man, with his gentle breeding and elegant deportment; on his right a Japanese, on his left a Chinaman, adorning the foot of the festive board, perhaps, a Longboat by some other name, and his right bower a son of Africa, picking a chicken bone. It would require fate to have made one an owl to gaze on such a scene and refrain from blinking. While we deny none the right of educational advantages in our goodly land, yet the line must be carefully drawn as to those who are eligible as even residents of Canada, let alone controllers of our educational institutions. In the grand old days, a part of university life was the comradeship and friendship reaching out into after life, a thing we trust to be cherished and fought for in the days to come.

In many places our universities have become co-educational. The lily and the nightshade entwined would be indeed a gruesome emblem.

A sight once seen in old Edinburgh has forever made race prejudice strong within—that of twin children, one black, the other white and fair-haired, belonging to a physician's daughter, who had perpetrated the crime of marrying a graduate in medicine (of the Edinburgh University), from India, a person of high caste. She had met him socially at her own father's dinner table. Keep our universities white.

“Bring no new Yellow race,
Or Black, or Brown, to spot *Columbia's* face,
The White Man's field;
Won for the generations long
Of White Men's children, to whom belong
The future's yield.
For pure blood's more than gain,
Of luscious fruit, or of ripened grain,
Of wood or gold.
Hate none, but know that Breed and Blood
Dictate the limits of Man's Brotherhood,
And bound each fold.”

W. A. Y.

WHERE SHOULD PEDIATRICS BE TAUGHT?

A CAREFUL study of approved text-books is helpful in acquiring a general knowledge of pediatrics. Didactic lectures are also serviceable; but, if unsupported by clinical material, they do not count for much. The most appropriate place for receiving instruction in the diseases of childhood is a dispensary or hospital for sick children, where painstaking clinicians suggest to the budding practitioner the best methods of gaining an inkling of a difficult subject.

In Toronto, the student of medicine can have access to the Hospital for Sick Children, College Street, devoted to the treatment of the medical and surgical diseases of childhood, with the specialties—diseases of the eye, ear, nose and throat, and orthopedics—clinical instruction in the same being given there daily by members of the visiting staff, who are professors of the University of Toronto. Twenty-five didactic lectures on medical pediatrics are given by two professors of the University of Toronto. Clinical

instruction in the contagious diseases of children is also given at the Toronto Contagious Diseases Hospital.

The Montreal General Hospital has a special ward devoted to children, and has a special outdoor clinic for children twice a week. So, also, has the Royal Victoria Hospital. The Children's Memorial Hospital, on Cedar Avenue, which is almost completed, will have a capacity of about eighty beds.

Lectures, both didactic and clinical, are delivered to fourth year students by professors of McGill University during the winter and spring terms, and students attend, in groups of four, during the session at the out-patient clinics. Instruction is given in orthopedics, and in diseases of the eye, ear, nose and throat, each in a special department at McGill University. Except in connection with general medicine, there are no clinics specially for children in Montreal. At Laval University, the medical department of which is situated at Montreal, pediatrics is taught by a special professor, who gives didactic and clinical teaching. This University has a dispensary in one hospital in Montreal, and the senior students visit a contagious diseases hospital, St. Paul's, in groups. Surgery is not divided from medicine, in teaching this branch. At the Western University, London, Ont., there is a course of 20 lectures on medical pediatrics. There is no separate course on surgical pediatrics, which is taken up, to a certain extent, in the surgical course. There is no clinical instruction except in cases met with at the Victoria Hospital (City Hospital). At Queen's University, Kingston, Ont., the Associate Professor of Obstetrics gives a course of lectures on medical pediatrics. Surgical pediatrics as a separate subject is not taken up, but the Professor of Surgery covers the ground in his lectures on general surgery. Clinical instruction in this subject is given at the Kingston General Hospital.

Owing to a growing tendency noticed among doctors engaged in medical teaching in North American medical colleges, to class themselves as physicians or surgeons, in their practice among adults, a similar line of cleavage is beginning to become apparent among pediatricists. From what has been said above, it will be seen that a division into medical and surgical pediatricists has not yet been declared in Canada. It may come, later on, and the

dawn of such a division will probably begin to appear as a sequence to a more thorough specialization of clinical teaching in the hospitals for sick children.

In his presidential address, at the second annual meeting of the Association of American Teachers of the Diseases of Children, Chicago, June 1, 1908, Dr. Samuel W. Kelly, Cleveland, took occasion to note the neglect of the surgical side of pediatrics in American colleges. In 1896, of sixty-three colleges, who gave him information on this question, only twenty-six professed to teach surgical as well as medical pediatrics. Thirty-seven acknowledged that they taught only the medical side of the subject. Dr. Kelly, also, criticized the shortcomings of the text-books on pediatrics, in few of which is reference made to the surgical side of the diseases of infancy and childhood. He does not intend to assert that pediatrics is a branch invariably badly taught in the United States, or that there are no colleges which teach it excellently, or that there is disharmony in medical faculties, or between teachers and clinicians concerning this subject. He does wish to say that there is no college in which the ideal teaching of pediatrics has been reached, and that there are many where it is not well taught. He closed his address with an appeal for united effort among pediatricists to improve the teaching of their specialty in American medical colleges. Should the uplifting effort be successful, the results will be, as he puts it: "A more thorough preparation of medical men, a better service to the public, and more respect for the child's doctor in every community." These reasons are strong enough to persuade North American medical faculties to aim at raising the teaching of pediatrics to an ideal plane.

J. J. C.

PRESENTATION BY MR. E. B. OSLER TO THE ACADEMY OF MEDICINE.

WITH his usual generosity, Mr. E. B. Osler, M.P., of Toronto, has presented to the Academy of Medicine an exceedingly interesting and most valuable collection of portraits and other engravings, selected by himself when on a recent visit to Paris. The collection is well worth careful study, containing, as it does, a number of subjects dear to the heart of a medical man. The collection includes an engraving made from Holbein's celebrated

painting, "Henry VIII. granting the charter to the Barber-Surgeons, London, 1547." This original painting is valued at £80,000. Another engraving, one perhaps better known to the medical profession, is "Une Leçon du Docteur Charcot à la Salpêtrière" There are also many portraits of celebrated medical men, whose names are familiar to every student of medicine, including Abernethy, Bichat, Lavater, Borelli, Larry, Cromel, and others.

The Academy of Medicine is certainly under a great debt of gratitude to Mr. Osler for his handsome donation, a gift that will be a perpetual source of pleasure.

W. A. Y.

THE WINNIPEG MEETING OF THE CANADIAN MEDICAL ASSOCIATION

DR. BLANCHARD, of Winnipeg, President of the Canadian Medical Association, spent a few days in Toronto last month, and on the evening of February ninth addressed the Section on Medicine at the Academy of Medicine. His remarks dealt largely with the arrangements already completed for the meeting of the Canadian Medical Association, next August. He impressed upon his hearers the fact that the 1909 meeting was undoubtedly going to be the best one that has been held for many years, and he urged every one to be present, as nearly as possible. The Canadian Medical Association meets in Winnipeg three days prior to the meeting of the British Scientific Association, so that those who attend the former can wait over and attend that of the British Scientific Association as well, on payment of an additional fee of \$10. The profession of Winnipeg are prepared to entertain the visiting members in the most lavish manner, though, as Dr. Blanchard said, the scientific side of the meeting would not be by any means overlooked. Dr. Blanchard proposed that a symposium on Diseases of the Kidney be given at one of the afternoon sessions. The usual reception will be held the evening of the first day, with numerous private dinners and other entertainments. We trust that our readers will bear particularly in mind the meeting of the Canadian Medical Association next August, and arrange to take their holiday at that time.

W. A. Y.

EDITORIAL NOTES.

Dangerous Epileptics.—Physicians and the general public know of the hurts and severe bodily injuries which befall the confirmed epileptic. Physicians also know that an epileptic is occasionally attacked with mania, which renders the patient dangerous to others and sometimes homicidal. In cases of larval epilepsy, violent actions have been committed and assaults made, sometimes giving rise to questions which come before the courts. Although this much is quite true, it will to most persons seem strange, that epilepsy in an accused person is to be received as a valid excuse for murder. As the result of a recent trial for murder, at London, Ont., Judge Meredith called the grand jury together and pointed out to them the danger in which the community is placed by the presence of epileptics, who may be seized, at any time, with an attack of mania, during which they may commit some crime. Judge Meredith said: "The trial just over seems to me to show clearly that it is practically impossible to convict anyone subject to epilepsy of any act which he or she may commit, except under special circumstances." Regarding the homicidal inclinations of an epileptic, Flint writes in his *Practice of Medicine*, "An epileptic under my observation, a quiet, docile man, has repeatedly said to me, with an appearance of much concern, that he had fears he might kill some one. He stated that he was conscious at the moment of an intense desire to kill anyone who irritated him." Perhaps, if Flint's patient had been a soldier, with a large supply of ball cartridge in his possession, he might, in a moment of irritation, have shot a comrade. The occasion makes the criminal; and, in view of the allowance made for the irresponsibility of epileptics, such persons should certainly not be recruited as soldiers. The plea of epilepsy will probably be heard of again in trials for murder.

The Unlicensed Sale of Poisons Causes Death.—Pharmacists are obliged by law to register the sale of poisons—a law sometimes more honored in the breach than in the observance. Recently, in this city, a girl sent a messenger to a pharmacy for ten cents' worth of morphine, and a paper containing about twelve grains of the deadly drug was handed to the messenger with no more ceremony

than if it had been so much bicarbonate of sodium. The girl for whom the morphine was bought took about half the powder at one dose, about 11 p.m., one evening, and in due time fell into a comatose state, which terminated in death next day, about twenty hours after the poison had been taken. It has been remarked that most cases of poisoning by opium prove fatal in from six to twelve hours, so that this case of poisoning by morphine was rather protracted. Referring to protracted cases of morphine poisoning, the author of *Taylor's Medical Jurisprudence* says: "I have known one case fatal in twenty-two hours, and among those collected by Sir R. Christison, the longest lasted twenty-four hours." From the evidence given before the coroner, who made enquiry into the cause of death, it was proved that the unfortunate girl received no medical assistance until about sixteen hours had elapsed from the time the poison was taken. It would appear, therefore, that the physician who attended her, Dr. E. Herbert Adams, had a hopeless task on his hands, owing to the fact that a poisonous dose of morphine had had ample time to expend its influence on the patient's blood and nervous centres, making her recovery impossible.

Doctored or Falsified.—Slang meanings of the word *doctored* are: To tamper with and arrange for one's own purposes; to falsify; to adulterate, as to *doctor* election returns, to *doctor* whisky. Popular cant words are not amiss in the mouths of cabmen, sailors, street-hawkers, sportsmen, colored minstrels, and others, who love popular but unauthorized words. Literally all such people love to sling the jaw, to use abusive language, insulting words, words that have no just reason for being. It is regrettable, therefore, to see the word *doctored* countenanced by a reputable Toronto morning newspaper. It appeared in a report of one of the early debates held this session in the Canadian House of Commons. The ideas suggested are: A doctored telegram is a falsified telegram; by implication, doctoring is the practice of falsification, and a doctor is a falsifier. These are not the ideas which obtain credence in this country. In Canada, well-equipped medical colleges are supported by public and private funds; provincial and municipal funds are expended in maintaining hospitals, where the well-to-do and the poor are doctored by highly-trained doctors.

Ascites in Typhoid Fever.—Ascites not being a disease, but an aggregation of symptoms, the diagnosis should not be limited to the demonstration of ascites alone, but should, at the same time, determine the original affection causing it. Text-books of the Practice of Medicine do not mention ascites as a symptom of typhoid fever, but in an Annotation which appeared in the *Lancet*, November 28th, 1908, and in a paper published in this magazine, January, 1909, Dr. McPhedran, Professor of Medicine in Toronto University, states that typhoid fever may be the efficient cause of ascites, apart from peritonitis. Six cases of typhoid fever are described in Dr. McPhedran's paper. In five of them ascites took place during the progress of the fever, persisted for about ten days or two weeks and disappeared with convalescence. In a sixth case peritoneal effusion took place; but it did not clear up promptly, for the patient "left the hospital in good condition, but with a considerable quantity of fluid still in the peritoneum." The six cases terminated in recovery. It is not stated that chemical or microscopical examination of samples of the effused fluids were made, so that we must accept the statement in the paper, that in five of the cases, the effusion into the peritoneum was dropsical, and in the sixth case inflammatory—probably of a tubercular character. That ascites may occur in typhoid fever is also shown by Dr. F. J. Poynton, who, in the *Lancet*, January 2, 1909, mentions a case of abdominal illness in which the diagnosis lay between appendicitis and typhoid fever. To settle the question of diagnosis, Dr. Poynton had an exploratory incision made by a surgeon in the region of the appendix. Clear fluid escaped from the incision, and some of the fluid being taken up in a sterilized pipette was found to be swarming with the bacillus typhosus. Dr. Poynton's case afterwards ran a typical typhoid course and terminated in recovery. Dr. Poynton thought the ascites in his case was due to an intense congestion of the peritoneum. Dr. McPhedran thought that "in at least four of his six cases, the effusion, so far as can be determined, was due to pathological conditions resulting from typhoid infection." He thought that the immediate cause of the peritoneal effusion was uncertain, but suggested a relaxed state of the abdomen, enlargement of the mesenteric glands and toxemia. In a monograph on diseases of the liver, which appeared in *Sajous' Annual and Analytical Cyclopedic of Practical Medi-*

cine, 1899, Dr. McPhedran said, that active congestion of the liver, resulting from the action of a toxic agent, such as typhoid fever, will produce ascites. If one were willing to find a short road to explain the anomalous ascites noted in five of Dr. McPhedran's cases of typhoid fever, this one might be accepted, and it seems seductive enough, too; for, in these same cases, the ascites promptly disappeared after the fever left—when the liver had returned to a normal condition. The weak point about such an attempt to explain ascites in typhoid fever is that it proves too much; once admitted, nearly every case of typhoid fever should have ascites. As ascites in typhoid fever has not been noted by writers, and its rationale cannot be explained by clinicians, it remains for pathologists to show the true cause of this phenomenon. In the meantime, Dr. McPhedran deserves credit for making an original contribution to the already enormous symptomatology of typhoid fever.

Dementia Præcox or Adolescent Insanity.—In a paper published in the *Medical Press* (London), January 6, 1909, Dr. Robert Jones discusses at length the terminology of dementia præcox. He describes the three forms given in Kraepelin's classification—hebephrenia, katatonia, and the paranoid form, together with the symptoms associated with each of them. In reference to the symptoms of these closely-allied varieties, he denies that they are different forms of insanity, or that they are limited to adolescence. He also remarks: "If Kraepelin's classification be a typical one, then I can only say that in Claybury Asylum, with nearly 2,500 patients, there are not more than 5 per 1,000 cases of dementia præcox among the total population; whereas, Kraepelin, I believe, considers that the vast majority of the residents in institutions for the insane are cases of this form." Dr. Jones objects to the term dementia præcox, because, while loss of memory can be relied upon as characteristic of true dementia, so called cases of dementia præcox are most retentive in their memories. A hard crack at Kraepelin's terminology is the following: "A terminology which suggests the ultimate termination of a disorder is, in my opinion, somewhat premature and inapplicable at its inception, more especially if, as in these cases, there is occasional recovery." As about 8 per cent. of the hebephrenic form and 13 per cent. of the katatonic form of the disease called dementia præ-

cox recover, he agrees with Dr. Clouston in thinking that the application of the term *dementia præcox* to a whole group of adolescent cases of insanity, curable and incurable, is confusing and unscientific. He also asserts the curability of many cases of so-called *dementia præcox* in these words: "In my experience for the last five years at Claybury, 2,879 young men and women between the ages of 10 and 25 have been received, a slight majority of them being females, and recoveries occurred in 36 per cent. Clearly, therefore, the term '*dementia*' is out of place." His conclusions are as follows: (1) There is no definite disease "*dementia præcox*." The descriptions applied cover almost every possible variety of insanity. (2) The term "*dementia*" is inapplicable, because it connotes permanent and irrecoverable loss of mental function. (3) The application of "*dementia*" is unsatisfactory to cases in which loss of memory is not a prominent early symptom. (4) The term does not state whether it is the terminal stage or the stuporose condition, which is of primary importance. (5) The qualifying adjective "*præcox*" is equivocal, in so far as it leaves it doubtful whether the diseased condition evolves precociously, or whether it is stated to occur in early life or youth. It is therefore a vague and indefinite term, as these symptoms are also known at maturity and even at the menopause, and, therefore, they should find no place in a scientific or logical classification. (6) A term which implies a definite entity, and which, with some, is becoming more accepted as such, should be distinguished by definite pathological findings, which is not the case. (7) Finally, it is more in harmony with practice, and of greater help to diagnosis and treatment, to use, in place of "*dementia præcox*," the term "adolescent insanity," suitably subdivided, as at present.

J. J. C.

PERSONALS.

Dr. Herbert Bruce spent 10 days, early in January, with Dr. Crile, Cleveland, O.

Dr. Chas. A. Page, Trinity, 1898, late of Kingsville, has settled at 105 Bloor St. West.

Dr. G. R. McDonagh, of Toronto, is in South Africa, but expects to return about April 1st.

Dr. H. T. Machell is spending a few weeks in Washington, D.C., in order to recover from a recent illness.

Dr. F. N. G. Starr has, we are glad to say, entirely recovered from his recent illness and is again hard at work.

Dr. Norman K. Wilson, son of Dr. W. J. Wilson, College Street, and who graduated last fall, is practising with his father.

Dr. W. W. Ogden, of Spadina Ave., has been seriously ill at his home on Spadina Ave.; but will, we hope, soon be up and around.

Dr. James P. Warbasse, formerly editor of the *New York State Medical Journal*, has joined the editorial staff of the *American Journal of Surgery*.

Dr. George H. McLaren, late Resident Surgical Officer Birmingham Eye Hospital, and Inspector of Ophthalmic Hospitals for the Egyptian Government, desires to announce that he will confine his practice entirely to diseases of the eye.

Dr. and Mrs. John Caven, of this city, have left for Florida, where they intend remaining till the end of March. Their experience on the White Star S.S. Republic was most harrowing, and Dr. Caven says that he is satisfied now to travel by land. We trust that our good friends will entirely recover from their wreck experience and return to Toronto as well as ever.

Drs. Perry Goldsmith and Gibb Wishart spent the last week of February in Chicago attending a meeting of the American Laryngological Association.

It is a matter of sincere congratulation that the Hospital By-law, as recently presented to the citizens of Toronto to vote on, passed by a goodly majority. No money could be put to better advantage than the manner in which this \$150,000 will be expended, and it will be but a few months before the citizens will benefit by considerably enlarged and improved hospital accommodation.

Every member of the profession will sincerely regret to learn of the serious illness of Dr. Jas. H. Richardson, of St. Joseph St., one of the fathers of medicine in Toronto. The doctor was in the General Hospital in December, being treated for bladder trouble consequent upon old age, but was able to go home after being in bed for about two weeks. He took ill again early last month, and, as we go to press, was in a serious condition, especially, for one who has attained to so ripe an age. We are sure that we voice the feelings of every member of the profession when we say that we hope the dear old gentleman will soon again regain his normal health.

The late Dr. Donald Gillespie, of Cannington, Ont., pursued his studies till graduation, in 1860, entirely at the Medical Department of Victoria University. He was always an earnest, industrious student throughout his course, thus foreshadowing his future career as a medical practitioner. He began practice with Dr. Martin, in Manilla, Ont., but in 1862 settled in Cannington, where he soon built up an extensive practice, and was much beloved as a careful and faithful physician. He practised his profession in Cannington till his death, which occurred Dec. 22, 1908. His memory will be long cherished and his loss much felt in the locality where he spent practically his entire and most useful professional life.

News of the Month.

TORONTO'S NEW JAIL SURGEON.

AFTER considerable opposition on the part of several members of the City Council, Dr. W. T. Parry, of Spadina Avenue, was duly appointed Surgeon to Toronto Jail on February 15th. The vacancy to this municipal office, created by the resignation last month of Dr. James H. Richardson, who has occupied the position for just fifty years, necessitated that the matter should come before both the Board of Control and the City Council at two subsequent meetings. Dr. Parry did not by any means have all his own way in this matter, as he was opposed by Drs. Sneath, J. Noble, E. E. King, E. H. Green, J. E. Forfar, McNichol and J. J. Gee. He was, however, appointed by a small majority.

Dr. Parry was born in Dunville, Ontario, in 1860. He attended Toronto School of Medicine and graduated in 1885, going subsequently to London and taking the degree of L.R.C.P. in 1886, and the additional degree of M.R.C.S. a year later. Dr. Parry for some years practised on Bathurst Street; but purchased a handsome residence on Spadina Avenue many years ago, where he has practised ever since.

A New Medical Journal for the North-West.—We have been favored by our friend, Dr. Harry Morrell, of Winnipeg, with Vol. 1, No. 1, of *The Saskatchewan Medical Journal*. We notice that Dr. Morrell is chairman of the publication committee, and Dr. G. H. Charlton secretary-treasurer. The first issue contains original articles by Drs. Geo. A. Bingham, of Toronto; Jas. McLeod, Regina; H. E. Munro, Saskatoon; C. A. Henry, Yorkton; G. R. Peterson, Saskatoon; J. C. Black, Regina. Besides about thirty pages of original matter, the issue contains the report of the third annual meeting of the Saskatchewan Medical Association, as also some editorial material, news items, book reviews, etc. We take this opportunity of congratulating Drs. Morrell and Charlton upon their good start and wish them every success.

Physician's Library

BOOK REVIEWS.

General Surgery. A presentation of the scientific principles upon which the practice of modern surgery is based. By ELRICH LEXER, M.D., professor of surgery, University of Königsberg. American edition edited by Arthur Dean Bevan, M.D., professor of surgery, Rush Medical College, Chicago. Authorized translation from the second German edition by Dean Lewis, M.D., assistant professor of surgery, Rush Medical College. Pages xxix. and 1,041, with 451 illustrations. New York: D. Appleton & Co. Toronto agents: D. T. McAinsh & Co.

Had this work been written in Great Britain or in America its title would likely have been either the "Principles of Surgery" or the "Science of Surgery." The Continental usage, calling this great division "general surgery," has been here followed. The other great division, known to us as the practice or the art of surgery, and on the Continent as regional surgery, is only incidentally considered in the goodly volume under review. Its scope can be inferred when the subjects taken up are named. Part I. treats of wounds, of aseptic technic, of local and general anesthesia, and of the principles of plastic operations. Part II. takes up surgical infectious diseases; Part III., necrosis; Part IV., mechanical injuries of tissues and their results; Part V., surgical diseases; Part VI., tumors, and Part VII., cysts, other than cystic tumors. Dr. Lexer's work mirrors German surgical science at its latest and best. Dr. Bevan's additions are just what would be expected by those of us who know him as a brilliant and most successful operator, and who know of him as a teacher winning fame for the great university with which he is connected. Dr. Lewis has made a translation of the German text into smooth and scholarly English; and, in view of this, he deserves our hearty congratulations. As an evidence of the advanced character of the work, mention may be made of the section on blastomycosis, written by Dr. Oliver Ormsby. Nothing to equal it can be found in any other general treatise known to this reviewer. The illustrations throughout the book are new to English readers, and are, in the main, excellent. The publisher's part is up to the Appleton standard, and, saying this, it is not necessary to say anything further on the subject. Reading certain sections of the work for

the purpose of this review has been a genuine pleasure. Its more careful study is counted upon by the writer as affording an opportunity for keeping in touch with the most advanced German and American practice. The viewpoint is new and the prospect most attractive.

N. A. P.

Text-Book of Gynecological Diagnosis. By DR. GEORG WINTER, O.O., Professor and Director of The Kgl. Universitäts-Frauenklinik in Königsberg, Prussia, with the collaboration of Dr. Carl Ruge, of Berlin. Edited by John G. Clark, M.D., Professor of Gynecology, University of Pennsylvania. After the third revised German edition. Illustrated in four full page plates and 346 text illustrations in black and colors. Philadelphia, London and Montreal: J. B. Lippincott Company.

But little attention has been given of recent years, as far as medical literature is concerned, to the subject of gynecological diagnosis. It is for this reason that we welcome this valuable text-book by Drs. Georg Winter and Carl Ruge. The editor, Dr. John G. Clark, has had no easy task in his work of putting before the American medical profession such a mass of practical material. The text-book consists of nearly 650 pages, which are illustrated by four full-page plates, and nearly 350 text illustrations in black and colors. On the second title page we find the following sentence: "To my esteemed master, Robert Olshausen, this work is dedicated in unalterable gratitude," showing in what high esteem Olshausen must have been held by the authors.

A large number of books devoted to American gynecology have appeared of recent years; but we cannot say that we have come across one quite so practical and generally useful as *The Text-Book of Gynecological Diagnosis*. It will be found by the average practitioner to be of great aid to him in his daily work, and is well worthy of the most careful perusal by all those who are fortunate enough to possess a copy. It is but twelve years since the first edition of this book was published, since which time it has been twice thoroughly revised. The book contains three parts, the first devoted to General Diagnosis, the second to Special Diagnosis and the third to Analytical Diagnosis. Part one covers such subjects as external and internal examination of the patient, combined examination, the proper method of using the specula, microscopic diagnosis, cystoscopy, bacteriologic diagnosis and radiography. Part two consists of over five hundred pages and forms, of course, the principal part of the book. It would be difficult to enumerate the different headings found in this section, but suffice it to say that very few subjects coming under this heading have been left untouched.

There is no doubt that American Gynecology owes a great

deal to the research work that has been done during the past decade or more by German specialists, who have proved themselves more than worthy of notice in this particular field. The German work in embryology alone has been hardly equalled by that accomplished in any other country, so that it is little wonder that a work such as the one under review contains such a wealth of original material.

We heartily recommend Dr. Clark's translation to any who are desirous of purchasing a book that must of necessity prove valuable for many years to come.

W. A. Y.

Aids to Obstetrics. By SAMUEL NALL, B.A., M.B., Cantab., M.R.C.P., Lond. Revised by C. J. Nepean Longridge, M.D. Vict., F.R.C.S. Eng., M.R.C.P. Lond., pathologist and registrar, late resident medical officer at Queen Charlotte's Lying-in Hospital, registrar to the Grosvenor Hospital, examiner to the Central Midwives Board, lecturer on midwifery for the London County Council. Twenty-fifth thousand. Seventh edition. London: Bailliere, Tindall & Cox, 8 Henrietta Street, Covent Garden, 1909. Canadian agents: J. E. Carveth & Co., Yonge Street, Toronto.

This little work, although without illustrations, is a very complete handbook. The subject is taken up in such a way as to be of special value to students or others wishing to review. It is up to date and well written, the chapters on the obstetrical operations being specially good. We only regret that it is non-illustrated and somewhat brief, or it might take its place as a first-class manual of obstetrics.

W. J. W.

Orthopedic Surgery for Practitioners. By HENRY LING TAYLOR, M.D. Published by D. Appleton & Company.

"Modern Orthopedic Surgery has no prejudices for or against mechanical, gymnastic, or operative procedures as such, but uses each at the proper time and in its proper place. It has completely emancipated itself from its former rather narrow limits, and has made, and is still making, vast progress in the simplification and proper choice of methods; it is also making contributions of value to medical and surgical practice. It is this progressive, vital, modern orthopedic surgery that it has been our aim to present."

The spirit of this quotation has been well kept in mind by the author throughout this comprehensive work—comprehensive, and yet all too brief.

The author's arrangement adds much to the convenience and clearness of the book and favors economy of time and space. The work is divided into General, Special and Technical parts. In the first are discussed the underlying principles and the more impor-

tant crippling affections. The second is topographical, giving attention in the discussion of each part to diagnosis, prevention, prognosis and treatment. The third part deals with the principles of mechanical treatment.

The author's style is terse and lucid; one is seldom left in doubt as to his meaning. His matter bears ample testimony to his own experience of twenty-five years in the study and work of orthopedic surgery. Many of his readers will be surprised at the extent of the field claimed and covered. The orthopedic surgeon's training gives him special qualifications for dealing with all mechanical problems relating to locomotion, and consequently with fractures. He is brought constantly into contact with diseases of the nervous system, because of their disabling results, remedial chiefly by surgical means. The general practitioner and often the general surgeon, who may not have been able to keep closely in touch with the great advance made in orthopedics, will read this book with surprise and delight. In not a few of its teachings he will find it necessary either to modify his views or to dispute the author's conclusions and practice.

"There is far too much fear of stiffened joints. In dangle and paralyzed joints ankylosis in proper position is a positive benefit and is often intentionally produced. . . . Normal joints may be fixed for an indefinite time without fear of ankylosis; it is only inflamed joints that become permanently stiff. . . . Anything that increases the joint irritation causes an increase of destructive action and of adhesive inflammation. Injudicious, passive or forced movements in the active stage of disease often do this. . . . It is a safe rule not to persist in manipulations that cause severe, general or local reaction, or are followed by increased stiffness. The fear of ankylosis with some amounts to a mania, and much harm and suffering have been caused by ill-advised and useless manipulations."

The very common practice of employing passive motion is responsible for many disabling results following fractures.

The teaching throughout the book has gathered up the latest and best that has found expression in surgical literature dealing with the surgery of the skeleton, that which is concerned with attitude and locomotion.

It is a disappointment to find no reference to important surgical work which has been done in the suturing, grafting and transposing of nerves, with a view to energizing paralyzed muscles. This work is closely associated with the objects sought by the orthopedic surgeon, and is a field full of promise.

While conciseness is commendable, yet one may wish that the author had written more fully on many points. In summing up one may in justice say that Dr. Taylor has given the profession

an excellent setting forth of the modern teaching and practice of orthopedic surgery.

B. E. M.

Obstetric and Gynecologic Nursing. By EDWARD P. DAVIS, A.M., M.D., Professor of Obstetrics in the Jefferson Medical College, Philadelphia. 12mo. volume of 436 pages, fully illustrated. Third revised edition. Philadelphia and London: W. B. Saunders Company. 1908. Agents for Canada: J. A. Carveth & Co., Limited, Toronto. Polished buckram, \$1.75 net.

It seems to us but a very short time since we received the second edition of Dr. E. P. Davis' work, *Obstetric and Gynecologic Nursing*. The mere fact of the third edition following the second so rapidly goes to show that the book is a valuable one and that it has met with a favorable reception. The author has thoroughly revised his work, and considerable new material appears in the third edition. The book is written for the trained nurse, and will be found full of most valuable information, which can be put to practical use during her career. It is divided into two parts, the first devoted to *Obstetric Nursing* and the second to *Gynecologic Nursing*. After perusing this work, we feel that it is worthy of recommendation, and we portend for it a better reception even than that given to its predecessor.

The Black Bag. By LOUIS JOSEPH VANCE. With illustrations by Thomas Fogarty. Toronto: McLeod & Allen, publishers.

The story of a young Californian, who suddenly became penniless through failure of his business firm in San Francisco and passed through enough adventures in the following few weeks, everything occurring at opportune moments, to please any reader who is fond of such characters as Raffles.

American Practice of Surgery. A Complete System by Representative Surgeons of the United States and Canada. Edited by JOSEPH DECATUR BRYANT, M.D., and ALBERT HENRY BUCK, M.D. To be published in eight royal octavo volumes. Volume V., 973 pages, illustrated by 452 line and half-tone engravings in the text and by eight full-page plates by chromolithography and other processes. (Subscription.) New York: William Wood & Co.

The first article, on *Surgery of the Head*, is by Dr. Edward Archibald, of Montreal, Canada. Scalp, cranial bones and contents of skull—vessels, membranes and brain structures—receive very full consideration. Some idea of the thoroughness with which all these topics are treated may be inferred from the fact

that this article alone occupies nearly 400 pages (out of a total of 973). Although surgery of the brain is a relatively new field, it has been most energetically explored and cultivated, and it can already boast some remarkable triumphs.

"Surgery of the Face" is the title of Prof. C. B. G. de Nancrede's article. It takes up, one after another, the different surgical diseases which may involve this part of the body, and gives sufficiently full and thoroughly practical information with regard to each one of them. The different operations which may be employed for the relief or cure of these diseases are described in detail; not all of them, however, as hare-lip and the various plastic operations receive separate and very full consideration in other parts of this work.

Dr. George C. Harlan's "Surgery of the Eye" is a very practical treatise on this subject, and gives the reader an excellent insight into the state of ophthalmic surgery at the present time.

As one might expect from the fact that Dr. Bryant's associate was for more than a quarter of a century in active otological practice, the surgery of the ear receives specially thorough treatment in the *American Practice of Surgery*. The entire field is subdivided into three parts, and each one of them is entrusted to an expert.

Dr. Robert Lewis, jr. discusses the different mastoid operations in great detail, and with the ease and assurance of one who knows from long experience what sort of practical information he may best furnish for the guidance of those who are likely to read his article. Equally thorough and satisfactory are the articles of Dr. John D. Richards, of New York, and Dr. Henry O. Reik, of Baltimore. The former writes on infective sinus thrombosis of otitic origin and on the surgery of the labyrinth—the latter an entirely new field; and Dr. Reik furnishes a well-written and thoroughly practical treatise on brain abscesses of otitic origin. All three of the articles are copiously illustrated, the last two being furnished with exclusively original pictures.

The remaining articles in the volume—on surgery of the cranial nerves, by Dr. Charles H. Frazier, of Philadelphia; on surgery of the pharynx, etc., by Dr. Charles H. Knight, of New York; on surgery of the larynx and trachea, by Dr. James E. Newcombe, of New York; on laryngectomy, by Dr. Frank Hartley, also of New York; and on hare-lip and cleft-palate, by Dr. James S. Stone of Boston—are all of conspicuous merit. In every instance the writer has kept clearly before him the duty of describing operative procedures in such a detailed manner that his readers, if reasonably well trained in surgical technique, should have no special difficulty in repeating the different steps recommended.

We cannot refrain from expressing the hope that the articles which are yet to appear in the remaining three volumes may maintain the high standard of excellence which characterizes the articles in Volume V.

Proceedings of the Royal Society of Medicine. Vol. II., No. 3. January, 1909. London, New York, Calcutta, Bombay: Longmans, Green & Co., 39 Paternoster Row. All rights reserved. Price, 7s. 6d. net.

The January issue of the Proceedings of the Royal Society of Medicine contains a number of very important articles by leaders in the English profession. The most important article, perhaps, contained in this volume is, "Discussions of the Influence of Heredity on Disease, with special reference to Tuberculosis, Cancer, and Diseases of the Nervous System." The introductory address is by Sir William Church, K.C.D., the following well-known members of the profession also taking part: Sir William Gowers, Professor Bateson, Dr. G. H. Savage, Dr. F. W. Mott, Dr. Mercier, Dr. Arthur Latham, Prof. Karl Pearson, Dr. J. E. Squire, Dr. Baskford, Mr. Butlin, Sir John McFadyean, Dr. A. M. Gossage, Dr. Shrubals, Mr. J. H. Evans, Dr. Heron, Mr. J. P. Mudge, Dr. Bulloch, Mr. N. Bishop Harman, and Dr. C. Herbert Bond. The usual number of sections on Anesthetics, Diseases of Children, Dermatology, Electro-therapeutics, Laryngology, Neurology, Obstetrical, Surgical and Oto-laryngological diseases appear, each one containing most important literature upon its particular subject.

International Clinics. A quarterly of illustrated clinical lectures and especially prepared original articles; edited by W. T. LONGCOPE, M.D., Philadelphia. J. B. Lippincott Company, publishers. Volume four of the eighteenth series is out. Dr. Jos. Pratt, of Boston, calls attention to the advance of physical therapeutics, a timely paper, seeing so much has been said of late of psychotherapeutics. Lichty, of Pittsburg, reports 140 cases of gastric ulcer. He reviews the management and treatment of von Leube and of Ziemssen, and also the surgical treatment. For the anemia he recommends iron subcutaneously. The cause, he says, is yet to be discovered. Dr. Palmer, of Cincinnati, writes on psychotherapeutics. The preceding number had an article on "The Trail of the Subconscious," highly excellent. This one gives merely a cursory and superficial view of the subject. The article quotes Strümpf as saying that one-half the cases of impaired health are of mental origin. As a remedy for some of these functional nervous troubles, travel is extolled; it is "the best instructor for the harmonious development of our physical, mental

and spiritual natures." Wainwright, of New York, contributes a paper on Gout. One cause of gout, he holds, is lead poisoning; another is drink. Its pathology has not been thoroughly established. The author describes the disease clinically, both the acute and the chronic types. He calls attention to the value of colocynth and states that it is the chief ingredient in the secret remedy known as Laville's tincture. Splanchnoptosis, by Thos. Brown, of Baltimore; Splenic Anemia, by Weber, of London; Gangrenous Appendicitis, with spontaneous cure, by A. L. Benedict, and a number of other interesting contributions appear in the volume.

J. N. E. B.

Proceedings of the Royal Society of Medicine. Vol. II., No. 2. December, 1908. Longmans, Greene & Co., 39 Paternoster Row, London, New York, Calcutta, Bombay. Price, 7s. 6d. net.

The December, 1908, issue of this valuable work contains a number of articles that are well worthy of perusal. The same sections as have appeared in the preceding volumes appear in this particular number, and we notice amongst the contributors such names as Dr. Edmund Cautley, Dr. Geo. Carpenter, Dr. James Collier, Dr. F. Parkes Weber, Dr. Albert Carless, Dr. Frederick E. Fentor, Dr. H. Radcliffe Crocker, Sir Malcolm Morris, Sir Felix Semon, Dr. Herbert Tilley, Dr. Chas. MacAlister, Mr. J. Bland-Sutton, and a number of others of equal renown.

We have on a previous occasion taken the opportunity of referring to "The Proceedings of the Royal College of Medicine" as being one of the most valuable contributions to medical literature, and we have no reason to change our opinion.

W. A. T.

Diseases of the Genito-Urinary Organs and the Kidney. By ROBERT H. GREENE, M.D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and HARLOW BROOKS, M.D., Assistant Professor of Clinical Medicine, University and Bellevue Hospital Medical School. Octavo of 605 pages, profusely illustrated. Philadelphia and London: W. B. Saunders Company. 1908. Agents for Canada: J. A. Carveth Co., Limited, Toronto. Cloth, \$5.00 net; half morocco, \$6.50 net.

The second edition of this book appears very soon after the preceding volume, and goes to show that the work of its authors has been acceptable to their readers.

After looking over the volume, consisting as it does of nearly six hundred pages, we find that considerable new material has been added and quite a number of subjects considered that did not appear in the first edition at all. A number of new operations

are presented to its readers, as also new methods which have appeared in recent medical literature. But few books have been written on Genito-Urinary Diseases whose authors have considered what is required by the general practitioner. The great trouble with the majority of medical authors is that they consider too much the interests of the specialist and more or less ignore what should benefit the average general practitioner. Drs. Greene and Brooks have in this volume incorporated a good deal of practical material, most of which will be found useful to the general practitioner. It is not to be expected that in a work of this size there will be found a full and complete description of this vast and rapidly increasing subject; but the authors have devoted the most of their space to conditions found very frequently in practice. Another advantage of this work is that it is the conjoint product of a surgeon and a physician, so that both sides of the subject have been considered.

Arteriosclerosis, Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis, and Treatment. By LOUIS M. WARFIELD, A.B., M.D., instructor in medicine, Washington University Medical Department, physician to the Protestant Hospital, adjunct attending physician to the Martha Parsons' Hospital for Children, St. Louis, Mo., formerly medical health officer at the Johns Hopkins Hospital, Baltimore, Md., member St. Louis Medical Society and American Medical Association, etc. With an introduction by W. S. Thayer, M.D., professor of clinical medicine, Johns Hopkins University. With eight original illustrations. St. Louis, Mo.: C. V. Mosby Medical Book Company, 1908.

This is a comprehensive but concise little work on a subject of universal interest. One finds embodied in it practically all that is known of the condition described by that rather vague name, arteriosclerosis. The volume is well bound, nicely illustrated, and carefully written. A careful perusal of its pages will hold the interest and well repay the reader.

W. J. W.

An Atlas of Clinical Surgery. By BOCKENHEIMER. Has just been published in three volumes. New York: Rebman Co.

This work was undertaken by Bockenheimer from material at von Bergmann's clinic. Models of morbid conditions were executed with great skill by Kolbow, in the pathoplastic institute in Berlin, and used with much value in the teaching of clinical surgery. These models have been reproduced for the purposes of this atlas by the four color process, giving a more natural appearance than can be obtained in reproduction by water-colors. These beau-

tiful clinical pictures should be of great value to assist the practitioner in the diagnosis of the more important surgical diseases.

In the text the author gives diagnosis, prognosis, and treatment, according to the teaching of von Bergmann's School, and therefore is quite abreast of modern times.

Mr. Marshall, who has undertaken the translation of this valuable work, has performed his task in a very acceptable manner.

Altogether, this work is of a very high order of merit, and should be in the hands of every practitioner. The cost of the work, \$24 for three volumes, will probably interfere with its being used largely by students, although it would be a most useful and practical work for them.

H. A. B.

Green's Encyclopedia and Dictionary of Medicine and Surgery.

Edited by J. W. BALLANTYNE, M.D., F.R.C.P.E. Vol. X.
Thiersch-Zymotic. Edinburgh and London: William Green & Sons.

Volume X. of Green's Encyclopedia brings the entire work to a conclusion. This volume includes all subject headings from "Thiersch's Method" to "Zymotic." The volume forms a very fitting conclusion to the splendid work, and it will be found by its readers that the ten volumes of the present set include almost all of the articles which appeared originally in the thirteen volumes of Encyclopedia Medica, along with a good deal of new material.

When we first glanced over Volume I. of this work, we were a little dubious that the editors could fully carry out their promises; but we have been agreeably disappointed. We have already taken occasion to say that Green's Encyclopedia and Dictionary of Medicine and Surgery is a medical dictionary on a very large scale and that it would be largely subscribed for by those desiring to have in their library what really combines a medical dictionary and a work dealing in abstract form with many thousand subjects in medicine and surgery.

Volume X. contains nearly eleven hundred subject headings, of which sixty-four are articles of more than one thousand words in length. Under these articles we find contributions dealing with Morbid Conditions of the Uterus, Displacements, Inflammation, Tumors, and Insanity Associated with Uterine Diseases. Another long article deals with the Pathological Change in the Urine, another with Tuberculosis, another with the Wrist-Joint, another with Whooping Cough, and still another with Yellow Fever.

It would be almost impossible to enumerate the medium sized and shorter articles to be found in this volume, as they are very numerous.

In the entire work by Dr. Ballantyne, we find not less than six hundred and nine lengthy articles, and ten thousand three hun-

dred and sixty-six subject headings, an average of nearly twelve hundred per volume.

We take the opportunity of again congratulating both the editor and the publishers upon the result of their labors.

Surgery of the Upper Abdomen. Volume I. Surgery of the Stomach and Duodenum. By JOHN B. DEEVER, M.D., L.L.D., Surgeon-in-chief to the German Hospital, Philadelphia, and A. P. C. ASHURST, M.D., Surgeon to the Out-Patient's Department of the Episcopal Hospital, Philadelphia. Publishers: P. Blakeshire Son & Co., 1012 Walnut Street, Philadelphia, 1909.

This book, of 452 pages, well illustrated, coming from two surgeons of such excellent repute, is so well written and contains such a wealth of knowledge from the commencement to the end, that it should be found among the "Selected Books" of each practitioner's library. The chapters on the anatomy and embryology of the upper abdominal viscera are excellent, and form the basis of the symptomatology and treatment of the diseases of the stomach and duodenum. They are not at all exhaustive, but of sufficient length for the purpose. "The Physiology of Digestion" is especially good, in the description of the functions of the serous and mucous surfaces, in their defensive action of the human economy in disease. Gastric ulcer is treated at length, and with a great deal of logical thought. The chapter on Pyloric Obstruction is especially interesting, one cause of which, "Infantile Stenosis," being so very well written, that the attention is held to the maximum. Malignant diseases of the stomach, hour-glass stomach, ulcer of duodenum and stomach, with the very lucid descriptions of the various operative procedures are, in themselves, worth the price of the book and the energy expended in digesting and assimilating them. The volume is essentially up-to-date, and contains many points that are new from the experience of the world's best-known and greatest surgeons.

Volume II., on "Surgery of the Liver, Gall Bladder, Pancreas and Spleen," is in active preparation, and, judging from the one just issued, should be eagerly looked forward to by both physicians and surgeons.

C. F. M.

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