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Original Contributions.

THE ORTHOPEDIC TREATMENT OF DEFORMITIES AND DISABILITIES RESULTING FROM PARALYSIS.*

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EVERY joint should be able to maintain easily a condition of balance. If at the knee the quadriceps extensor be paretic or completely paralyzed, while the hamstring muscles still retain their contractile power, the knee will soon assume a condition of permanent flexion. It will be impossible to extend the leg so that it may functionate properly in supporting the body weight.

Another condition at the knee, which is not seen nearly so frequently, is that of hyperextension when the hamstring muscles are greatly disabled through paralysis, and the extensor muscles still retain a fair proportion of their normal strength. This is shown well in Fig. 1, where the knee is hyperextended through paralysis of the flexors.

If in the ankle the anterior group of muscles be paretic, while their antagonists retain their normal power, a condition of equinus will result (Fig. 2), the heel being drawn upward, while the anterior portion of the foot drops downward so as to interfere with the normal movement. In a similar way, if the peronei muscles be disabled, the internal group, namely, the tibiales and the long extensors, will draw the foot inward so as to bring about a condition of varus and supination. This is shown in Fig. 3, left foot.

*Read at the Meeting of the Toronto Medical Society, November 24, 1904.

A very troublesome condition of flatfoot also results when the internal group of muscles is weak, permitting the foot to assume a condition of pronation, as seen in Fig. 4, right foot.

The disability experienced by a patient suffering from paralysis is not due alone and directly to lack of muscular power, but results partly from violation of the law of balance which has just been referred to. If some plan be employed so as to maintain a condition of balance, the efficiency of the part will be greatly increased, and the discomfort and disability much relieved. The

Fig. 1.

essential object in view in the treatment of such cases is to maintain this position of balance.

The most common cause of this condition of lack of balance is anterior poliomyelitis. It results also, though less frequently, from congenital disproportion between the parts which normally should maintain the balance, from traumatism and from other forms of paralysis. One of the marked characteristics, of the common infantile spinal paralysis is that groups of muscles which act together functionally are most disabled; while one group of muscles at the knee may be affected none or little, their

opponents may be greatly disabled. The same is true of the varying groups of muscles at other joints.

Treatment.—During the first few weeks after the onset of the paralysis much may be done by the use of massage and electricity. It is seldom, however, that the patient is seen at this time by the surgeon. He sometimes sees the patient before deformity has resulted, and it becomes his duty to prevent its occurrence. More frequently, however, deformity is added to the disability, and the continued use of the limb and the lapse of time

Fig. 2.

increase the amount of the deformity, as will be seen by reference to Fig. 3. In this case the weight bearing upon the feet, which are already so displaced as to be unable to support the weight of the body, will carry them further and further away from their normal position.

Before the occurrence of deformity, or even when deformity of a moderate degree has occurred, mechanical appliances may often be used with great advantage. The most generally required, and among the most effective of these, may be found in boots which are properly constructed. A child who suffers from infantile paralysis, affect-

ing the inner group of muscles at the ankle so that the foot becomes greatly everted in weight-bearing (as in Fig. 3, right foot), may have a boot so constructed as to be able to hold the foot in the normal position. This not only serves to benefit the child while it is worn, but it also holds the foot in a corrected form while growth occurs, so as to prevent the extreme deformity which would result if the foot were not held in place.

Similarly, if the outer group of muscles be paralyzed so that the foot becomes inverted (as in Fig. 3, left foot), then, if seen at an early stage, a boot may be so made as to prevent the foot from becoming supinated. In cases where the tendency to turn over is very marked, a boot alone will not suffice to hold the foot directly in the line of weight-bearing. A brace, consisting of a bar at the outer

Fig. 3.

side, when the tendency is toward pronation, or at the inner side, when the tendency is toward supination, may be employed. A strap should then be fastened, in the case of pronation, to the inner side of the boot, and pass about the bar at the outer side of the leg, or be placed upon the outer side of the ankle and be carried around the bar at the inner side of the leg, when the tendency is toward supination. Such simple means prove very effective in retaining the foot directly under the body weight. In a similar manner, a night brace may be employed to hold the

foot in the correct position. The use of such a simple brace at night is of vast importance. It is probable that the deformity which results in many cases occurs more during the night than when the patient is walking about in the day-time. There are some conditions such that the weight of the body tends to hold the foot in the correct position instead of disturbing its balance. While lying in bed, however, and the weight of the bed-clothes is resting upon the anterior part of the foot, deformity frequently occurs, and a very simple brace holding the foot in the correct position during the night causes but little inconvenience to the patient and is a very marked agency in preventing deformity.

Fig. 4.

In such a case as that shown in Fig. 1, where the knee is hyperextended, a brace extending from the boot to the perineum, and having an automatic lock corresponding to the knee-joint, may be employed. This automatic lock holds the leg in extension in walking, so that the limb, which otherwise would be unable to bear the patient's weight, can do so with security.

It is not practicable here to describe all the different forms of disability which might result. The foregoing illustrations are selected from those which occur most frequently, and will serve to illustrate the mechanical means which may be employed at the different joints according to the indications.

One important distinction, however, should be pointed out. The upper extremity is employed in fine and delicate work. It

is necessary that the fingers should be able to handle a pen or needle, tie a knot or finger a piano or violin. Failing to do this work, the upper extremity falls much below its normal efficiency. The lower extremity performs its duty in acts which require a much coarser muscular adjustment. If the limb can be made to bear the body weight, and to convey the individual from place to place, it thus performs reasonably well all the duties for which it has been designed. This distinction has an important bearing upon treatment. Much may be done which will keep the limb

Fig. 5.

so adjusted under the body weight as to enable the individual to use it with a fair degree of comfort and efficiency, whereas treatment which would be effective for the upper extremity is much less available. It is found, also, that the lower extremity is disabled through paralysis very much more frequently than the upper; hence, we are called upon to deal in a surgical way with the lower limb much more commonly than with the arm and hand with a view to remedying paralytic defects.

In recent years much has been accomplished also in an opera-

tive way. The simplest form of operation called for, and that most frequently required, consists in cutting the structures which are contracted, and which in that shortened state prevent the part from being placed directly in the line of weight transmitted through the limb. For example, when the foot has been long supinated and in a condition of varus, the muscles at the inner border of the leg and foot are much shortened, and also the ligaments and fasciæ of that part. These may, in the great majority of cases, be cut subcutaneously, thus permitting rectification of

Fig 6.

the deformity. There are few tendons in the lower extremity which may not require, under varying conditions, thus to be cut. There need be no hesitation when tendons, fasciæ or ligaments have thus been cut subcutaneously, in making a full replacement of the deformity. It is necessary that it should be done with careful, aseptic precautions, and that the limb shall be maintained in a corrected position for some weeks thereafter.

For this purpose there is no form of splint which is superior to that made from plaster-of-Paris. After incising such tendons

and fasciæ as may require cutting, sometimes a large amount of force must be employed to effect the necessary replacement. In such a case as that shown in Fig. 4, the part of the foot anterior to the mid-tarsal joint must be brought upward, and when the plantar fasciæ and ligaments have been cut, it requires a powerful force to accomplish the desired result. It was largely to meet the indications in such a case as this that an instrument was devised, calling into exercise the use of the lever. By this means the foot may be thoroughly straightened out and the concavity of the plantar surface obliterated.

A second means of dealing with tendons has also been largely practised within recent years. If the peronei muscles be unable to counterbalance and antagonize the muscles at the inner border of the leg and foot, a condition of balance may be restored by transferring one of the inner groups of muscles to the outer border of the foot and inserting it so as to reinforce the outward pull. This has been referred to quite largely as "tendon grafting," "tendon transposition," "tendon transplantation," etc. The efficient muscle thus transferred may be grafted into the tendon of the paretic muscle at the outer border, or it may with great advantage be carried under the periosteum there and so sutured as to give direct insertion into the bone.

This mode of restoring balance has given a fair degree of satisfaction, but has proved less satisfactory than was expected. It is a plan which is very attractive and reasonable looking, and increased thoroughness and efficiency in technique is bringing about results which are more satisfactory. It permits of being employed over a large field, as there are few joints where the relation of parts may not be altered by such muscular transference.

Both operations are sometimes called for, and may be employed so as to greatly increase efficiency. The term "flail joint" is sometimes employed to signify a joint the muscular control of which has been entirely lost. If all the muscles about the ankle joint have been so disabled that there is no power to move the foot in any direction, then there results a condition of great insecurity and danger in the attempt to have the foot bear the body weight. A mechanical appliance may sometimes be employed so as to accomplish this end with a fair degree of success, but an operation which will secure a synostosis between the leg and foot is much more satisfactory. If an incision be made, horseshoe shaped, about the external malleolus, so cutting the ligaments as to permit the entire inversion and dislocation of the foot, the bones at the ankle joint will be fully exposed, and if sufficient be removed from the upper surface of the astragalus and from the lower ends of the tibia and fibula, and the parts removed be so adjusted as to permit an exact fit of the remainder of the

astragalus into the notch between the internal and external malleolus, a firm, bony ankylosis is likely to result. This secures promptly the most efficient weight-bearing foot that can be obtained in the case of a flail joint at the ankle.

Similarly, an excision at the knee may be made so as to secure a very safe and weight-bearing limb, which before could be rendered efficient for this purpose only by the use of a mechanical appliance such as was described above—a knee-brace locking spontaneously. In obtaining ankylosis at the ankle joint it is well that the plantar surface of the foot should be at right angles

Fig. 7.

with the axis of the leg and that care should be observed to prevent an undue degree of either pronation or supination. In thus operating at the knee it is well to have the leg slightly flexed upon the thigh so that the angle formed will be about 170, or not larger than 175 degrees. This slight degree of flexion enables the patient to walk better, and is more advantageous when sitting down.

Either after operative work or the use of mechanical appliances, or sometimes where these means are not available, educational methods may be employed with advantage. Many of the

deformities have either entirely resulted or have been largely due to a lack of personal attention on the part of the patient. Educational work, such as may be done in the gymnasium, may be employed to train a child, whose inner group of muscles at the ankle is weak, to so hold the foot as to greatly overcome the inconvenience and disability of paretic flat-foot. The same is true largely of deformities of the spine, which very frequently arise from paralysis, such as that shown in Figs. 5 and 6. The condition of the spine, shown in Fig. 5, was present shortly after the onset of an anterior poliomyelitis. Shortly after the acute stage was passed, the boy was instructed every day how to hold his body in a more erect position, and exercises and massage were employed so that by these means, and through the natural tendency there is toward recovery in the early years of this affection, recovery was almost complete.

There are many forms of paralysis where the efficiency of the disabled part may be very greatly increased by judicious, persistent, educational work in the gymnasium. This is a field which has been largely neglected, but which, associated with massage, is effective in the accomplishment of great good in the treatment of some cases disabled through paralysis.

A comparatively large number of children who are unable to walk at the usual age will be found to be affected with spastic paralysis. Unfortunately, a large percentage of these cases are defective mentally, and such mental defect becomes a serious barrier in the way of treatment. In the ordinary cases which present themselves thus affected with spastic paraplegia, there are usually deformities resulting from muscular contracture.

The first step in treatment should be the correction of such deformity. The contractured groups of muscles most commonly found are the adductors of the thighs, flexors of the knees, and the inner groups of muscles at the ankle. The first step in treatment should be sufficient tenotomies to enable one to overcome such contractured conditions. Tenotomies and force employed at the time are not sufficient; but braces, especially such as can be used at night, must be employed to maintain the corrections. Following this, very patient and long-continued educational methods will often bring about great improvement in this very discouraging class of cases. It is probably unwise to make much attempt to improve the physical state of such patients as are far below par mentally. A considerable proportion of these patients, however, are intelligent and ready to give a hearty co-operation in the efforts that are made for their betterment. In such instances the results are sometimes very gratifying. When once the lower extremities have been brought directly under the individual, so as to be available for normal support and locomotion, the control

of the individual over the extensors, and their efficiency, may be greatly improved by an arrangement which will keep the patient in the erect position while efforts are made in learning to walk.

We have in our gymnasium a trolley so arranged that a small car runs upon a track at a height of about fifteen feet from the floor. Suspension straps passing under the chin and occiput and connected by a rope with the trolley car, hold the patient in an erect position while he employs his feet, or pulls upon a rope with his hands, to propel himself along the floor. Thus the person who is unable to bear his weight or to stand up, is so helped that he may exercise the disabled parts and become educated in locomotion.

Many of the cases which are disabled from paralysis present great discouragements when an effort is made to effect improvement in their condition, but it is only justice to the surgeon to remember that their present condition is often a pitiable one. Without some aid many of them never can learn to walk, and will be dependent upon some help to move about with crutches or in a wheel-chair, others will go about with much inconvenience and suffering. The effort of the surgeon must not be expected to bring about a normal condition. He has accomplished his work and met the indications when he has in any degree rendered the working power of the individual more efficient, when he has improved the attitude, the bearing, the walking of the patient, and when he has lessened deformity, which is so disagreeable to view. Fortunately, however, in many of the cases he is able to reach a standard which goes considerably beyond this, and a few patients are able to rejoice in a degree of activity and in an appearance that so nearly approaches the normal that strangers are unable to recognize the fact that a defect has ever existed.

CLEANING MILK BY CENTRIFUGAL FORCE.*

BY PROFESSOR F. C. HARRISON,
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CLARIFIED milk, or milk that has been passed through a separator, has been recently quite extensively advertised. The effect of this method of cleaning milk is similar to that of the gravel filters, and according to Backhaus, 95 per cent. of the mechanical impurities (hairs, manure particles, etc.) are eliminated. The separator divides the milk into three parts, the slime which adheres to the bowl of the machine, the skim-milk and the cream. Several investigators have given us data of the number of bacteria which are found in these three products. Thus Popp and Becker found the germ content, per c.c. of the whole milk, to be 72,954; of the cream of this milk, 58,275; the separator skim-milk, 21,735, and the separator slime, 43,891.

Scheurlen found in one litre of milk 2,050,000,000 of bacteria, and after separation, 1,700,000,000 in the 200 c.c. of cream, 560,000,000 in the 800 c.c. skim-milk and 18,000,000 in the 6 c.c. of slime.

Other investigators have also shown that centrifugation does not decrease the number of bacteria in milk. Thus, Fjord and Fleischmann claim that centrifugal separation has little value as a means of purification, and Conn states that "milk after passing through a centrifuge, although it contains less gross impurities, shows more bacteria than before. This is explained by the fact that masses are broken up, and large numbers of bacteria liberated," and, again, the same writer says, "centrifugal purification does not materially affect the bacteria, for there seem to be about as many after treatment as before."

Niederstadt obtained similar results, for he found that by the centrifugal treatment of 300 litres of milk, about 130 grams of sediment were obtained. The cream was richer in bacteria than the sediment. The separator effected no purification of milk from bacteria, and 75 per cent. of the bacteria went into the cream.

Dunbar and Kister, in an exhaustive series of experiments, found in four instances fewer bacteria after separation, the average of these four instances being as follows: Raw milk, 446,000 per c.c.; centrifuged milk, 146,000 per c.c. But in the remainder of the experiments, twenty-four in number, more bacteria were found in the separated milk, the averages in this case being: Raw milk, 1,400,000 per c.c.; centrifuged milk, 2,200,000 per c.c.

*From the Transactions of the Canadian Institute, 1902-3.

It would seem from these figures that the smaller the number of bacteria present in the whole milk, the more efficient was the separator in reducing their numbers.

Eckles and Barnes have also investigated the purification of milk by the centrifugal separator. They found a large propor-

THE BACTERIAL CONTENT OF MILK BEFORE AND AFTER SEPARATION.

Date	Before Separation.		After Separation.		More Bacteria after Separation + or Less −
	Total No. of Colonies.	Liquefying Colonies.	Total No. of Colonies.	Liquefying Colonies.	
April 8	447,000	25,000	775,000	64,000	+
" 8	391,000	23,300	1,000,000	196,000	+
" 10	491,000	6,500	529,000	18,700	+
" 10	442,000	7,500	469,000	16,000	+
" 12	1,351,000	88,500	2,495,000	271,000	+
" 12	1,990,000	67,500	2,070,000	110,000	+
" 17	1,958,000	.....	4,250,000	21,600	+
" 17	3,000,000	3,800	3,750,000	9,000	+
" 19	1,850,000	6,600	2,700,000	30,700	+
" 19	2,500,000	6,000	2,800,000	25,700	+
" 22	1,100,000	4,200	1,160,000	10,850	+
" 22	1,200,000	10,850	1,200,000	18,750	+
" 24	2,000,000	15,000	2,000,000	10,000	−
" 24	2,000,000	11,000	2,250,000	13,000	+
" 26	996,000	6,000	1,100,000	12,600	+
" 26	1,100,000	11,000	994,000	8,600	−
" 28	2,700,000	4,800	2,900,000	12,000	+
" 28	3,000,000	13,000	2,700,000	7,600	−
May 1	714,000	22,800	790,000	56,000	+
" 1	646,000	30,000	730,000	32,000	+
" 3	950,000	38,000	908,000	36,000	−
" 3	832,000	26,000	964,000	38,000	+
" 7	530,000	30,000	710,000	40,000	+
" 7	480,000	13,000	805,000	22,000	+
" 17	2,250,000	31,000	2,470,000	61,000	+
" 17	2,060,000	6,000	3,000,000	61,000	+
" 20	2,300,000	.....	2,750,000	.....	+
" 20	2,800,000	.....	2,300,000	.....	−
" 22	16,000,000	20,000	15,000,000	19,000	−
" 22	12,000,000	26,000	17,000,000	26,000	+
Average	2,359,000	19,800	2,759,000	44,540	+

tion of the bacteria removed by centifuging, but no enhancement in keeping quality.

Russell, in a private communication to the writer, expresses his opinion thus: "I do not think clarification is worth the trouble, unless the milk is exceptionally dirty."

At the suggestion of the Ontario Department of Agriculture,

we (my assistant, Dr. Streit, and myself) have reinvestigated this subject.

A power belt separator was used, run at the speed indicated by the manufacturers. The milk came from farms in the vicinity, and was of average quality, similar to the ordinary factory supply. About 150 pounds of this milk were thoroughly mixed in a sterilized can with a sterilized stirrer. A half-pint sample of the milk was taken in a sterilized jar, the rest of the milk being put through the separator. The cream and skim-milk were caught together in a sterilized can, and were again thoroughly mixed with a sterilized stirrer, and another half-pint sample of the clarified sample was taken. Both samples were immediately carried to the laboratory, where suitable dilutions were made and plates poured.

The culture medium used was whey gelatine, with 1 per cent. of peptone. The plates were kept at 20 deg. C., and counted at the end of forty-eight or seventy-two hours, depending on the size of the colonies. In most cases the plates were counted by each of us independently, so as to reduce the personal equation.

Each result given in the table is the average of four plates, and thus the gross average represents the numerical results obtained from 240 plates or analyses.

A perusal of the table will show that on six occasions there were fewer bacteria after separation than before, and on twenty-four occasions more bacteria present after clarification than in the raw milk.

Another striking fact brought out by this investigation is the large increase of liquefying colonies in the separated milk. The bacteria, which liquefy gelatine, are usually harmful, some are spore-producing germs, and they give rise to off flavors in both cheese and butter. Many of this class are present in manure, on particles of fodder, etc., and our results seem to show that these bacteria exist in clumps or masses in such material, and the centrifugal process breaks these up and distributes them through the milk.

These results obtained at Guelph are identical with those obtained by Dunbar and Kister, and go to show that centrifugal purification, as far as bacteria are concerned, is ineffectual.

Selected Articles.

DR. WILLIAM OSLER, THE NEW REGIUS PROFESSOR: HIS LIFE AND WORK AT JOHNS HOPKINS.

That Dr. William Osler, of Baltimore, whose recent appointment by King Edward as Regius Professor of Medicine at Oxford University, has awakened national interest in two countries, at least, will within a few months, or possibly a year from the time he enters upon his new duties, be knighted, is whispered in the circles where the great physician's intimates are to be found.

More than that, it is understood that the peerage will, in him, be given another member ere many years have flown by.

Dr. Osler, it is definitely announced, will sever his connection with Johns Hopkins Hospital next June, and will assume at once his new office under the patronage of His Majesty.

In several ways Dr. Osler may be called the first physician in America. By many he is considered the greatest medical man in the United States, and in his own particular line, that of consultant and teacher, as the greatest in the world. He is the first American physician upon whom has been bestowed an honor like that approaching the regius professorship by any foreign country. The distinction which comes to him by favor of the King of England is the very greatest that can come to any medical man in the world, and it is gratifying to the recipient and his friends that not a word of criticism, in any country, has been uttered, and this in the face of the fact that Dr. Osler's name will lead the list of all the great names in the medical profession of England during the remainder of his life.

Among medical men everywhere, the regius professorship of Oxford is considered the highest reward, and the consummation of the loftiest ambition a physician may aspire to. Aside from the great honor there is a material side to it which any physician might well covet. The salary attached to the position is relatively small—$10,000 per year—but medical men say that the practice which comes unasked to the chair holder is worth ten times as much.

Duties of Regius Professor.

Beyond the mere money question, however, is the congeniality of the life it embraces for a man of the scholarly ambitions of Dr.

Osler. At his disposal is not only the time but the opportunity for research work that he so highly prizes. He, as regius professor, is practically a free lance. He comes and goes as he sees fit. He is not held down by arbitrary rules or regulations. He is chairman of the faculty, subordinate to no one on earth —not even the King. He conducts either personally or by deputy all examinations and no one may receive a degree that is not signed by the regius professor. He is considered throughout the British Empire as the highest medical authority, not only of the King's realms, but of the entire world. He is the one the King most delights to honor when occasion demands.

Dr. Osler, in a letter to a friend recently, said: "If success consists in getting what you want and being satisfied with it, my life has been a success." This will do away with the idea that Dr. Osler was at any time averse to accepting the honor King Edward has bestowed upon him.

Always a British Subject.

The new regius professor was born in Canada and has ever maintained his loyalty to the British Government. His son was registered at the British consulate in this city. He married the widow of the famous Dr. S. W. Gross, of Philadelphia, who, before her first marriage, was Miss Grace Lindsee Revere, of Boston. Most of his later professional career has been divided between Philadelphia and Baltimore.

Dr. Osler is not an old man—he is 55—and as his constitution is of the rugged kind that means great longevity, he it is hoped will long enjoy the fruits of his patient energy. The departure of Dr. Osler from Johns Hopkins will be a heavy blow, and the faculty will have the greatest difficulty in the selection of his successor.

Dr. Osler was born at Bondhead, Ontario, July 12th, 1849. His father was a clergyman of the Church of England, Rev. F. L. Osler. The son has always been a member of that church. His earliest school life was passed in the school of his native village, and then he went to Port Hope, Canada, for a term or two in the Trinity College School at that place. Later he entered Trinity University of Toronto where he took his academic degree. As a student in those early days Dr. Osler was a hard worker during working hours, but when the time came for recreation none was more enthusiastic than he in those pursuits. Dr. Osler was in nowise a precocious child, but he won the regard of his teacher and fellow pupil alike by his honesty, industry and singleness of purpose, with which were combined well-maintained ability to grasp the subjects as taught. Vacillation has been foreign to his character always.

Work Day by Day.

In after life, when he taught others, he has consistently maintained by precept and by practice that to succeed one must do well what lies at hand without thought of what may confront one on the morrow. "Love to labor" has been one of his favorite maxims, for his own as well as for the guidance of his students. He is a firm believer of doing one thing at a time and doing it well, and by doing nothing in a manner that is not worth one's best efforts. Addressing a body of students recently, Dr. Osler said:

"As to your method of work I have a single bit of advice which I give with the earnest conviction of its paramount influence in any success which may have attended my efforts in life — 'take no thought of the morrow.' Live neither in the past nor in the future, but let each day's work absorb your entire energy and satisfy your wildest ambition. The student who is worrying about his future, who is anxious about his examinations, doubting his fitness for the profession, is certain not to do as well as the man who cares for nothing but the matter in hand and who knows not whither he is going."

His Career at McGill.

After leaving Trinity College, Dr. Osler decided upon the medical profession as his life work, and he entered the office of Dr. Bovell at Toronto as assistant and student. Here he remained three years and then entered McGill University in Montreal, where he graduated in 1872. He then went to London, Berlin and Vienna, taking special courses in physiology and pathology. Upon his return to Canada in 1875, Dr. Osler was elected to the chair of the Institute of Medicine at McGill University. Twenty-four years later, addressing the faculty of that college, Dr. Osler referred to his appointment in the following terms:

"A quarter of a century ago this faculty, with some hardihood, selected a young and untried man to deliver the lectures of the Institute of Medicine. With characteristic generosity, the men who had claims on the position by virtue of service in the school, recognizing that times were changing, stepped aside in favor of one who had had the advantages of post-graduate training in the subjects to be taught. This experiment on the part of the faculty, enthusiasm and constitutional energy on my part, led to a certain measure of success.

"My first appearance before the class filled me with tremulous uneasiness and an overwhelming sense of embarrassment. I shall not forget the nice consideration of my colleagues and the

friendly greeting of the boys, which calmed my fluttering heart. One permanent impression of the session abides—the awful task of the preparation of about one hundred lectures. After the ten or twelve with which I started had been exhausted, I was on the treadmill for the remainder of the session. False pride forbade the reading of the excellent lectures of my predecessor, Dr. Drake, which with his wonted goodness of heart he had offered. I reached January in an exhausted condition, but relief was at hand. One day the post brought a brand-new work on physiology by a well-known German professor, and it was remarkable with what rapidity my labors of the last half of the session were lightened. An extraordinary improvement in the lectures was noticed; the students benefited and I gained rapidly in the facility with which I could quote the translated German.

"Four years later I was appointed on the visiting staff of the Montreal General Hospital. What better fortune could a young man desire! I left the same day for London with my dear old friend, George Ross, and the happy days we spent together working at clinical medicine did much to wean me from my first love. From that date I paid more and more attention to pathology and practical medicine and added to my courses one in morbid anatomy, another in pathological histology, and a summer class in clinical medicine. I had become a plurist of the most abandoned sort, and by the end of ten years it was difficult to say what I did profess, and I felt like the man to whom Plato applies the words of the poet:

> "'Full many a thing he knew;
> But knew them only badly.'

"Weakened in this way, I could not resist when temptation came from pastures new in the fresh and narrower field of clinical medicine. After ten years of hard work I left Montreal, a rich man—not in this world's goods—for such I have the misfortune, or the good fortune, to lightly esteem, but rich in the goods which neither rust nor moth have been able to corrupt—treasures of friendship and good-fellowship, and those treasures of widened experience and a fuller knowledge of men and manners which contact with the bright minds in the profession necessarily entails. My heart, or a good bit or it, at least, has stayed with these treasures."

This charming bit of speech, besides containing interesting biographical material, indicates the modesty and cordial nature of the great physician.

Dr. Osler's reputation as a teacher spread beyond the confines of the Canadian University, and the bright star of fame had already appeared above his horizon before he rounded out the

fifth year of his professorship at McGill. The first bright ray came in 1883, when he was elected fellow of the Royal College of Physicians of London, England, and this was followed in 1884 with his selection as Galstonian professor. Honors came to him fast, but he remained the same sensible, cool-headed and affable gentleman that he is to-day.

His Visits to Europe.

Almost every summer Dr. Osler takes a trip abroad and travels leisurely about the Continent. This habit began as far back as 1882, and on one of his numerous visits to London he met Dr. S. W. Gross, of Philadelphia. Dr. Gross was at that time famous as a consulting physician, and was at the head of the Jefferson Medical College at Philadelphia. A strong friendship sprang up between Dr. Gross and Dr. Osler, and in October, 1884, the former sent for Dr. Osler to go to Philadelphia. He complied and was then informed that on recommendation of Dr. Gross he had been appointed to the professorship of clinical medicine at the University of Pennsylvania. Dr. Osler promptly accepted.

A few years later, Dr. Gross died. In May, 1893, Dr. Osler married his old friend's widow. Mrs. Osler comes from the very best of the older families of Boston. She is a woman of more than usual beauty and as charitable as she is beautiful. To her efforts largely the women of Maryland were interested in the fight that has been inaugurated against the dread tuberculosis. Due to her efforts, many rich women were interested in the situation and gave liberally in support of her project to build and maintain, in the Blue Ridge Mountains, a number of model homes for consumptives, whose means did not permit the environment needed in their cases. Dr. and Mrs. Osler have one son.

Goes to Johns Hopkins.

Dr. Osler remained at the University of Pennsylvania until October, 1889, when he was invited to create the chair of Professor of the Practice and Principles of Medicine at Johns Hopkins Medical School, and promptly accepted. At that time the new methods of instruction in the matter of original research by the students of Johns Hopkins, which were an innovation in university teaching in America, were attracting world-wide attention. Dr. Osler's reputation had, at that time, placed him in the front rank of medical men, and seeing the great field that lay before the Baltimore University, and recognizing the opportunity presented to those who desired to explore new fields and carry scientific investigation as far as it was possible to carry it, he took

up his residence in Baltimore so as to be near the scene of his work.

His success at Johns Hopkins immediately attracted world-wide attention. He soon took a place in the very front rank of the greatest medical men of his time. In 1898 he was elected dean of the Medical Faculty of Johns Hopkins. Apart from his numerous duties at the school his practice rapidly assumed such vast proportions that he was compelled to adopt a system as strict and arbitrary as governs the management of a large corporation. His hours of consultation are crowded as full as possible and every day people who wish to see him are turned away disappointed. The only sure way to secure an audience with Dr. Osler is to make an appointment several days ahead. The demands from other cities upon Dr. Osler are many. Scarcely a case of unusual importance appears in America that effort is not made to secure at least the advice of Dr. Osler. After the shooting of President McKinley, Dr. Osler was called to Buffalo.

His Literary Work.

This great amount of work to which have been added his literary labors, has proved a mighty strain upon his physical resources, and it is considered well from this point of view, at least, that he should go to the quiet walks of the venerable institution to which His Majesty has summoned him, and where his work will be less exacting.

"A fitting end to a great career" is the way several of his colleagues refer to Dr. Osler's new work. It means for him a longer and quieter life than he could hope to find in America where the conditions are so different.

Great things are expected of Dr. Osler in a literary way during the next decade. This will be the opportunity of a lifetime devoted to study, to put into enduring form the ripest and best experiences and the deepest knowledge which have come to him.

As a writer, Dr. Osler is forceful and polished. He prefers the simplest and most easily comprehended words, and his essays make beautiful and refreshing reading. His published works are as follows:

Cerebral Palsies of Children, 1889.
Principles and Practice of Medicine, 1892.
Teacher and Student. (Address), 1892.
Oliver Wendell Holmes. (Address), 1894.

Last June Dr. Osler delivered the lecture on the Ingersoll foundation at Harvard. His lecture was "Science and Immortality." This lecture will be published in book form shortly, and is eagerly awaited. To his students, however, Dr. Osler is generous with his time and never fails to be with them at their

smokers or entertainments when it is possible. He has a way of jotting down his ideas from day to day so that he is always ready, with the boys, to present to them something new. Another evidence of his generosity in this regard is that when invited to be present, and it is told him that the boys would like a short talk from him, he prepares his remarks with the same care as though he were to address the highest group of authorities in the world. In a word, Dr. Osler believes in and practices thoroughness in everything he does.

His Method of Teaching.

Dr. Osler's method of teaching is unique. He believes the greatest thing a doctor can know is to be able to tell what ails the patient, quickly, so that remedial effort may not be delayed. His lectures to the senior class which come under his personal care at Johns Hopkins are often filled with epigrams, but each emphasizes the point he desires to make clear.

Dr. Osler is not a genius in the sense of being an originator and discoverer, but he is a genius in being able to impart to others the results of the investigations of the medical fraternity. Once a week he takes his class through the hospital wards and asks it to diagnose the cases there met. He quizzes the boys and seeks to impress upon each the various indications and phases of each case and does it in a manner to create a lasting impression. The greatest privilege known to the students of Dr. Osler's classes comes with each Saturday evening when they go in a body to his beautiful home and there sit about a miniature banquet table while the host talks by the hour upon various subjects. He has a charming way of getting at each student's ambitions and from the vast fund of his experience offers many timely and valuable suggestions as to how to do with this or that phase. Dr. Osler's magnificent library is ever open to the demands of his class. It is no wonder that he is idolized by his boys, as he affectionately calls them.

The famous physician is as free from fads as the most democratic gentleman of this day. He loves to dress well and he does. He is extremely particular about the fit of his garments and has a love for fresh ties and immaculate waistcoats. There is no false dignity about Dr. Osler. He loves a joke as well as the next man and can tell a good story in splendid style. He detests practical jokes and practical jokers. His favorite story is of the Irishman, brought to the hospital after his peculiar case had been abandoned by several of the leading physicians of the leading infirmaries of the country. Dr. Osler approached the cot, and gazing at the peculiar growth on the man's chin, said:

"What is the matter with your chin, Mr. Hennessy?"

"Just as I expected," replied the patient. "I knew it was a waste of time and money to come here just to be asked what ails me. What in blazes are you here for?"

Dr. Osler is not one who believes in all work and no play. He frequently speaks to the student in this vein: "Do not become too deeply absorbed in your profession to exclude all outside interests. Success in life depends as much upon the man as the physician. The more you see of life outside the narrow circle of your work the better equipped will you be for the struggle. While medicine is to be your calling, see to it that you have also some intellectual pastime which will keep you in touch with the world of art or letters. Cultivate other pursuits, in moderation, outside of your profession. No matter what it is, have an outside hobby. When tired of anatomy, refresh your minds with Oliver Wendell Holmes, Keats, Shelley, or Shakespeare."

Upon the question of religion he has often said, "The only way to take the Bible is by simple faith. When you begin to reason it out you will surely become confused." Dr. Osler despises littleness and narrowness, and has often said that he devotes a half hour daily to communion with great minds of the present and past lest he fail to remember that broad mindedness should be a cardinal principle with every man. He loves the poets. Shelley and Shakespeare are his favorites.

Dr. Osler's hobby is the running down of first editions of old books. He will chase one of the species across the continent and never rest until he has gotten it. One of his chief delights is to rummage through the old book-stores of London. The result is a rare collection of the most famous books on earth.

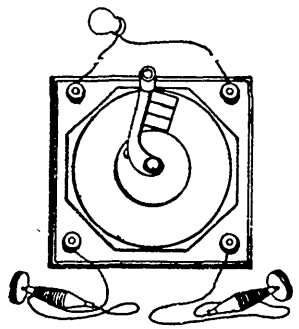
Dr. Osler has a profound regard and admiration for the old style country doctor. Speaking on this subject one day to his class he said: "Many of you have been influenced in your choice of a profession by the example and friendship for the old family doctor or of some country practitioner in whom you have recognized the highest type of manhood, and whose unique position in the community has filled you with laudable ambition. You will do well to make such a one your example, and I would urge you to start with no higher ambition than to join the noble band of general practitioners. They form the very sinews of the profession—generous-hearted men with well-balanced, cool heads, not scientific always, but learned in the wisdom of the sick-room, if not in the laboratories."

At the present time Dr. Osler is engaged upon the gigantic task of translating and editing Nothnagel's "Encyclopedia of Medicine." The series is to comprise twenty volumes. Six have been completed.—*Dominion Medical Monthly*, December, 1904.

THE ALTERNATING LIGHTING CURRENT IN THERAPEUTICS.

THE prevalence of the alternating electric lighting current in the many smaller cities and towns of the country. has come to offer many complex problems to the physician contemplating the installation of electrical apparatus. When the marvellous extent of the field of electro-therapy is considered it must be admitted that confusion is easy. Taking this point, together with the great variety of currents offered by different plants, and the complication of the matter is realized.

Let us dwell briefly on the physics of this current. The alternating current most in vogue at present is the sixty cycle variety; the number of alternations per minute with this form is 7,200; that is to say, the poles of the current are reversed 7,200 times



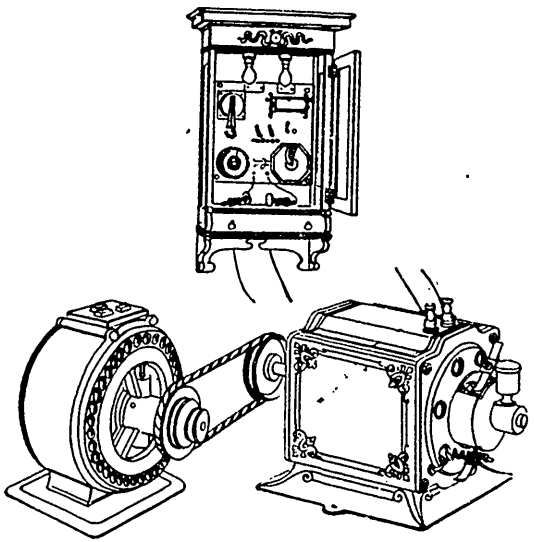
Graphite Rheostat with Lamp in Series

per minute, thus neutralizing the chemical polar properties of the current as effectually as an acid solution is rendered void by the introduction of an alkali. The 125 or 133 cycle mode of current has a still greater number of alternations per minute, viz., 16,000, which removes still more remotely the possibility of any polar effect.

The one actual therapeutic property possessed by the alternating current lies in its sinusoidal effects. It is true that it is not a current of truly sine waves, but modern dynamo construction has improved it in this respect, and it is a fact that this current now compares very favorably as a therapeutic modality with the output of the standard sinusoidal machines. A convenient method of applying this current is with a graphite rheostat as a means of control; connected by means of a series attaching plug with a sixteen candle power lamp. Its chief value consists in the pleasant sensuory effect upon the motor mechanism. It is a far more valu-

able current for this deep muscular massage than the slowly interrupted faradic current; especially as regards the absense of disagreeable sensation, although the oscillations are quite rapid for muscular treatment.

Another method of utilizing the alternating current in electro-therapy, although in a rather indirect manner, is by transforming it to a direct current which may be employed in producing galvanic effects; a motor dynamo outfit, so styled, is used for this purpose. The process of transforming the current really amounts to developing power by passing the alternating current through a small alternating current motor; the shaft of this motor is either geared or connected directly with the shaft of a



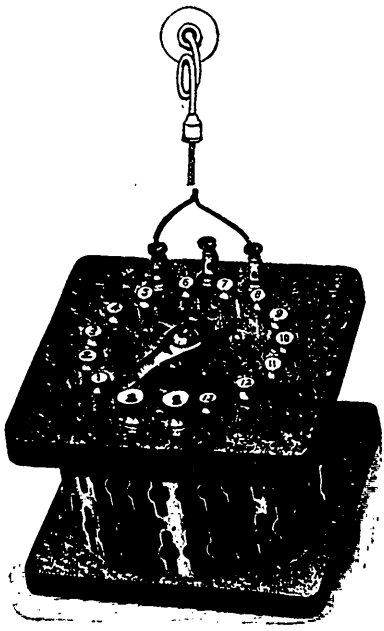
Transforming the Alternating Current to Provide a Direct Current for Galvanism.

small direct current dynamo; the power thus produced operates the dynamo which generates a direct current of suitable voltage and amperage to be used in connection with a galvanic wall-plate; this current may also be employed to excite to action the faradic coil of a physician's switch-board. Strictly speaking, the alternating current employed in this method is used as a mechanical agent rather than as therapeutic force.

Another mode of employing this current, although a surgical rather than a therapeutic method, is in galvano-cautery. This is quite an important branch of electricity with the physician making a specialty of eye, ear, nose and throat work. The great advantage of cautery in many minor cutting operations is in the almost certain avoidance of hemorrhage. A transformer working on the

principle of an induction coil is used to adapt the current to cautery work. The 110 volt or 55 volt alternating current is attached to the proper binding posts of the transformer; a current of about two amperes is thus fed to the appliance. The transformer converts this current of 110 volts and two amperes to a current of about six volts and thirty or forty amperes, which is sufficient to heat most platinum cautery knives and loops. The cautery transformer is a very simple device, and makes a most valuable addition to the equipment of a physician who has the alternating current available.

Another use to which the alternating current may be subjected



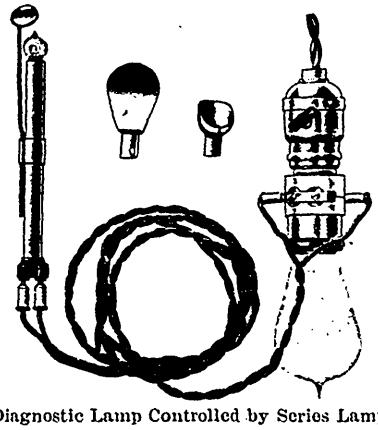
The Cautery Transformer

is to light diagnostic lamps. Perhaps this matter may seem a very simple one to dwell on at first thought, but upon further consideration the complexity of the subject will be appreciated. There is frequent call for a wall plate or other piece of apparatus which will combine a current for diagnostic lamps among other features; this is an easy matter to arrange regardless of whether the plate is to be used with either direct or alternating current; but especial stress should be laid upon the fact that a separate contrivance such as a large heavy current graphite rheostat will prove more suitable to the purpose. Another manner of using the alternating current to light small lamps is by using series lamps

in connection to regulate the flow of current. A number of diagnostic lamp sets are on the market which embody this principle, among which will be found a very unique one in that the small lamp is absolutely guarded against an excess of current, which may be accidentally encountered when used with a wall plate or other controller.

A number of other uses of the alternating current, both therapeutic and medicinal, might be dwelt upon, such as photo-therapy, X-ray therapy, high frequency effects, etc., but space will not permit of this.

As a brief review, in conclusion, we may say that the alternating current is valuable therapeutically and surgically as follows:



Diagnostic Lamp Controlled by Series Lamp.

As a sinusoidal current.

As a source of power to generate a direct dynamo current for galvanic and faradic purposes.

As a means of supplying a current for cautery work through the medium of a cautery transformer.

As a current to light diagnostic lamps by means of a wall plate or rheostat as a controlling device, or with a lamp in series.

The McIntosh Battery and Optical Co., of Chicago, having worked at these problems for upwards of twenty-five years, have been enabled to produce apparatus adapted to all of these branches of electro-therapy. Their appliances embody those features considered by physicians as essential, correctness of design, elegance of apparatus and durability of construction.

THREE INFANTS TREATED WITH THE R.-H. LYMPH-COMPOUND.

BY F. B. GOTTSCHALK, M.D., CHICAGO, ILL.,
Professor Diseases of Children, Jenner Medical College.

CASE 1.—A child, Leslie G., two years old, developed severe bowel trouble with gastro-enteric infection, with a temperature of 103-104. This temperature remained almost stationary in spite of ice caps, ice baths, intestinal antiseptics and other usual treatment. The depression following this constant temperature was very great, and at the end of a week was followed by cerebral symptoms, piercing cries, extreme restlessness, etc. Opiates had to be employed constantly. After the first week the child slept with its eyes open, even when under the effect of the opiate. Examination showed entire loss of reflex to light.

The child was seen by two specialists in consultation who made an unfavorable prognosis, stating that they had never seen a child with such severe involvement recover the use of its vision even if it should survive the disease itself.

As a last resort it occurred to me that a few injections of the R.-H. Lymph-Compound could not aggravate the case, but on the contrary might prove a benefit. Consequently three drops were injected hypodermatically at 4 p.m. One hour later the child went to sleep with closed eyes. The temperature went down to 101 deg. F. No more opiates were used. The injection was repeated at 10 p.m. The child slept until morning, temperature 100 F., gradually going down to normal in the next two days.

On seeing the child next morning I found his eyes following the light. By noontime his eyes were following about the shadows of his mother and nurse. By evening of this day he was able to distinguish the difference between his nurse and mother, and on the following day recognized the other members of the family. On the fourth day the improvement was so great that I suggested the child be taken into the garden in the hammock or its buggy. Immediately on being taken out he called for his little playmate.

Injections were kept up to the end of the week, when the physician's attentions were no longer needed. Recovery complete. At present writing child is very robust and healthy.

CASE 2.—Boly K., twenty months old. Well nourished physically, but very backward mentally. The child was so indifferent to its surroundings that the parents questioned its capacity for sight, but examination showed this to be a mistake. When seen by me I suggested that the parents have electricity put into their house and secure an electric solenoid to put the child to sleep

in, for its tonic and reconstructive effect. One previous similar case had shown improvement after a six months' treatment of this nature. The parents readily consented to this. To this treatment were added injections of the R.-H. Lymph-Compound, three to four drops daily.

After using one-half ounce of the lymph the child began to show a marked mental improvement and to manifest interest in its surroundings. The child has thus far used one ounce. It not only crawls about the room but stands up by the chairs and shows all the signs of intelligence manifested by a child eight or nine months old.

CASE 3.—A frail, delicate child, two years old, was seized with severe gastro-enteric infection, temperature 102 to 104 deg. F., great prostration. In spite of routine treatment for this trouble the child rapidly failed, and at the end of seven days a fatal termination seemed probable.

Remembering the results in Case No. 1, I again resorted to the R.-H. Lymph-Compound, three drops, twice daily. Improvement was not perceptible until the second day, when the child became much brighter, though the temperature remained 102 and 103 deg. On the third day the child, which had been indifferent to the previous hypodermic injections, made a decided objection. It took nourishment eagerly, and temperature was down to 100 deg.

After six days, owing to marked improvement, the injections of lymph, which seemed cruel to the parents, were discontinued and strychnine was administered by mouth. On the second day after discontinuance of lymph the temperature went up again, followed by marked prostration. The injections of lymph were again resumed with an almost immediate fall of temperature. Improvement and cure took place in the next two weeks.

There is no doubt in my mind that the effect of the Lymph-Compound has a more active influence on the infant and growing child than it has on the adult; the beneficial results as seen in the adult being greatly intensified in young patients.—*Journal of American Animal Therapy Association.*

PRURITUS.

"As direct local nerve sedatives, weak tar solutions, amongst which 'Liquor Carbonis Detergens,' one in fifty of water, holds a prominent place."

"*Diseases of the Skin*," page 190.

W. ALLAN JAMIESON, M.D., F.R.C.P. (Edin.).

"GLENWOOD," A PRIVATE INSTITUTION FOR THE TREATMENT OF EPILEPTICS ON THE COTTAGE SYSTEM, AT DANSVILLE, N.Y.

It may interest the Canadian medical profession to know some facts as to a recently opened institution at Dansville, N.Y., for the treatment of epilepsy, especially in its incipient stages.

The founders of Glenwood gave as much attention to the important matter of location as to any detail incident to their undertaking. After considering every possible combination of especially desirable natural advantages, the interest and convenience of patrons seemed to be most subserved by a sojourn in nature's garden spot, the Valley of the Genesee. In making this decision the choice of two world-famed institutions was but corroborated —for Craig Colony (New York's model institution for the treatment and care of its epileptic paupers) is but a few miles away, and the Jackson Health Resort (with a half century's record of caring for the sick and exhausted), the grounds of which adjoin those of Glenwood. An elevated, equable and genial climate, pure mountain springs, dry, porous soil, together with the magnificent panorama of forest and field within the colossal amphitheatre of hills which stretch far away to the distant horizon—all these and more combine to form an unsurpassed setting for Glenwood.

A quarter-mile from Glenwood, and in the valley below, is the thriving and picturesque village of Dansville, with its churches, schools and railroad facilities.

Behind and above the institution rise the "everlasting hills" with their burden of forest, shrubbery and foliage. What could make a more magnificent setting for all the striking advantages which Mother Nature has collected and placed together in this beneficent dale?

Coming to the immediate surroundings of Glenwood the investigator finds the well-appointed administration building, and the many beautiful cottages, surrounded by several acres of beautiful lawn adorned with flowers, shrubbery and trees in abundance. Golf, tennis, croquet and other games and sports are amply provided for.

The gravel subsoil prevents malarial dampness which is the disadvantage of so many places, and causes the ground to dry rapidly after rains, and renders the air, both day and night, singularly free from chill and dampness, thus making a large amount of out-door life entirely practicable and advantageous for the patients at Glenwood.

At Glenwood where each individual patient is constantly under the personal care of an expert in epilepsy, the percentage of

cures or degree of improvement, must be fully twice as large as is possible at the large public institutions.

The importance of maintaining a healthful Christian atmosphere is fully appreciated, and every patient at Glenwood can obtain such quantum of religious opportunity as he, or his parents or guardians may desire.

Expenses range from ten to thirty dollars per week, according to room and any special arrangements as to meals. All patients receive the same care and attention from those in charge, irrespective of the price they pay. Patients pay for two months in advance upon entering the institution and thereafter monthly in advance.

All applications and business correspondence should be addressed to the Health Resort Company, 62 State Street, Rochester, New York.

Correspondence concerning patients should be addressed to the Medical Superintendent of Glenwood, Dansville, New York, and mail intended for patients should be addressed in his care.

AN ADVANCE TOWARD BETTER HOUSEHOLD SANITATION.

THERE has been recently introduced into Toronto a new system of house-cleaning by compressed air which must, of necessity almost, interest physicians. It is an advance in the right direction, and, we venture to think, will be found to be in accordance with the theories of preventive medicine. By it the entire internal house fixings are thoroughly and quickly cleaned of everything in the way of dust or dirt, by compressed air, which collects and removes everything of that kind without it being allowed to mix with the air of the room or permeate the entire house. The walls are cleansed and the carpets thoroughly renovated by collecting the dirt, not only in their fabric, but between the carpet and the floor, without removing them or disturbing the furniture. Draperies, tapestries, decorations, and ceilings are also cleansed without in any way dismantling the rooms and without creating dust, the bane of the good housekeeper.

A point about this system that will interest our readers is that, by this method, a room or house can be disinfected after a case of contagious disease. The current of compressed air is charged with disinfectants, which penetrate every nook and corner, leaving little opportunity for the spread of disease and yet proving harmless to any fabric with which the air comes into contact.

By the compressed air method, one man can easily cleanse

six or eight rooms in half a day, including not only the walls and ceilings, but the entire contents even to the bedding.

Compared with the old system of house-cleaning, the new system is certainly an immense improvement, and, for no other reason, perhaps, than that it is healthy, it will take but a very short time for the compressed air method to be adopted generally, judging from the number of times in passing along our best residential streets last spring, and in the early autumn, we saw the "hose and reel" quietly at work, rendering the house ornamental, a great service in causing it to become also the house healthful.

Not in private dwellings alone, but more especially in hospitals and public institutions, do we deem this new system necessary. It discovers dirt that would, perhaps, remain unseen, and removes it by a sort of Roentgen ray penetration, restoring the appearance and color of fabrics and making them look bright and fresh. We venture to think that such an equipment is a necessary adjunct, and should be installed in every hospital, thus removing all chance of accumulated dirt which might add to the cases of sickness present in the institution.

HARCOURT CHLOROFORM INHALER.

THE Harcourt Chloroform Inhaler, of which mention has already been made in these pages, has been awarded silver and bronze medals at the St. Louis Exposition, and a silver medal was also awarded to the inventor, Mr. A. Vernon Harcourt, M.A., F.R.S. The apparatus has had an extensive trial in some of the London hospitals and in private practice, and we understand that the French surgeons, who saw it in use during their visit to London a short time ago, were greatly impressed, and are now making a trial of it in Paris and other French clinics. Of late years the chloroform question has been very much to the front in England, and we are informed that an extraordinary amount of interest has been displayed over Mr. Harcourt's invention by those surgeons and anesthetists who have had any experience with it.

Some criticism was offered by certain speakers at the meeting of the British Medical Association at Oxford to the effect that the reading of the scale was inaccurate if the bottle is shaken about. This, of course, is perfectly true; everyone knows that continued violent disturbance of a volatile liquid will increase the rate of evaporation. But then, what a man does in his laboratory to confirm his im-

pressions of physical laws is not necessarily the same course pursued by the anesthetist when he has a patient on the table under the surgeon's knife! In connection with this criticism it has been pointed out that if the bottle is attached to the apparatus by two and a half inches of thin-walled rubber tubing (about one mm. thick) the rubber tube acts as a damper, preventing any oscillation of the bottle which might be caused by slight movements.

For hospital use it is contended that it is found much more convenient to attach the apparatus to a stand and connect it to the mask with a flexible rubber tubing about two feet long and with a smooth bore one-half inch in diameter. This leaves the operator quite free with only one hand engaged.

It should be noticed that the readings of the scale are no indication of the vapor strength if air is admitted round the mask. The inability on the part of some anesthetists to obtain the same results as others is generally to be put down to non-fitting of the face-mask.

The simple device of the increase tube, whereby a dose up to 3 per cent can be given, is most ingenious and increases the usefulness of the apparatus.

A number of instruments have already found their way to this country, and we invite any of our readers who have had a sufficiently long experience of the manipulation of this inhaler, to communicate their results through the medium of our columns to the larger section of our clientèle who have not yet had the good fortune to handle it.

MASTICATION, THE QUADRUPLE IMPORTANCE OF, FOR GASTRIC DIGESTION.

M. Dastre, Professor at the Sarbonne, Paris, communicates a succinct statement, which may be regarded as the latest word of science respecting the relation of mastication to gastric digestion. We translate as follows:—

1. *Mechanical.*—A division of the foodstuffs into small fragments. The gastric juice penetrates cubes of cooked albumin at the rate of about one millimeter per hour (Herzen, Comptes, *Rendus de la Societe de Biologie,* 1886). It is clear that small particles, for example, cubes presenting on each side a surface of one square millimeter, will be penetrated in about one hour, while cubes with sides of one square centimeter will be penetrated only at the end of several hours.

2. *Physical.*—The extraction of food substances soluble in

water. During mastication the saliva dissolves those alimentary substances which are soluble in water, or in a neutral or alkalin aqueous liquid; but most of these substances act as pepsinogens (Schiff) or succagogues (Pawlow). The more prolonged the mastication, the greater will be the quantity of saliva secreted, and because of the extraction from the foodstuffs of pepsinogens and succagogues to the great benefit of gastric digestion, an increased quantity of gastric juice, containing a greater quantity of pepsin, is produced.

3. *Chemical.*—The saliva transforms alimentary starches into dextrin and sugar. Dextrin is one of the most powerful of pepsinogens; if one chews insufficiently, but little dextrin is produced, for the ptyalin ceases to act in an acid medium such as the gastric juice. It is true that the pancreatic juice takes up anew the digestion of the starches, but the dextrin absorbed by the small intestine is without pepsinogenic properties. It is necessary that it should be absorbed by the stomach. It is essential, then, that mastication should be prolonged to produce dextrin in large amount.

4. *Secretory.*—Pawlow has proved that the mucous membrane of the stomach is innervated, from the secretory point of view, by the pneumogastric and the sympathetic. The first is the centrifugal path of the cerebrogastric reflex. The point of departure for this reflex may be either subjective (psychic reflex) or sensory (sensory reflex). It may be produced by visual and auditive sensations, but it is especially excited by olfactory and gustatory sensations under the influence of which the gastric juice flows abundantly. Now, the mastication of a sapid substance intensifies gustatory sensations, and consequently re-enforces the sensorial gastric secretory reflex.

These different phenomena are intimately related, the one to the other. The more one chews, the more freely the saliva flows; the more saliva, the larger the amount of pepsinogens and of succagogue substances brought into solution, and at the same time the gustatory sensations, which are the point of departure of the gastric secretory reflex are prolonged and re-enforced.—*Modern Medicine.*

Appointment of Associate Coroners.—The *Ontario Gazette* announces the following appointments: Charles Richard Charteris, M.D., of Chatham, to be an associate coroner for the County of Kent; John H. Wright, M.D., of Wallaceburg, to be an associate coroner for the County of Kent; Donald McEachren, M.D., of Linwood, to be an associate coroner for the County of Waterloo.

HEIGHT AND WEIGHT.

THE statistics as to the height and weight of school children, which have now been kept for twenty years in some of the most progressive schools, are of considerable value, especially as affording a basis for comparison and for establishing an average standard of healthy increase in height and weight. In Marlborough such statistics have been kept since 1874, and the statistics show that a boy of 13 weighs on an average 5½ lbs. more and is 2 inches taller now than the average boy of 13 in 1874. Not so much difference is shown between the average at the age of 18 then and now. To-day an 18-year-old boy is 4½ lbs. heavier and 9-10 of an inch taller.

The Rugby statistics, which have been kept since 1879, show that the 13-year-old boy is now 6 lbs. heavier and 2½ inches taller than in 1879. But the 17-year-old boy shows in the same period an increase of 9-10 of an inch in height, and a diminution of one pound in weight.

In Canada such measurements and statistics are kept at some of the best private schools, both for girls and boys, and it is to be hoped that in the public schools similar records will be made before long. They would be of considerable value.

Another record, aside from school work, is quite as important, but it would be more difficult to get, viz., a record of the average weight and height of younger children and infants. Charles Gilmore Kerley, of New York City, stated in his chairman's address in June, 1904, before the Section on Diseases of Children of the American Medical Association, that only 20 per cent. of the children over one year of age, coming under his observation in New York City, are of normal development. Eighty per cent. abnormal is a large proportion, and in medical practice it is always necessary to distinguish between the average child brought to the physician and the fortunately far larger number whom the physician seldom or never sees after they are out of long clothes. Dr. Osler is in the habit of telling the undergraduate and post-graduate student at the Johns Hopkins to go to football matches, tennis tournaments and golf, so as to have the physician's idea of an average human being brought nearer the normal. A wise piece of advice. Life insurance examinations are another useful means to the same end. H. M'M.

The Canadian Journal of Medicine and Surgery

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., *must be* in our hands by the fifteenth of the month previous to publication.

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Editorials.

THE PHYSICIAN AND MENTAL THERAPY.

IN the November, 1904, issue of the *Medical Herald*, St. Joseph, Mo., Dr. Bell, the editor, writes entertainingly of the attitude of the educated physician towards mental therapy. He says, in brief, that there is abroad in the world a desire to know more of the mind, the soul, the ego, to learn its attributes, its relations to health and disease, its power and influence over the body, which is its

dwelling place; but that the educated physician turns a deaf ear to the cry of the multitude for light, declares that those who have experienced some of the evidences of psychic power are either weaklings, or misled, or impostors, and accounts for all vital phenomena by atoms, molecules and evolution.

Small wonder, he continues, that teachers of the opposite extreme are quickly sought, who, with like methods, declare the non-existence of material things. These latter teachers, brokers at a celestial exchange, sell for cash the healing influence of "The Divine Mind, in which it is impossible for pain, disease, disorder to dwell, to those enthralled possessors of mortal mind, who are as ill as they think they are, and capable of entertaining aches, pains, disease, destructive tissue changes and death."

Dr. Bell censures the educated physician, because he fails to recognize the fact that psycho-therapy, through suggestion, does accomplish results unattainable by drugs alone, or because he has not sought to utilize this rediscovered truth, wisely combining it with known and tried remedies derived from the physical world. He concludes his article by putting the question of science and pseudo-science in this fashion: "Man's dual nature demands and surely shall receive, late though it be, the fullest consideration. He who denies the power of the human mind to heal the body is not wise. He who denies the virtue of medicine, and claims the non-existence of pain and disease, is a stranger to the truth. There is but one way to prevent the continued progress of pseudo-science, and that way is the plain one of acknowledging truth wherever found, and wisely assigning it to its proper place."

This argument is a plea for humbug in selected cases. Men can be cured of certain diseases by humbugging them; therefore they should be humbugged. The physician should first diagnose the disease. If it is amenable to mental therapeutics, it should be so treated; if physical agents are required for its relief, they should be used.

There is nothing new in faith-healing. The essentials for its exercise are strong faith in a divine power to heal, and the existence of disease or pseudo-disease. Eight hundred years before the beginning of the Christian era, at the temple of Asklepios, in Epidauros, Greece, the performance of religious rites and lustrations prepared the suppliant for the operation of the divine

power. At night when the patients were gathered together in the long ward of the Abaton, priests recited prayers, and then put out the lights, with an injunction to go to sleep and hope for dreams in which the god should appear and tell them how they might find relief. Whether hypnotism played a part in the ritual of cure can only be conjectured; it is clear, however, that nothing was left undone to create an atmosphere of suggestibility. Many inscriptions recording cures have been discovered, and several of these speak of dreams, in which wholesome counsel was given by the god. In the case of the less imaginative patients it is not unlikely that the influence of the mystic surroundings was helped by the use of opium, or other drowsy syrups, causing vivid dreams. Men and women, worn out by suffering, and possessed by an eager faith in the healing power of Asklepios, would, when under the influence of such a thing, need no elaborate *mise en scène* to make them see visions. As an evidence that actual cures were wrought through faith in Asklepios, large numbers of *ex voto* offerings, many of them made of gold, have been excavated from the ruins of his temples.

In Christian times and lands, especially since theology and medicine parted company, the tendency of the latter is to seek and find its *raison d'etre* in the treatment of human diseases by physical agencies of various kinds. Science is necessarily opposed to humbug, and the votaries of medical science will not willingly employ the arts of the charlatan, even to cure disease. But there are others.

As long as the physical therapeutist rides the horse he learned to ride at college, the merits and demerits of which he has familiarized himself with on many a hard-fought field, he preserves his equilibrium, knows his destination, and often reaches it. Should he try to ride Mental Therapeutics, just because it is the fashion to do so, his efforts will probably end in disaster, and he will probably have to exclaim with the aged farmer, who collided with a tree, while learning to ride a bicycle, "You can't teach an old dog new tricks."

Some persons may think an educated physician censurable because he neglects to use suggestion or mental influence when treating an hysterical patient; but death from either an hysteric fit or the hysteric state is the rarest of events, if it ever occurs. Besides, asafetida often cures the hysteric attack.

Christian Scientists, who make faith-healing a religious

dogma, use the same method in treating diverse diseases and diseased conditions, viz., hysteria, neurasthenia, pneumonia, typhoid fever, scarlet fever, diphtheria and broken bones. Recently a young man residing in Toronto fell ill with typhoid fever, and was deprived of medical aid by his relatives, who dismissed the attending physician and employed a "divine healer." The patient's mother-in-law threatened to prosecute the mother of the patient, and the "divine healer;" but they replied that they did not care for the law. Just before the patient died, several Christian Scientists were sitting in the room reading Bibles, the sick man having one in his hand. By entering the room they said that his mother-in-law was helping the devil to take the young man away. The wife was not allowed to see her dying husband, because "the train of thought would be interrupted."

Clearly in this case the "divine healer" required treatment; his dying dupe just to be left in peace. You cannot drive fanaticism out of a Christian Scientist by pointing to the achievements of medical science; but you should fine him for practising medicine until he is possession of a legal qualification to do so. On the other hand, it would be too much to expect the educated physician to turn himself into a faith-healer merely because some of his patients wish it so.

Then, again, we may pick a pearl from a heap of dust. Practitioners of faith-cure, when qualified, should be obliged to report their cases of typhoid fever, scarlet fever and diphtheria to the medical health officer. Statisticians would then be in a position to estimate the value, if any, of mental therapy in such diseases; or, at least, to learn the real mortality rates when these diseases are uninfluenced by the recognized medicinal agents.

J. J. C.

GOOD SHOWING FOR CONTAGIOUS DISEASES IN TORONTO, BUT TYPHOID FEVER IS NOT REPORTED BY THE HOSPITALS.

At page 121 we publish a letter from the M. H. O. of Toronto showing the cases of, and deaths from, diphtheria, scarlet fever and typhoid fever, respectively, during each month of 1904, up to December 27th of last year. On making the necessary addition and division we find that these figures show: Diphtheria,

1,268 cases, 114 deaths, a mortality of 8.99 per cent.; scarlet fever, 312 cases, 12 deaths, a mortality of 3.84 per cent.; typhoid fever, 131 cases, 40 deaths, a mortality of 30.53 per cent.

As the mortality from diphtheria varies in different epidemics from 10 to 50 per cent., that which is recorded for Toronto for 1904, 8.99 per cent., would indicate a rather mild type of this disease, or else that the cases had been efficiently treated. Owing to the fact that anti-diphtheritic serum is extensively used in Toronto, 1,203,500 units having been used in the City Isolation Hospital during 1904, the low mortality rate from diphtheria, in this city, is probably due, in a large measure, to the last mentioned agent.

In scarlet fever the prognosis is always guarded. The mortality varies in different epidemics from 5 to 40 per cent. As neither Moser's anti-scarlatinal serum, nor Aronson's anti-scarlatinal serum was used in the treatment of scarlet fever at the Toronto Isolation Hospital during 1904, nor in private practice during this time, so far as we know, the low mortality rate of scarlet fever in Toronto is probably due to the mildness of the type of the disease, although good medicinal treatment and thorough nursing would powerfully assist in producing this result. Isolation and disinfection would, of course, limit the spread of the disease.

The mortality from typhoid fever varies in different epidemics. In private practice the average is probably between 5 and 10 per cent., and in hospital practice it is somewhat more. The high mortality recorded in Toronto—30.53 per cent.—would indicate the prevalence of a very deadly form of typhoid fever during the year 1904, or else the fact that only a small percentage of cases of typhoid fever occurring in this city had been reported. The former hypothesis is a most unlikely one, for the water supply of Toronto is unusually good. The latter is, therefore, the more probable one, viz., that while the M. H. O. of Toronto is kept fully informed as to all the deaths from typhoid fever, he learned of only a percentage of the cases of that disease, which occurred in this city during the past year.

Assuming that a mortality of 10 per cent. would fairly represent the actual death rate due to typhoid fever in Toronto during 1904, the recorded mortality for that year—40—would

indicate that there must have been some 400 cases of typhoid fever in this city last year, instead of 131 cases, the number reported. Let us suppose some illustrative cases: A resident of Toronto having caught typhoid fever outside of this city, enters a Toronto hospital, notification not having been given either to the M. H. O. of the municipality where the disease was contracted, nor to the M. H. O. of Toronto. A resident of an outside municipality may be treated in a Toronto hospital for typhoid fever, notification not having been made either to his own M. H. O. or to the Toronto authority. Patients belonging to these classes die in the Toronto hospitals, their deaths helping to unduly swell the legitimate typhoid mortality rate of this city, because while their deaths are ascribed to typhoid fever, notification of their cases, as cases of typhoid fever, has not been given to the M. H. O. of Toronto. Such a statistic as to typhoid mortality is misleading, and should be fully explained, if published. There is no use in being finical in such a matter. On the other hand, why bear a burden which causes reproach and may do harm, when, by distributing the burden, you may save yourself and assist other municipalities to get rid of their unhygienic shortcomings?

J. J. O.

ARE CHRISTIAN SCIENTISTS MAKING PROSELYTES OF PHYSICIANS?

THE query is almost an insult to the profession at large, but strange, vague rumors are abroad in our fair city, and we must cry "A halt—to Harry Holly!" ere we fire the fatal shot that is the doom of all deserters from the ranks. The credit, not of a nation in this case, perhaps, but of a noble profession depends on loyalty, fidelity and honor. Again those benighted persons calling themselves Christian Scientists have sacrificed a young life to their ignorant fanaticism. We refer to the Goodfellow case of recent date in this city, where at the first signs of illness the young wife, who was not a Christian Scientist, reported her husband's condition to the physician of the G.T.R. After two days the Goodfellow family (Christian Scientists) dismissed him, though he faithfully told them how ill the young man was with typhoid fever, and warned them that death might ensue if they withdrew medical attendance, medicine, etc. They turned a deaf ear and

persisted in the "think" cure, until a comparatively few hours before death, when, in haste, they sent for the physician who was called in at the "passing on" in both the Lewis case and in the Frazee case, and he, unfortunately, through soft-heartedness, hurry, or for want of proper investigation, or for some reason he is unable to transfer from the realm of thought into plain blank verse, issued a death certificate, signing it "pneumonia."

The form of death certificate at present in use is greatly at fault in construction, in so far that there is an opportunity that might present itself to anyone so desiring, perhaps with criminal intent, to fill in the cause of death. We think it is high time that the Act be altered, and the wording of the form of death certificate entirely changed, making it impossible for anyone to tamper with it, and necessitating the return of death being filled in *in toto* by the medical attendant, or, as occasion arises, by the coroner in charge of the case. It is true that care is taken by the Medical Health Officer that no burial permit be issued until a satisfactory certificate is filed, but if the change to which we refer were made, it would often save time and trouble.

Pity 'tis these misguided people seem to look upon this particular medical man who signed the Good fellow death certificate in the light of a sympathetic brother "almost persuaded." If someone had not reported this case to the coroner-in-chief for investigation, would not the physician have been (though maybe unintentionally) aiding in covering up a crime? For it is a dastardly crime to let a young promising life burn out with fever and provide neither proper medical attendance, medicine, nor nursing. The Frazee and Lewis cases ought to have been warning enough, but a third, and let it be a last warning, has now been sounded. Let all physicians stand firm against the wiles of these insinuating people, and let the tenderfeet in our profession understand that, if they lower their colors, they must face the music of the dirge suited to the words, "Good-bye forever." If there be a repetition of the laxity in the granting of a death certificate, such as has been reported in the Goodfellow case, the circumstances are indeed a fit subject for investigation by the Discipline Committee of the Ontario College of Physicians and Surgeons.

Let the punishment fit the crime. A clergyman who asked for reduced rates at a hotel, on the ground that he was a minister of the Gospel, and was refused, demanded the reason

when paying his bill. The clerk replied: "You did not bow your head and ask grace before meat, therefore as you ate like a sinner, now please pay like a sinner." W. A. Y.

EDITORIAL NOTES.

The Adulteration of Coffee in Canada.—Bulletin No. 100, Ground Coffee, shows that of 75 samples of coffee examined at the laboratory of the Internal Revenue Department, Ottawa, 45 were genuine, 19 adulterated, 8 doubtful, and in 3 the adulteration, chicory, was declared. The principal adulterants found were chicory and roasted cereals. Of chicory, which has been used for over one hundred years as a substitute for and an admixture with coffee, Pavy writes in *Food and Dietetics*: "It gives increased color and flavor to coffee, and, used as an admixture to a moderate extent, is considered by most persons to furnish an improvement on coffee alone. The preference shown is quite independent of any consideration of economy. It is employed upon its own merits and, when there is no concealment, its addition to coffee cannot be looked upon in the light of an adulteration." In chicory, there is no caffein. Roasted chicory contains, like coffee, an empyreumatic volatile oil, which forms the source of its aroma and a bitter principle. According to the analysis of John, 25 per cent. consists of watery, bitter, extractive matter. The addition of roasted cereals to coffee causes the latter, when tested, to yield the iodine reaction for starch (blue color). Coffee adulterated with roasted grain is sold more cheaply than pure coffee. Whatever may be the dietetic value of roasted cereals, when taken in the form of a hot infusion, very little therapeutic benefit can be derived from the employment of coffee extensively adulterated with cereals. Pure coffee is advantageously administered as an antidote in cases of opium poisoning. It is also of service in subduing the effects produced by the immoderate use of alcoholic stimulants. It frequently affords relief in some forms of nervous headache, and is well known to constitute one of the most valuable agents we possess for controlling the paroxysms of spasmodic asthma.

Does Centrifugalization Diminish the Number of Bacteria in Milk?—In an article entitled "The Mechanical Methods of Purifying Milk," by Paul Diffloth, published in *La Presse Medicale,* November 30th, 1904, the following appears: "The centrifugalization of milk appears to give a result contrary to the diminution of the number of bacteria in it. Fjord and Fleischmann also show the feeble value of separation by the centrifuge and Conn proves that, if centrifugalized milk contains fewer impurities, it also contains more bacteria after centrifugalization than before. This particular fact may be easily understood. Agglomerations of bacilli, colonies of microbes, are disassociated, divided, their elements dispersed, without in any way losing their vitality, the action of the separator not having any effect on their evolution." The author quotes Niederstadt, Dunbar and Kister in support of the view. Eckles and Barnes contend that the bacteria are diminished by centrifugalization; but that the preservation of the milk is not facilitated by that process. Russell adds that "this mode of clarifying milk is not worth the trouble it gives, unless in dealing with exceptionally dirty milk." As the result of 240 analyses, Professor Harrison expresses the following conclusion: "The action of passing milk through a separator to purify it of contained bacteria is useless; the number of bacteria liquefying gelatine increases slightly after it has passed through the separator; the common bacteria found in manure and hay appear to be disseminated through the milk by the mechanical action of this treatment." M. Diffloth also notes that swine breeders recognize the absolute necessity of pasteurizing the whey got from cream separators, the preservation of which is much more difficult than that of whey obtained through natural processes, while the danger of using it as food is much more considerable. He rejects centrifugalization as an efficacious method of purifying milk. In reference to the last quctation, made by M. Diffloth, Professor Harrison, of the Bacteriological Department of the Ontario Agricultural College, Guelph, in response to a query, writes us as follows: "In answer to your letter of December 19th, 1904, I may state that I am the individual quoted by M. Diffloth. You will find a full account of this work in the transactions of the Canadian Institute for 1902-03, page 467, and following pages." The paper is entitled "The Bacterial Con-

tamination of Milk and Its Control." A reprint of that portion of Professor Harrison's paper, which refers to the cleaning of milk by centrifugal force, appears at page 84 of this issue.

Observations on Poisoning by Carbolic Acid.—In a communication on poisoning by carbolic acid and its proper treatment, published in the *New York Medical Journal,* October 8th, 1903, by Dr. Charles V. Burke, the author says: "Alcohol is of great value, and, if given promptly, and followed by efficient stomach washing, will save life." With this statement we are in accord. His next statement, "The use of the stomach tube is always necessary, when any appreciable quantity of carbolic acid has been taken," is too absolute to be true. That the patient's stomach should be promptly emptied is true, but, if that has been done, why should the attendant force a stiff tube into the patient's esophagus when "there is spasm of the esophageal entrance"? We treated a middle-aged man, who had swallowed 11 drams of liquid carbolic acid, as follows: Forty grains of sulphate of zinc, dissolved in 2 ozs. of whiskey, were given as an emetic about seven minutes after the poison had been swallowed. Vomiting promptly ensued, and the patient's stomach was thoroughly emptied, the odor of the vomited carbolic acid permeating a large house. The stomach tube was not inserted. Two ounces of olive oil were given him one hour afterwards and retained. In an hour the patient walked to his house, which was near by, with assistance. The urine he voided that night was of an olive green color. Next morning, one ounce of Epsom salts was given him; the excrement voided later on smelled strongly of carbolic acid. The patient recovered. Recovery was due in this case to the prompt evacuation of the patient's stomach by a stimulating emetic given about seven minutes after the poison had been swallowed. The whiskey was an appropriate vehicle for the emetic. Usually the treatment of carbolic acid poisoning is employed too late to be of service, the patient, if the dose of the poison is large, dying of paralysis of the heart. An emetic of sulphate of zinc in whiskey has an excellent effect in emptying the stomach, and a powder paper containing forty grains of sulphate of zinc should be one of the indispensable preparations in a physician's pocket case.

The People of Montreal Support Vaccination.—The Province of Quebec has happily attained to a degree of freedom from smallpox, quite remarkable when one considers its past history in connection with that plague. Many remember with regret the mortality from smallpox (3,175 deaths), which occurred in Montreal, from June to December, 1885. Since then, great progress has been made in the enforcement of hygienic rules in Quebec. Through the operation of strict regulations providing for the enforcement of isolation, disinfection and vaccination, and also owing to the co-operation of the people in submitting to these regulations, severe outbreaks of smallpox do not occur in the Province of Quebec, and sporadic cases are controlled with comparative ease. The *Montreal Medical Journal,* December, 1904, says: "The medical health officer of Montreal, in his recent report, shows that out of 90 cases of smallpox in Montreal last year, 1903, not one person suffered from the disease who had been vaccinated during the last five years. Two years ago, when the officials visited the schools, over a thousand scholars refused to attend school because they had to submit to vaccination; but this year (1904) they have not had one refusal. In addition to this the Department of Health has now the co-operation of all classes in the community in enforcing vaccination."

A Novel Method of Utilizing the Appendix Vermiformis in Surgical Operations for Cancer of the Intestine.—During a discussion "on the treatment of cancers of the large intestine," at a meeting of the Société de Chirurgie, Paris, November 16th, 1904, Dr. Segond stated that he quite agreed with the opinions of Dr. Quenu, the reader of the paper, as to the treatment of intestinal cancer, accompanied with total or almost total obstruction of the bowel, viz., primary removal of the obstruction by establishing an artificial anus, and, secondly, ablation of the cancer itself two or three weeks afterwards when the general condition of the patient had sufficiently improved to permit of the operation being done with safety. Dr. Quenu's preliminary operation consists in first suturing the large intestine to the abdominal parietes and, afterwards, evacuating the large intestine of feces by puncturing it with a trocar and cannula. As cancer of the large intestine is most frequently found at the cecum, Dr. Segond, in operating for cancer of that portion of the intestine, looks for the

appendix vermiformis, draws it out of the abdomen, cuts off its free end, and inserts a long drain into it, so as to conduct intestinal liquids and gases outside of the surgical dressings, without occasioning any risk of infecting the intestinal serous membrane, which is in contact with the incision.

Is Tuberculosis Transmitted to Man from the Eating of Butcher's Meat?—Dr. Westenhoffer has made some experiments to elucidate the transmission of tuberculosis to man, an account of which was read before the Medical Society of Berlin, Germany, November 3rd, 1904. He inoculated guinea pigs with pieces of flesh taken from animals, which were affected either with acute miliary tuberculosis or with localized tuberculosis of the bones, glands, etc. Positive results proving infection were obtained in the cases in which the flesh of animals affected with miliary tuberculosis was used, and then in only half the cases. Dr. Westenhoffer concludes that butcher's meat affected with miliary tuberculosis should not be offered as food for man. It should also be remembered that the chances of human beings becoming infected with tuberculosis by eating tubercular meat, are much less than the chances of guinea pigs becoming tuberculized after they have been inoculated with tubercular products. According to Dr. Westenhoffer, when a slaughtered animal reveals, on examination, only localized lesions of tuberculosis, its flesh may be used as food for man without danger, if care is taken to cut out the diseased portions and such parts of the carcase as are in contact with the tubercular lesions. These are the only parts of the carcase in which, excluding cases of miliary tuberculosis, bacilli tuberculosis are found. Dr. Westenhoffer's observations on this important point agree with those obtained by other pathologists.

The Association of Major Hysteria with Locomotor Ataxia.—At a meeting of the Hamburg Medical Society (November 15th, 1904), Dr. Nonne presented a female patient, who, four years before, had shown signs of a commencing locomotor ataxia, but who had latterly consulted him for multiple nervous symptoms, of an hysterical character (pseudo-spastic paresis, characteristic anesthesias, great trembling, etc.). After a few treatments by suggestion, the hysterical symptoms disappeared, but the symptoms of locomotor ataxia, which they masked, viz., Argyll Robertson pupil, abolition of the patellar reflex, slight bladder disorder, ataxic gait, etc., reappeared. J. J. C.

PERSONAL.

Dr. J. F. W. Ross spent a few days in Boston last month.

Dr. Alex. Primrose spent a week in Nova Scotia last month.

Dr. R. A. Pyne has again been elected to represent East Toronto in the Local Legislature.

Dr. George Carveth has closed his private hospital at the corner of College and Huron Streets.

Dr. D. C. Meyers, of Deer Park, returned from England on the 7th ult., after spending about three months on the "t'other side the briny."

Dr. Helen MacMurchy has kindly consented to edit a short column in the Journal on Public School Hygiene, a subject on which she is particularly well fitted to write.

We understand that Drs. Temple and Macdonald contemplate some changes as to Bellevue Hospital this summer, and intend to so arrange matters that outside members of the profession can attend their own cases there.

Professor and Mrs. McPhedran gave a thoroughly enjoyable at-home to a large number of the profession at their handsome residence on Bloor Street West, in honor of Dr. William Osler, on December 28th. The function was enjoyed by all who had the privilege of being guests.

Dr. George Elliott, proprietor of our contemporary, the *Dominion Medical Monthly,* purchased some short time ago the house belonging to the late Mr. Baines, on the south-east corner of Beverley and Cecil Streets, and, after renovating the interior, moved up from John Street.

Dr. H. P. H. Galloway, of Bloor Street East, intends removing with his family to Winnipeg, Man., next August. He is building a house there, and it will be completed by that time. He still remains a partner of Dr. B. E. McKenzie, and in all probability will start an orthopedic hospital in Winnipeg, where there is every prospect of success in that special line of work.

Dr. Brefney O'Reilly, who has come on so well in his profession, and is still in the early twenties, is to go to Baltimore and be with Dr. Osler until that noted *savant* leaves for England in the spring. The inestimable benefit of such a sojourn and the implied commendation given by Dr. Osler's wish for it is matter of great satisfaction to the young medico's relatives and friends.

Prof. Wm. Osler, of Baltimore, Md., was dined and feted while in Toronto a few weeks ago, and everyone had peculiar pleasure in again meeting so honored a member of the profession on his return to his native city. Dr. Osler will go to Oxford in May to assume the Regius Professorship of Medicine; but it is hoped, before sailing, that he will again favor us with a more prolonged visit than a paltry three days.

The annual dinner given to the staff of the Journal took place in the banquet-room of the King Edward Hotel on January 4th, and was very successful. Covers were laid for thirty-five, and delightful music was rendered by a male quartette, composed of Messrs. Percy Coward, Gorrie, Howitt and Jellett. Mr. Irving Cameron proposed the toast to "The Journal," and Dr. Charles Sheard gave "some reminiscences of medical journalism." The toast to the collaborators was proposed by Dr. Cassidy, and replied to by Drs. A. J. Johnson, C. R. Dickson and B. E. McKenzie.

Correspondence.

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

"HAVERGAL LADIES' COLLEGE AND ITS STAFF OF SPECIALISTS."

TORONTO, 43 Grosvenor St., Dec. 28th, 1904.

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY:

DEAR SIR,—The profession is indebted to Dr. MacCallum and your excellent journal for the *exposé* in your December number of the methods of Havergal College and its staff of specialists.

I have treated patients from Havergal College on various occasions, and have never been invited to devote a percentage to the revenues thereof, so that, I presume, I cannot consider myself qualified for a place upon "the staff of specialists in connection with the college." I need not say I have no desire to qualify.

Yours very truly,

D. GIBB WISHART.

DIPHTHERIA, TYPHOID AND SCARLET FEVER RETURNS FOR 1904.

TORONTO, Dec. 27th, 1904.

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY:

DEAR SIR,—I beg to forward you the following returns for the year 1904:

	Diphtheria		Scarlet Fever		Typhoid Fever	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
January	146	13	37	0	2	1
February	122	10	41	0	5	3
March	88	17	30	3	2	1
April	58	7	16	1	9	3
May	55	11	16	2	10	2
June	109	13	27	0	5	3
July	79	2	14	1	12	1
August	99	5	8	1	18	6
September	86	6	21	0	19	6
October	94	3	17	1	16	4
November	153	14	41	2	21	5
December to date	179	13	44	1	12	5

Faithfully yours,

CHARLES SHEARD, M.D.,

Medical Health Officer.

News of the Month.

PROFESSOR WILLIAM OSLER'S ADDRESS BEFORE THE CANADIAN CLUB.

THE Canadian Club had a most distinguished guest at their luncheon at McConkey's, on December 29th, in Dr. William Osler, whose recent appointment to the position of regius professor at Oxford has given such great satisfaction to his host of Canadian friends. After the repast, Dr. Osler delivered an interesting and entertaining address on "The Triple Relationship which We Canadians Owe." He referred first to the cordial reception always accorded Canadian people in the United States, and urged that instead of any carping criticism being levelled at our neighbors over the border, there should be reciprocated that kindly feeling which he found always existed in the States towards those who went there from the Dominion. He made some humorous as well as practical remarks on the incessant flitting of our young people to the United States, and whilst it was bad enough to lose the men we certainly could not afford to let the girls go as well. He suggested a $100 tax on every girl leaving Canada for the States, and as an incentive to young men to commit matrimony favored a tax on bachelors.

Dr. Osler, speaking of Imperial Federation, thought the time had arrived for Canada to bear her fair share in the defence of the Empire. As to Canada itself, he urged the bringing up of a race, strong alike in mental, moral and physical character, and thought it was time something was done to put the teachers of this country on a better financial footing. He deprecated so much slander and abuse being introduced into the political life of the Dominion, and while he blamed the newspapers as being responsible for most of it, thought it could be got rid of by the application of a little Christian spirit. Some five hundred people listened to the address with keen interest, and as an indication of the desire to hear the doctor, it may be mentioned that scores were unable to be accommodated at the luncheon, although they succeeded in finding room to participate in the intellectual feast.

Dr. Osler expressed the pleasure it gave him to return to his old town where he received his early education, where he had so many friends, and a town to which his family owed so much. He said it was with the young people that the future of this country

rested, and facetiously remarked how grateful he was that the chairman had just told him that no member was admitted to the Canadian Club who was over forty years of age. He also humorously observed that there were too many old men knocking about doing active work, and that no man over forty ought to be engaged in it.

Dealing with the first point of his subject, Dr. Osler said it might be fortunate or otherwise that Canada was so situated in having to the south one of the largest and most powerful nations on earth. As Britishers they should feel proud of it, for there never was a nation, ancient or modern, that had such a child, neither was there ever likely to be again. The United States had for Canadians a serious and important influence. One influence was the incessant dribbling over the border of young men, and he was told that there were in the United States to-day nearly a million Canadians, many of whom occupied prominent positions in financial circles and the leading professions, more particularly in medical and theological departments. They had been successful by reason of two special qualities, industry and thoroughness, the only two qualities worth anything in the make-up of a good man. If it were only a matter of draining the young men Dr. Osler would not mind it so much, but the most serious loss to Canada was that of the young women. Only a few months ago he was talking to a young man who had reached nearly thirty years of age without getting his affections settled, and when he asked him why he did not get married, the young man replied that all the girls who were eligible had gone to the United States. Dr. Osler had the figures from six of the large hospitals in American cities, and of 651 women in the nursing department, 196 were Canadians, which he thought was an enormous proportion, nearly one-third. He felt that something should be done to stop this incessant loss of the future mothers of this country.

As a remedy Dr. Osler could only see two ways, and one which found evident favor with the audience was to get the Dominion Parliament to put a tax on bachelors. Every man who had not at the age of 25 a family to support should, he thought, be helping the other fellow who had a family by paying a good big tax, which would only be a reasonable and rational political measure. And, now, as to the delicate question of the girls. To keep them in the country the doctor would have an export tax of $100 on every Canadian girl who left Canada for the United States, and here again he found a sympathetic audience. The Canadian girl was, of course, he observed, worth a good deal more, and it would even be worth the while of the country to pay the family of the girl $1,000 to keep her here. "These," said Dr. Osler, "are the suggestions I throw out to the politicians amongst you."

It was remarkable, continued the doctor, how well Canadians

were treated in the United States, and it was little wonder they went there. They were simply taken into the family, and the question was not asked as to where they came from, but "What can you do?" Very often a carping spirit cropped up on the part of Canadians towards Americans; "but," said Dr. Osler, "when it does come up bear in mind that nearly a million of your countrymen live there, and are treated in such a way as should make you at home remember that whatever feelings you may entertain towards the United States as a nation, it ill-becomes you to speak in any way derogatory of a people amongst whom we live as brethren, and that we could not live better at home." After speaking of various conflicts which had been waged and done so much for this country, Dr. Osler alluded to the Alabama and Alaskan disputes, and pointed out the great compensation Americans brought here every summer by visiting our watering places, and making Canada their favorite resort. They should not also forget that millions of acres south of Alaska, between it and the American border, were being largely taken by American citizens, so that on all accounts Canadians should not lose sight of the fact how inadvisable it was for them to assume in any way an antagonistic or hostile attitude either in the newspapers, in public, or in private life against their American brethren amongst whom so many of them lived in harmony and comfort.

"The British relationship of this country is a very delicate problem," continued Dr. Osler. A great many miles separated the Mother Country from Canada, and the tie, when they came down to it, was after all only one of sentiment. But after all, there was no stronger tie than that of sentiment which ruled us in every relation of life, and what stronger tie was there than that which sent thousands of young men to do battle for the Mother Country when she was in danger in South Africa? There were of course difficulties and troubles which would require a great deal of patience on the part of the politicians of the Mother Country as well as on the part of the politicians at home during the next twenty-five years to promote the proper feelings and harmony which must exist if there was to be a proper organic unity between the colonies and England. It was plain and open talk that there could only be three events before this country, either independence, annexation or some measure of Imperial federation. A great deal of nonsense, Dr. Osler proceeded, was talked with reference to the difficulties connected with Imperial federation. He did not see that there were difficulties in any way to be considered in opposition to the remarkable advantages the entire Empire would gain. The chief difficulty on the part of the British beyond the seas was unquestionably that they wanted everything, and were not willing to give anything in return. If, however, as Cana-

dians they were going to be an integral part of the great world-wide Empire, they would have to take their share in the responsibilities of that Empire. They could not ask the mother to be constantly providing for her children. Canada was now reaching the stage of manhood, and it was high time she was taken into partnership in the affairs of the Empire and contributed her fair share in the expenses as apportioned for carrying on and supporting it.

"And now," said Dr. Osler, "a few words about our own country." What were the ideals which they should cherish with reference to Canada? They should first see that they had a strong race, and fortunately they were situated in a most satisfactory position for proper development. It was often spoken of as being a disadvantage to the country being so far north, but he pointed out that there had rarely been in the history of the world a very strong nation not situated in the north, and it was very much to their advantage in Canada to have a rigorous climate with the winter biting hard at times, as it was more likely to be conducive to the production of a race stronger than any other on the continent. They had already a heterogeneous commingling of English, Irish and Scotch, which was the best mixture the world had ever seen, and if, said the doctor, with a merry twinkle, an Act of Parliament could be passed compelling some Canadians to marry French-Canadian girls, the future of the race would be assured. Then they must have a strong race mentally. That, he admitted, was a very difficult matter, because whilst they could grow corn and potatoes, they could not grow brains, but they could foster elementary education by having everywhere well-equipped schools and school teachers.

"There is no one problem of greater moment in this country than getting well-equipped schoolmasters," urged Dr. Osler. They could get plenty of girls to teach, but he did not believe in boys being brought up under a school-mistress. The difficulty was in getting young men to teach in the high schools, and those would never be obtained unless they were paid better salaries, and made to feel that their profession was one which was not only honorable and useful, and doing the best and highest work for the country, but one in which there was some prospect of looking forward to a pension whereby he would have something to provide against old age. Dr. Osler was gratified to find that the University problem in Canada was rapidly approaching solution. Nothing was more pleasing to one who had known the history of the University question here than to see the rapidity with which the universities were growing. The Provincial University would, he hoped, in time really get to the Provincial breast, and not be bottle-fed, as it had been so long.

"There is no doubt that there has been a great mental awakening in this country," proceeded Dr. Osler, and he found it reflected in the literature as represented by the magazines and scientific journals, whilst poetry, usually not thought much of by business men, was on a much higher level here than in the United States. Whilst poetry was regarded so disparagingly it was none the less an important factor in the history of a nation. Poetry tended to a higher vision, and where there was no vision people would perish, and Dr. Osler humorously suggested that if any of the business men present came across a young fellow scribbling poetry in the office they should at once raise his salary.

"The third and most important thing," said Dr. Osler, "is after all to grow a strong race morally, and that is the hardest of the lot." He did not think that Canadians as a whole were a highly immoral people, and homicides in this country were not nearly so numerous as in the United States. Neither was drunkenness so prevalent as it used to be in the days of our forefathers, and after a few pleasantries at the expense of the Scotchmen, the doctor laughingly remarked that the great change only showed what environments would do. Illegitimacy was also exceedingly rare, and that of itself was an excellent indication of the morals of the people, whilst with another jocular shot of the doctor's "divorces are not so prevalent as some would like them." The latter feature he attributed to the fact that the law was enacted in the Dominion Parliament, but if it had been settled by the Local Legislature he had no doubt that divorces would be as common here as in any other part of the continent.

Dr. Osler's last point was to the effect that there was far too much evil-speaking, lying and slandering in connection with Canadian political life. He thought it was altogether unnecessary and superfluous, and not right that young men should be brought up in an atmosphere in which there should be a constant feeling of hostility, and a slandering attitude in the press towards political opponents. It was not a difficult matter to correct if people would only set their hearts earnestly against it. He regarded it as much worse even than drunkenness to take a man's character away. Political opponents should be dealt with in an ordinary every day Christian spirit. It was said that Christianity could not be brought into politics. It was true as regards a certain type, "but," said Dr. Osler, "don't call it Christianity, but every-day behavior, which, if not strictly St. Paul's teaching, was Aristotle's true gentleman."

A hearty vote of thanks was accorded Dr. Osler for his address.

FORMAL OPENING OF THE NEW ONTARIO MEDICAL LIBRARY IN THE QUEEN'S PARK.

PERHAPS it was characteristic that Dr. Osler, the eminent medico, the Regius Professor of Medicine, the popular author on medical subjects, in making his opening address at the Medical Library, on December 28th, should forget all about the little humbug of formally declaring it open, when the doors had been swinging for hours and everybody was already inside. His shrewd speech, not too fluent, indicated the practical mind and the eye for realities quite as much as the little oversight, and when reminded, the droll

NEW MEDICAL LIBRARY, QUEEN'S PARK.

way in which he handed over the bunch of keys to the dean of the medical faculty and vice-president of the Library Association betrayed the pleasant humor of a man with an extensive outlook.

Physically, Dr. Osler is not a large man as Oslers go, and the family qualities seem to have been refined and distilled, both in his appearance and his talents, in keeping with his reduced stature.

Dr. Reeve took the chair as vice-president, in the absence of Dr. J. F. W. Ross, president of the Library Association, and opened the proceedings about 4.30. A mob of eminent local physicians stood up in the council room of the new library, looking like His Majesty's commons when summoned to the bar of

another place. Behind the chairman and Dr. Osler were five ladies—Dr. Cooper, from Brisbane, Australia, and Dr. Lelia Davis, Dr. Greenway, Dr. McMurchy and Dr. Julia Thomas. Chester Massey and Dr. N. A. Powell also had seats, the latter being librarian.

Dr. Reeve described Dr. Osler's visit as a happy coincidence with the opening of the library. They owed him a great deal, as he was the largest subscriber, except Mr. Massey, who had supplemented their funds by the very handsome donation of $5,000. Dr. Osler had long ago given words of encouragement and advice worth more even than the $1,000 he had contributed. Dr. Osler was the author of the most popular text-book on medicine, suited not only to the student, but consulted with advantage by medical men the world over.

Dr. Osler rose amid applause.

It gave him great pleasure to be present, he said, and declare the building open. It was for their intellectual refreshment, always in order for medical men, and for friendly and social intercourse, also always in order. The institution would have a dual influence, a very important direct influence coming first. They could all appreciate their deficiencies. It was a poor doctor, indeed, who had not borne in to him the fact that he could be much better. There was but one way of improvement, the careful and intelligent study of the cases before him. They talked of large experience and years of practice, but these were not necessarily an advantage. Years might bring sterility. Many did not study, and the older they grew the worse doctors they got to be. They could not study without books, and a good reference library was almost impossible for one doctor to gather together. It was better to subscribe to such a library, and have access to all the periodicals and literature of the profession and keep up his cases by reference to the experience of other men.

Such a library fostered the best traditions of the profession, which, without disparagement to others, he considered were older, better and nobler than those of any other profession. They would remember the Hippocratic oath and the high aims of the Greek physicians, which never were equalled, and which were theirs to-day. In a home of this sort such traditions should be nurtured and fostered. There were few finer than their own local traditions, and in such a place portraits of old notables of the profession should be hung, books, papers and manuscripts obtained from their families and stored there, as was done in Boston. The family papers of Dr. Widmer were an example, and all of these should be in a fireproof safe. Records of Dr. Bovelle, Dr. Hodder and many older men should, and no doubt would, there find an appropriate storehouse

There were too many laymen there to let him speak as he would, or he might give the profession away entirely in dealing with the indirect advantages. Even laymen knew that doctors sometimes disagreed, and were a wee bit sensitive with one another. There was a little too much antagonism in certain sections of the profession, and they did not always get along as they should. Some of the older men had had bad teachers. He would not particularize, but they came from bad schools in the Old Country, where the worst possible example of jealousies, bickering and personal animosities among the professors was set to the students. When the seniors were thus in active hostility, what could be expected of the juniors? No man over fifty should ever believe any story told about a contemporary.

"When there is any trouble now," said Dr. Osler, "it is one of these confounded patients—generally a woman—who has stirred up hostility." Great laughter occurred over this passage. They should never under any circumstances listen to anything about a brother practitioner. The laughter was renewed when he added:

"Don't believe it even if you know it's true." A little self-sacrifice would do them no harm and stimulate them in connection with the library. When they got past the bread-and-butter stage—and he knew some who had not got past the bread stage—they should help as they were able. The public ought to know how difficult it was for a doctor to save anything in the first twenty years of his practice. As he got on, such a building should become the object of their careful solicitude.

Amid bursts of laughter he rallied them on their tendency to stock investment and speculation. They had sunk too much in War Eagle and such ventures. Next time a promoter came along they should put $50 in Golden Fleece and $100 in the library, a much better investment.

"You might have had the handsomest building in America, with marble front and Grecian candidate, if you had not been such fools financially. Doctors do not appreciate the fact that no doctor has any financial sense. He is not of the profession where he could get it." The library was only a start. They should have their rooms not only filled with books, but a hall built at the back. "God speed you in your future work," he concluded.

Chester Massey had a high admiration for the profession, and thought he had a good right to, for he had had more to do with them than most men of his age, and they had treated him well. There was a formidable array of physicians present, and he hoped it augured well for the new-born child which he might say was now receiving infant baptism. The grade of service and quality of their work the world over entitled medicine to rank next to theology. An ounce of prevention was worth a pound of cure, and as the ministers sounded their notes of warning it was the duty of

the doctors to keep us out of trouble physically, and prevention should be the strongest element in their practice. He suggested a stated periodical visit for the doctor to examine and prescribe and see that all was well. Mr. Massey said that the contribution of which they spoke should be credited to his father's estate, and that he merited no more credit than the humblest citizen. He hoped they would find that they had builded better than they knew.

Dr. Reeve stated that the library was due to the suggestion of the late Dr. J. E. Graham, a portrait of whom would adorn the library. They owed a great deal to their president, Dr. Ross, and next to him to Dr. N. A. Powell.

Dr. Powell, in a conversation with Mr. Massey, had touched him with a quotation from a hymn:

> "And shall we ever live
> With this poor dying wreck."

In a heart-to-heart talk with Dr. Ross he had aroused his interest. The munificence of Dr. Osler, of Timothy Eaton, of E. B. Osler and the kind consideration of the university authorities had enabled them to acquire the building, worth from $10,000 to $12,000, with a lease of twenty-one years entirely free of debt, and with enough money invested to pay the ground rent. They had 7,000 or 8,000 volumes in the library, and hoped to have the medical societies meet there. He invited them all to come in at $5 a year. They would fit one room in the name of Dr. J. E. Graham and another in the name of Dr. Osler, whom they would claim and name as brother still.

Refreshments were served at the close of the formalities and the visitors spread over the building. The large north room will be used for meetings; the south front room for new books and visitors; the room behind as a coffee room. Upstairs there are five large rooms for stacking books and a large bathroom. A large brick building in the rear will be used for surplus books and magazines. Electric lighting and hot water heating are installed throughout the house, which has been known as the Thorne residence, 9 Queen's Park.

THE THIRTY-EIGHTH ANNUAL MEETING OF THE CANADIAN MEDICAL ASSOCIATION.

The thirty-eighth annual meeting of the Canadian Medical Association will be held in Halifax, N.S., from the 22nd to the 25th of August, 1905, both days inclusive, under the presidency of Dr. John Stewart, of that city. Recently there was held in Halifax a special meeting of the Medical Society of Nova Scotia, when

were present several members from the surrounding country near Halifax. It was decided that the Medical Society of Nova Scotia should act as hosts and entertainers of the Canadian Medical Association. Dr. G. Carleton Jones has resigned from the position as local secretary, and the President, on the advice of his Executive, has appointed Dr. J. R. Curston as local secretary, Dr. Jones having been appointed chairman of the General Committee of Arrangements. The address in surgery will be delivered by Mr. Francis Caird, of the Royal Infirmary, Edinburgh, and the address in gynecology will be delivered by Dr. Howard A. Kelly, of Johns Hopkins, Baltimore. The title of his address will be "Cystitis in Women." Dr. J. W. Stirling, of Montreal, will deliver an address in ophthalmology. In addition to this there will be addresses in medicine and pathology, and Dr. A. J. McCosh, of New York, will also be asked to present a paper.

The General Secretary is now in communication with the transportation companies as regards rates, and an effort will be made to have transportation extended to Sydney, the Canadian Pittsburg, with return *via* Portland, Boston or New York. From the manner in which the Maritime medical men have taken hold of matters it is expected that the meeting in Halifax will be fully up to the best meeting yet held.

Any one desiring to present papers or specimens or make demonstrations should enter at an early date into communication with the General Secretary, Dr. Geo. Elliott, Toronto.

GOLDEN WEDDING OF DR. ANSON BUCK AND HIS HELPMEET.

THE fiftieth anniversary of the marriage of Dr. Anson Buck and Keturah Adelaide Howell was celebrated on Tuesday, December 27th, at their home, Palermo. There were present their children, Mr. and Mrs. Colin C. McPhee, of Montreal, and Hon. Colin H. and Mrs. Campbell, of Winnipeg, with their infant son, Colin Howell Campbell, and the immediate relatives of Dr. and Mrs. Buck. Two sisters of the bride, Mrs. Teeter, of Burlington, and Mrs. C. P. Lawrence, were the only guests present who attended the ceremony of fifty years ago. Gifts, letters and telegrams of congratulation from different parts of Canada and the United States testified to the very great esteem in which Dr. and Mrs. Buck are held by the many friends they have made.

Dr. Buck, who at the time of his marriage had just graduated from the Royal College of Surgeons, London, England, was the youngest son of Philip Buck, who was born at Lachine, Que., his parents at that time making their way with other U. E. Loyal-

ists to Canada at the close of the War of the American Revolution. Mrs. Buck was the second daughter of John Triller Howell, also of U. E. Loyalist stock, so that for over a century both families have been identified with the history of Halton County. Dr. Buck began the practice of his profession in his native village, and soon succeeded in building up a very extensive practice, which he has attended to for fifty-one years, and to-day is as active and energetic as at any time during the half century. In addition to the demands of his practice Dr. Buck has devoted a great deal of attention to political, municipal and church affairs. For thirty-seven years he has been a member of the Township Council of Trafalgar, twenty as reeve, and for twenty-three years he sat in the County Council. He has also been greatly interested in temperance work. In politics Dr. Buck has been an enthusiastic Liberal.

Dr. and Mrs. Buck have the best wishes of their host of friends for many more years of health and happiness.

DEATHS IN NOVEMBER, 1904.

THE returns from the office of the Provincial Board of Health for November are not so complete as those received a year ago, as several municipalities failed to report and the number of deaths recorded are much less. The deaths, as reported in November, 1903, were 2,081, and for the same period this year are 1,910 from a reporting population of 1,900,100, but the death rate per 1,000 remains practically the same, being 12.1 and 12 per cent.

The decrease in the number of cases and deaths of infectious diseases is the most interesting feature of the returns. The total number of cases reported for November this year is 856, and deaths 225, while for the same month in 1903, as may be seen by the table below, 1,062 cases and 259 deaths were reported, which is a case decrease of nearly 20 per cent. and in deaths 13 per cent.

COMPARATIVE TABLE

	1904		1903	
	Cases	Deaths	Cases	Deaths
Smallpox	2	0	5	0
Scarlet Fever	205	8	276	9
Diphtheria	316	45	476	64
Measles	12	1	29	5
Whooping Cough	23	1	30	14
Typhoid Fever	171	43	109	30
Consumption	127	127	137	137
Total	856	225	1062	259

ONTARIO MEDICAL ASSOCIATION.

THE annual meeting of the Ontario Medical Association will be held in Toronto, June 6th, 7th and 8th next, under the presidency of Dr. William Burt, of Paris.

Strong committees on papers and on arrangements have been appointed under the chairmanship, respectively, of Dr. A. Primrose and Mr. I. H. Cameron.

A considerable number of papers are already promised, and in addition the committee is pleased to announce that they have received word from Dr. Albert Ochsner, of Chicago, accepting the invitation of the Association to present a paper in surgery.

The personnel of the two local committees is as follows:

Committee on Papers and Business—Dr. A. Primrose, chairman; Dr. N. A. Powell, Dr. J. F. W. Ross, Dr. A. A. Macdonald, Dr. Allen Baines, Dr. R. D. Rudolf, Dr. W. B. Thistle, Dr. R. A. Pyne, Dr. Clarence Starr, Dr. J. M. MacCallum, Dr. W. H. Ellis, Dr. N. H. Beemer, Dr. Price Brown.

Committee on Arrangements—Mr. I. H. Cameron, chairman; Dr. R. A. Reeve, Dr. A. H. Wright, Dr. G. A. Peters, Dr. J. A. Temple, Dr. W. J. Wagner, Dr. H. C. Scadding, Dr. H. T. Machell, Dr. Charles Sheard, Dr. W. P. Caven, Dr. A. McPhedran, Dr. H. C. Parsons, Dr. B. L. Riordan, Dr. P. L. Scott, Dr. W. Goldie, Dr. G. B. Smith, Dr. Hamilton.

ITEMS OF INTEREST.

Gift by Lord Mountstephen.—Lord Mountstephen has given £200,000 of Argentine bonds to King Edward's hospital fund, sufficient to bring in £11,000 yearly. The King has written, personally thanking him for his "magnificent donation."

Senator Sullivan's Jubilee.—This spring Queen's Medical College will celebrate Senator Sullivan's jubilee, when he will be made an honorary professor, and given the degree of LL.D. At the medical banquet recently Dr. Sullivan announced his intention to resign his chair of surgery. Fifty years ago he entered the college as a student.

Dr. Johnston, of Fergus, Stricken Down.—On Saturday, the 24th of December, Dr. Johnston, of Fergus, started from that village to drive to the home of his brother in Eramosa for the purpose of spending Christmas with him. On his way through Gara-

fraxa he called at the house of Mr. Andrew Thomson to see a sick child, and decided to stay there all night. He stayed there over Sunday, and by Monday morning was so ill that he could not proceed on his journey, and had to remain in bed. He grew worse very rapidly, and soon several doctors were in attendance on him, who found that the complication of disorders from which he had been suffering for a long time had come to an acute stage. We are glad to know, as we go to press, that the doctor is rapidly progressing towards recovery.

Had a Pleasant Reunion.—A reunion of the members of the house staff and ex-house staff of the Toronto General Hospital took place at the Toronto Club on Thursday evening, December 29th, among those present being Drs. J. N. E Brown, Dawson City; T. H. Middlebro', Owen Sound; A. S. Tilley, Bowmanville; H. J. Way, of Chicago; Drs. H. B. Anderson, H. A. Bruce, Fred. Fenton and Harold Parsons, Toronto. Dr. Charles O'Reilly was the only guest and congratulated his old house staff present on their prosperity in the honorable profession in which they were working. Two hundred and twenty house surgeons had come and gone during his *régime*. Since the year 1892-93 the patients had increased from 2,800 to nearly 4,000, and the house staff now numbers fourteen. It was proposed to inaugurate a society or association of the "ex-house staff, Toronto General Hospital," and to have the joint meetings, if possible, in August or September of 1905.

Calgary's Successful Sanatorium Receiving Much Attention.—The Calgary Sanatorium for the treatment of incipient pulmonary tuberculosis has verified the fact, through the many patients that have been treated in that institution, and who to-day are following their vocation in life with perfect health and strength that the air, climate and altitude of Calgary is exceedingly beneficial to patients suffering from that disease. The open air treatment introduced by the late Dr. Ernest Wills, of each individual patient, is observed and directed in every detail by the physician in charge. The patient on arrival is at first placed in the main building, and later, if it is thought advisable, he lives and sleeps in a specially constructed cottage with canvas walls, where ventilation is perfect and heat properly regulated during the winter months. Dr. G. M. Atkin, M.B., who has made a special study of pulmonary tuberculosis, has charge of the sanatorium. Here he resides so that each individual patient is under his personal observation. In this way by studying the requirements of each case the best results are obtainable. Mrs. Wills, wife of the late Ernest Wills, M.D., who formulated the plan and built the sanatorium, has charge of the executive work of the institution.

Biloxi Sanatorium.—The attention of the profession throughout the Dominion is called to the fact that on the sunny shores of the Gulf of Mexico there has been recently completed a thoroughly up-to-date sanatorium, especially designed and constructed for convalescent and nerve-tired patients. The great advantages that this institution presents to the profession in point of climate, location, equipment justify us in saying that we physicians of a much colder clime should extend a helping hand to this institution by sending those of our patients whose conditions necessitates warm and out-door exercise, for at the sanatorium at Biloxi, Mississippi, they can certainly get these to the utmost, as well as everything which can be thought of in an institution for the improvement of sick or convalescent people. A feature which marks this institution as almost unique, is the splendid bathing facility, which location upon the very beach of the gulf affords. By a simple device, the salt water is automatically pumped into the bath-annex, where hot salt baths, plain or complex can be given in any kind of weather or season, as well as bathing in the gulf itself, for the more robust.

Adnephrin 1 to 1,000 Solution.—Medical science is indebted to Prof. Abel, of Johns Hopkins University, for the isolation of the active principle of the adrenal glands, and for the exhaustive investigations through which the chemistry of this extremely interesting and valuable substance has been brought to light. Adnephrin is beyond question the most powerful astringent and hemostatic known. One drop of a 1 to 1,000 solution of it instilled into the eye will, within a few seconds, produce a pallor of the conjunctiva. It is also remarkable as a cardiac stimulant. Adnephrin Solution is practically neutral in reaction, non-irritating and stable. It is physiologically tested, always uniform in strength and highly active. In minor surgical operations it is of inestimable value in checking the hemorrhage and affording a clear field. Thus in surgery of the eye, ear, nose, throat, urethra, vagina, etc. it finds extensive application. Medicinally it is useful in epistaxis, hemoptysis, hematemesis, menorrhagia, postpartum hemorrhage, other forms of hemorrhage, etc. All progressive pharmacists supply Adnephrin Solution.

PRURIGO.

"Tar soaps or lotions such as 'Liquor Carbonis Detergens,' diluted, are also useful."

"Diseases of the Skin," vol. i., page 146.

H. RADCLIFFE-CROCKER, M.D.(Lond.), F.R.C.P.

The Physician's Library.

BOOK REVIEWS.

A Manual of Personal Hygiene. Proper living upon a Physiologic Basis. By American authors. Edited by WALTER L. PYLE, A.M., M.D., Assistant Surgeon to the Wills Eye Hospital, Philadelphia. Second edition, revised and enlarged. 12mo volume of 441 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Bound in silk, $1.50 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto.

The second edition of Dr. Pyle's work, which appears four years after the first edition, contains numerous additions, including an illustrated system of Home Gymnastics, a chapter on Domestic Hygiene, and an appendix in which simpler methods of Hydrotherapy, Thermotherapy and Mechanotherapy and a section on First Aid in Medical and Surgical Accidents and Emergencies are given. Dr. B. H. Bergey, of Philadelphia, has joined the list of contributors, and writes the chapter on Domestic Hygiene. The book is written in simple, yet choice language, and may safely be recommended to persons of more or less education, who desire information on matters of personal hygiene. It should be read by the profession, and be recommended by them to their patients. It is handsomely bound and well printed. J. J. C.

Progressive Medicine, a Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M.D., Professor of Therapeutics and Materia Medica, in the Jefferson Medical College, Philadelphia; assisted by H. R. M. LANDIS, M.D., Philadelphia and New York: Lea Brothers & Company. Six dollars per annum.

The September number begins with a review of recent literature on tuberculosis, giving prominence to its prevention, and the treatment of tuberculous patients by various methods both in sanitaria and at home. The literature relating to diseases of the heart, lungs and blood vessels is also reviewed in the first section.

Under "Dermatology and Syphilis" many common skin diseases are discussed, and recent views on methods of treatment are

given. The writer is not enthusiastic regarding the value of radiotherapy, except in a very limited number of skin diseases.

In the third section a very comprehensive review is given of the "Diseases of the Nervous System."

The last part is devoted to obstetrics. A new sign of early pregnancy is described as a change in the consistence of the vaginal portion of the cervix uteri giving rise to an intermittent hardening and softening which may be appreciated by the finger. Many of the physiological and pathological problems of pregnancy are considered at length. The part relating to eclampsia is extremely interesting. Most obstetricians will agree with the statement that "the exact nature of the cause of puerperal eclampsia is as yet one of the unsolved problems."

The December number comes in five sections, Diseases of the Digestive Tract, Surgery of the Extremities and Orthopedics, Genito-urinary Diseases, Diseases of the Kidneys, and Practical Therapeutics being the leading subjects of discussion and review. All the articles are useful and full of valuable suggestions, which are derived from many sources. The section devoted to practical therapeutics is certainly not the least important, and no harm would be done if two or three times the amount of space were given to the discussion and review of the recent literature relating to this important subject. A. E.

Clinical Urinology. By ALFRED C. CROFTAN, Professor of Medicine, Chicago Post-Graduate Medical College. New York: William Wood & Co.

Of the many works which have been recently issued upon this subject, this is one of the most satisfactory. It is not too large, it does not confuse by its multiplicity of methods, yet it is thoroughly scientific. In addition to the technical details, which are always clear and concise, it is a clinical work, and discusses in a most satisfactory manner the significance of the various pathological constituents. It can be thoroughly recommended.

J. J. M'K.

Normal Histology and Microscopical Anatomy. By JEREMIAH S. FERGUSON, M.Sc. and M.D., Instructor in Normal Histology, Cornell University Medical College, New York City, with 462 illustrations in the text, many in colors. New York and London: D. Appleton & Co. 1905. Canadian Agents: The George N. Morang Co., 90 Wellington Street West, Toronto.

It is a fact that on many subjects there is undoubted multiplication of books and that especially in medical literature. This volume is, however, an exception to that rule, as the books available on normal histology and microscopical anatomy are but few

in number. Laboratory methods are so different from those of but a few years ago that a new book on this subject is more or less welcome, an accurate knowledge of the minute anatomy of the human organism being entirely essential to the proper understanding of Physiology and Clinical Medicine.

We can say, after carefully perusing Dr. J. S. Ferguson's book, that it is a volume that gives the student a thorough and comprehensive view of normal histology and microscopical anatomy and will greatly aid him in his study along that line.

The Surgical Treatment of Bright's Disease. By GEO. M. EDEBOHLS, A.M., M.D., LL.D., Professor of Diseases of Women in the New York Post-Graduate Medical School and Hospital; Consulting Surgeon to St. Francis Hospital, New York; Consulting Gynecologist to St. John's Riverside Hospital, Yonkers, N.Y., and to the Nyack Hospital, Nyack, N.Y.; Fellow of the New York Academy of Medicine, and of the American Gynecological Society; Honorary Fellow of the Surgical Society of Bucharest; permanent member of the Medical Society of the State of New York, etc. New York: Frank F. Lisiecki, Publisher, 9 to 15 Murray Street. 1904.

This very interesting book has been written, not for the purpose of telling the reader how to operate in these cases, as one might be led to suppose from the title, but to meet the very active and insistent demand on the part of the medical profession for such facts and information, especially as regards results, as may at present be available concerning the new treatment, that is, the treatment by surgical interference of so common and so fatal a malady as chronic nephritis. Dr. Edebohls has for a long time past been writing in the journals on this subject, and has now arranged these articles in chronological order for publication. The data and detail connected with his various cases constitute about two-fifths of the present volume. The remaining three-fifths of the volume is devoted almost wholly to the consideration of the results obtainable by operation in a variety of cases.

The book is so admirably arranged that by the use of the index and cross references, information on any special point can be easily obtained, and its whole tone is definite and forceful. It is a book largely composed of facts, and hence must exert a very decided influence on the minds of all who read it. The treatment of seventy-two patients is described, patients who, it must be remembered, presented themselves for operation only as a last resource, and it is most interesting to note the results obtained by operation. They are as follows: Thirteen received no benefit from operation, seven of these died soon after operation, but would have died as soon probably had the operation never been done; fifty-nine ex-

perienced amelioration of their symptoms varying from slight and temporary improvement to complete cure. In nine cases the operation proved directly life-saving by rescuing the patient from immediately impending death. Surely these results justify our having more frequent resort to surgical operation in these cases than has hitherto ever been suggested. A. J. J.

Pathological Technique. By F. B. Mallory, M.D., and J. H. Wright, M.D. Third edition, revised and enlarged. Philadelphia: W. B. Saunders & Co. Canadian agents: J. A. Carveth & Co., Limited, Toronto.

That a third edition has become necessary of this well-known text-book testifies not only to its popularity, but also to the diligence of its authors. There is no work in English which can compare with Mallory and Wright's as a laboratory text-book for the working pathologist. This new edition contains so many added methods and so much new matter that it completely supersedes the older editions. J. J. M'K.

The Surgery of the Diseases of the Appendix Vermiformis and Their Complications. By William Henry Battle, F.R.C.S., Surgeon to St. Thomas' Hospital, formerly Surgeon to the Royal Free Hospital, Hunterian Professor of Surgery at the Royal College of Surgeons of England, etc., and Edred M. Corner, M.B., B.C., F.R.C.S., surgeon in charge of out-patients to St. Thomas' Hospital, and Assistant Surgeon to the Great Ormond Street Hospital for Sick Children; Erasmus Wilson Lecturer at the Royal College of Surgeons, etc. Chicago: W. T. Keener & Co. 1905.

We have received with the compliments of W. T. Keener & Co., of Chicago, this very latest utterance on the Surgery of the Diseases of the Appendix Vermiformis and Their Complications. Our readers will observe that the authors are two surgeons of St. Thomas' Hospital, London, England. They have "summarized, as briefly as the importance of the subject permits, the views held by the physician and the pathologist, and tried to place the surgeon's view before the profession in such a way that it shall be of practical value." As an instance of the instructive character of the information with which this 12mo of 203 pages is packed, may be mentioned the reference to hematemesis in appendicitis at page 176. So recent an author as Taylor ("The Practice of Medicine," London, 1904) mentions hematemesis as a symptom in cirrhosis of the liver, in gastric cancer, in gastric ulcer, and in splenic anemia, but does not mention the occurrence of hematemesis in appendicitis. This book likewise contains sections on Acute Abdominal Disease, Car-

cinoma, Tubercle and other Disease of the Appendix, Life Insurance, etc., which have not appeared in previous publications on this subject. It is a well-printed, neat, and withal an inexpensive work. J. J. C.

Hand-Book of Surgical Anatomy. By G. A. WRIGHT, B.A., M.B. (Oxon.), F.R.C.S., Professor of Systematic Surgery in the Owen's College; Surgeon to the Manchester Royal Infirmary, etc.; and C. H. PRESTON, M.D., B.S. (Lond.), F.R.C.S., L.D.S. (Eng.), Lecturer on Dental Anatomy in the Owen's College; Assistant Dental Surgeon to the Victoria Dental Hospital of Manchester. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia. 1904. Pp. 202. $1.50 net.

This small book is intended by the authors primarily for the use of students of the Manchester School of Medicine, and no doubt will prove of most value to those students who are pupils of the authors and who are familiar with their methods of presenting the subject for study in their own school. There is no subject of the curriculum in which there is more diversity of method in teaching than in that of anatomy to-day. Consequently, it is very difficult to prepare a text-book which will be of service to all schools in common. The book before us is well and carefully prepared, and contains very few mistakes, but it is not of much value to the student except as a help in revising his work. The student who has done thorough and conscientious work in the dissecting room, and who has seen something of the practice of surgery in the wards, will find this book of interest and of considerable value in connecting anatomical facts with surgical conditions and surgical procedure. The book is not expensive, and we recommend it to students as a guide which will prove both interesting and instructive when wishing to revise their work. A. P.

Diet in Health and Disease. By JULIUS FRIEDENWALD, M.D., Clinical Professor of Diseases of the Stomach in the College of Physicians and Surgeons, Baltimore; and JOHN RUHRAH, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, Baltimore. Octavo volume of 689 pages. Philadelphia, New York, London: W. B. Saunders & Company. 1904. Cloth, $4.00 net. Canadian Agents: Messrs. J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto.

This latest work on diet is practical and comprehensive, prepared to meet the needs of the general practitioner, medical student, hospital interne and trained nurse. It contains a full account of foodstuffs, their uses and chemical compositions. Dietetic

management in all diseases in which diet plays a part in treatment is carefully considered, the articles on diet in diseases of the digestive organs containing numerous diet lists and explicit instructions for administering. The feeding of infants and children, of patients before and after anesthesia and surgical operations, and the latest methods for feeding after gastro-intestinal operations have never before been discussed with such practical detail. The subject of rectal enemata is given completely, with recipes and full instructions as to technic. Diet is considered in its relations to age, occupation, and environment; and the beneficial results from the rest cure have been accorded prominent consideration. There is also a section on food adulteration and the resultant diseases.

Enlargement of the Prostate. Its Treatment and Radical Cure. By MANSELL MOULLIN, M.D. (Oxon.), F.R.C.S., Senior Surgeon and Lecturer in Surgery at the London Hospital; Member of the Council of the Royal College of Surgeons; Examiner in Surgery in the University of Cambridge; late Radcliffe Travelling Fellow; Fellow of Pembroke College and Examiner in Surgery in the University of Oxford, and Hunterian Professor at the Royal College of Surgeons. Third edition. London: H. K. Lewis, 136 Gower Street, W.C. 1904. Pp. 199. Price 6s.

The work of this author in his published writings on the surgery of the prostate gland is so well known that it is unnecessary to make any extended reference to the book which now appears in its third edition. It forms a most reliable guide to the treatment of enlarged prostate. The subject is treated with that conservatism which is characteristic of the British surgeon. A combination of calm and unbiased judgment, with an extensive practical experience in the various methods of treatment has enabled the author to make a contribution to the literature of this subject which is of the greatest possible value.

The normal prostate is described from the physiological and from the anatomical standpoint. The pathology of prostatic hypertrophy is explained, and the results of that hypertrophy upon the urinary organs and upon the system in general are fully described. The author describes the "local treatment" in a most thorough manner, and from this standpoint gives some most excellent advice, not only in the management of the early symptoms of mechanical obstruction to the outflow of urine from the bladder, but also in the treatment of the various complications which may arise subsequently. The author favors the suprapubic operation for removal of the gland as the most successful method of dealing with the trouble in a radical manner. It would appear that the result of the experience, which has become more and more

extensive year by year, has shown most conclusively that the suprapubic route is the safest and most efficient method, and we thoroughly agree with the author in this view.

We unhesitatingly recommend the work of Mr. Mansell Moullin to all practitioners as a most complete, reasonable and thoroughly scientific monograph on enlargement of the prostate.

A. P.

The Surgery of the Abdomen. Part I.—Appendicitis and Other Diseases About the Appendix. By BAYARD HOLMES, B.S., M.D., Professor of Surgery in the University of Illinois, etc. New York: D. Appleton & Co.

We have looked through this book more or less carefully, and must confess to be at a loss to know whether it is written as a joke, or whether the author has arrived at certain conclusions, from his experience or otherwise, that he desires the profession to swallow as facts—right or wrong.

One gets a jolt in the preface, when he is informed that the terms "'above' and 'below' are not employed in the sense of toward the head or toward the foot, but 'cephalic' and 'caudal' are used in their places." We have sometimes heard people described as having their brains located somewhere near their gluteal region, but "cephalic" in this book doesn't mean that! We think our readers should be so apprised! Then it strikes us as very funny to have that portion of the abdomen "toward the foot" described as the "caudal" end, for where, oh! where does the poor "tail" come in?

We would strongly recommend the profession generally not to take the book too seriously, but if they do require a little light reading occasionally, it might be taken in divided doses.

F. N. G. S.

A Text-Book of Human Histology. Including Microscopic Technic. By DRS. A. A. BOHM and M. VON DAVIDOFF, of Munich, and G. CARL HUBER, M.D., Professor of Histology and Embryology in the University of Michigan, Ann Arbor. Second edition, thoroughly revised and enlarged. Handsome octavo of 525 pages, with 376 original illustrations. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Flexible cloth, $3.50 net.

The favorable reception accorded to the first American edition of Bohm and Davidoff's text-book of histology has justified the production of this second edition, wherein we find the same arrangement of subject-matter as was presented in the former edition.

Many of the chapters, especially those dealing with general histology, have been subjected to extensive alterations.

We notice that recognition has been given to the results obtained by the use of prism methods of plastic reproduction, also Maziarski's observations on the ultimate division of the tubular systems of many important gland. have been given a place.

The text and illustrations have been extended and improved, which, with its flexible cloth binding, make it most useful and convenient for laboratory use. W. H. P.

Essentials of Bacteriology. By M. V. BALL, M.D., formerly Resident Physician at the German Hospital, Philadelphia. Fifth edition, thoroughly revised by KARL M. VOGEL, M.D., Assistant Pathologist at the College of Physicians and Surgeons (Columbia University), New York City. 12mo volume of 343 pages, with 96 illustrations, some in colors, and 6 plates. Philadelphia, New York, London: W. B. Saunders & Co. 1904. Cloth, $1.00 net.

It is with pleasure that we review this work, thoroughly revised in its preparation for this fifth edition. We note the inclusion of all recent advances in the subjects of immunity, tuberculosis, yellow fever, dysentery, bubonic plague and other infectious diseases, making it reflect as faithfully as possible the present status of bacteriology. We can confidently say that this book will be of inestimable service to the student. W. H. P.

The Prospector. By RALPH CONNOR. Toronto: The Westminster Co., Limited.

A creature of bone, sinew, grit, and godliness, from Varsity campus in a football scrimmage to the Far West, as a messenger of good tidings, the reader follows "Shock," the hero, with interest and admiration. Ralph Connor has put enough bloodiness and general cussedness into his story to enthral a schoolboy, enough of the call of the wild to claim men for his readers, and enough of tenderness and a picture of an old-fashioned mother to make womankind pause and remember as she turns the pages of "The Prospector."

Neoplasms as Seen Under the Microscope. With notes concerning treatment of cancer in general. New Jersey, N.J.: Reed & Carnrick.

This is the title of one of the most beautifully executed pamphlets we have seen in some time. The colored micro-photographs are splendidly done and true in every detail, especially those of lymph adenoma, polypus of the uterus, myxoma and osteoma durum. The pamphlet is worth procuring, and may be had from the publishers in exchange for a calling card. Send for it by all means.

Saunders' Medical Hand-Atlases.

Atlas and Epitome of General Pathologic Histology. By Dr. H. Durck, of Munich. Edited, with additions, by Ludvig Hektoen, M.D., Professor of Pathology, Rush Medical College, in affiliation with the University of Chicago. With 172 colored figures on 77 lithographic plates, 36 text-cuts, many in colors, and 371 pages of text. Philadelphia, New York, London: W. B. Saunders & Company. 1904. Cloth, $5.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto.

This new atlas in Saunders' Medical Hand-Atlases is a valuable addition to the series. All the accepted views regarding the significance of pathologic processes have been concisely stated, conflicting theories having been wisely omitted. The illustrations have been made from original specimens without combining different microscopic fields, extraordinary care having been taken to reproduce them as near perfection as possible. In many cases as high as twenty-six colors have been required to reproduce the original painting. In editing the volume, Dr. Hektoen has incorporated much useful matter; and this atlas ought to be as favorably received as the previous volumes on Special Pathologic Histology.

Gallstones and Their Surgical Treatment. By B. G. A. Moynihan, M.S. (Lond.), F.R.C.S., Senior Assistant Surgeon to Leeds General Infirmary, England. Octavo volume of 386 pages, illustrated with text-cuts, some in colors, and nine colored insert plates. Philadelphia, New York, London: W. B. Saunders & Company. 1904. Cloth, $4.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto.

The great and increasing importance of the subject of gallstone disease is a sufficient warrant for the publication of this forelying work, and Mr. Moynihan's extensive experience in treating cholelithiasis specially fits him to write an authoritative and trustworthy work such as we have found this. A full account is given of the origin and causation of gallstones, and of the pathologic changes and clinical manifestations to which they give rise. Special attention has been paid to the detailed description of the early symptoms of cholelithiasis, enabling a diagnosis to be made in the stage in which surgical treatment can be most safely adopted. Every phase of gallstone disease is dealt with, and is illustrated by a large number of clinical records. The account of the operative treatment of all the forms and complications is full and accurate. The beautiful illustrations, a number of which are in color, including nine insert plates, are unusually clear and artistic, and form a special feature.