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THE SANATORIUM—ITS IMPORTANCE IN THE CRUSADE AGAINST TUBERCULOSIS.*

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It was with a considerable degree of pleasure that I accepted the invitation of this Association to read a paper on one of the phases of sanatorium work. To one who lives in a sanatorium, whose whole time is spent amongst cases of pulmonary tuberculosis, there is no more pleasant task than that of endeavoring to instil in both the profession and the public some of the enthusiasm which comes from seeing each year so many consumptives, who left their homes sick and suffering, returning practically well, to again take up the battle of life. I feel it indeed an honor that you have invited me from Canada to present this paper, when you have in your republic a number of excellent sanatoria, and in charge of them men of the highest standing, both amongst the profession at large and amongst their co-workers. I wish to thank you for having so kindly asked me to speak to you to-day, and I hope that something of what I may say will be of interest to you.

In tuberculosis we have a most insidious disease, and one which presents itself in a multitude of forms. Carrying off as it does millions of our fellow-men each year, we cannot but feel that we are coming short of our duty if we do not, as physicians and sanitarians, press home to our municipalities, our states and provinces, that modern science has fully demonstrated its curability, the possibility of its prevention, and entire eradication. Since Koch's discovery in 1882 of the tubercle bacillus, and his able de-

*Read at the Annual Meeting of the Minnesota State Sanitary Association, St. Paul, Minn., Dec. 17, 18, 1902.

monstration of its causative relation to pulmonary tuberculosis, our attitude towards this disease, which had been looked upon as hereditary, has gradually changed. We now realize that it is not hereditary, but is a communicable disease, and that where there are several cases in one family it is usually not difficult to trace the infection of one from another. Many are more or less continually exposed to infection, and we cannot overlook the fact that all who are exposed do not contract the disease. A predisposition to the disease may be inherited, so that should there be exposure an infection would occur more readily than in one who had not the predisposition.

In the matter of prophylaxis we must consider two individuals, first the tuberculized patient, who is the source of infection, and second, the person exposed to infection through the carelessness or ignorance of the first. Though we should do everything in our power to prevent the patient being a source of infection, through educative measures and strict precautions, we must not neglect what is also important, the improvement of the general health, and with this, the resisting powers of the exposed individual, and thus minimize his chances of infection. Koch, having so ably demonstrated to us the cause of the disease, and knowing the sputum is the one great source of danger, we are in a position to say how the disease may be prevented, and were we in a position to carry out the necessary steps not many years would elapse before the disease would be eradicated, or at least be as rare as typhus and leprosy, which have been kept under control by sanitary and other measures.

Though we know the specific cause, medical science has not yet demonstrated to us a specific treatment for the disease, but in spite of this we have of recent years realized that the disease is eminently curable, especially if treated early. Numerous writers have shown us from post-mortem findings that there is no lack of proof as to the curability of the disease, while there are few physicians of the present day who cannot point out at least one case in practice of arrested or healed pulmonary tuberculosis. Twenty or thirty years ago a case was looked upon as inevitably fatal, to-day we can give many patients a favorable prognosis.

No method of treatment of pulmonary tuberculosis has given such universally satisfactory results as that adopted in sanatoria devoted to the treatment of this disease, and it is this treatment which I shall attempt to outline to you.

May I make a momentary digression to clear any confusion which may exist in your minds in the use of the two words sanatorium and sanitarium. They are often used synonymously, but wrongly so. The word *sanatorium* has its origin in the Latin verb *sanare,* to heal, to cure, and is properly restricted to an institution where treatment is undertaken. The word *sanitarium* is

from the substantive *sanitas*, health, and should be used of any healthy district, or of a resort of convalescent patients, for example, the Adirondacks, Colorado, or the foothills of our Canadian Rockies. The confusion is being added to by some institutions, which, having adopted the name sanitarium, find it more convenient to retain it than to make the change which they recognize should be made.

First, a few words regarding the sanatorium itself, and its situation. Circumstances must of necessity have a great influence on the character of the building, its location and its surroundings. The site is preferably on a slope, facing southerly or south-westerly, with shelter from prevailing winds by hills or well-wooded lands, which rise above the buildings. Protection from the north and north-west winds is especially sought for where there is a prolonged winter, while a wind break from the raw east winds is also desirable. The subsoil should be porous, so that there is good drainage. It is, of course, necessary for the treatment of early and curable cases that the sanatorium be far from the impure air of a city, or of any manufacturing centre. Freedom from dust, smoke, and all irritative and infective organisms, is a prime requisite for healing of the lungs to ensue; heretofore climate has been looked upon as playing an important part in the treatment of pulmonary tuberculosis, but we are beginning to realize that there is no special climate for such cases. That climate is not a necessary factor has been ably demonstrated by Dr. V. Y. Bowditch, of Boston, who has for eleven years been treating poor consumptives in his sanatorium at Sharon, where, in the low, damp climate of New England, not far removed from the coast, he has been able to secure results fully equal to those obtained in what we have been inclined to consider more favorable climates. Many sanatoriums in Germany and England are placed in parts of the country which are subject to frequent fogs, and where the relative humidity is usually high, but in spite of these drawbacks a satisfactory percentage of all patients is sent home either well or nearly so.

I would not be understood to advocate that a sanatorium might be placed anywhere, irrespective of meteorological or other conditions. To secure the best results, the sanatorium should be where the patient will be most comfortable, and where, with a maximum of sunshine, he can spend the greatest number of hours daily out of doors.

A change of climate is often of great benefit to a patient, and this factor alone would suggest that a sanatorium be at some distance from the patient's home. "I have previously expressed myself in this matter, "Wherever a patient be treated, we must recognize as essentials a pure air, free from dust and organisms, a liberal diet and a life regulated in all its details, with rest or

exercise dependent upon the patient's condition. Where these essentials can be secured, with, in addition, such climatic desiderata as abundance of sunshine and atmospheric conditions allowing constant living out of doors, we have a place well suited for the purpose in view.* Or, as Knopf puts it, "The best climate for a consumptive is the one which permits him to remain outdoors more and longer at a time than anywhere else." **

The sanatorium is built on the most approved hygienic principles, the wards are airy and bright, large windows are everywhere present, ample ventilation is provided for, and every facility for the patient living an out-of-door life in all weathers. The sleeping-rooms, whether single or containing many beds, have simple furnishings, and on all sides it is noted that an effort is made to eliminate anything which might tend to accumulate dust or obstruct the entrance of light and air. No carpets, curtains or hangings of any kind are allowed. The walls may be washed, while the floor is either of linoleum or polished hardwood. All the woodwork has rounded edges, and sharp angles are avoided.

The sanatorium is essentially for the treatment of the earlier or quiescent cases—only those sanatoria which possess an infirmary admit the active cases, which need constant care and a nurse in attendance. When the disease is active the patient is preferably nursed at home, rather than away amongst strangers. In the early stage, with high fever and rapid pulse, the disease is as a rule extending, and may take on a very acute type. The patient should not be sent away from home until the signs of activity have quieted down somewhat. The journey itself may determine a fatal issue. Special hospitals should be provided near the patient's home for the more advanced cases. Especially is there a crying need for these to take care of the consumptive poor of the larger cities.

It is the aim of the sanatorium to place the patient under the best possible hygienic conditions, and to use every therapeutic resource to improve his nutrition, that with the gradual restoration of the general health the organism is enabled to resist any further extension of the process, and, in addition, that a curative process may be begun in the already diseased area. The healing of tuberculosis is secondary to improved nutrition. The physician in the sanatorium recognizes that he treats each patient individually, and it is to this the success may be attributed. All patients are placed under the same hygienic rules, which are to be faithfully observed; this is the general basis of treatment, but in addition each patient is studied in detail, and therapeutic measures, whether in the way of rest, exercise, special diet, or exhibition of medicines, are advised as indicated.

*"Where can our consumptive patients best be treated." *Dominion Medical Monthly*, September, 1902.

**Knopf. "Prophylaxis and Treatment of Pulmonary Tuberculosis," p. 202. Philadelphia. 1899.

It is impressed upon the patient that it is not the climate which is going to cure him, nor is it the medicine—these are of secondary importance. He is taught that his recovery will be due to his careful observance of the directions given to him as to his daily programme, that he must follow closely the instructions of his physician, and that it is attention to the smallest details of his daily life which will bring success. There is a constant contact of the physician and his patient, the patient is educated in hygienic living, both by precept and example; he is in a position to note the improvement in others who pay due regard to these details, and he soon acquires a habit of care which will remain with him, and be instrumental in retaining his health after his return to his home and his work.

Foremost in the measures used in the sanatorium is *aerotherapy*. The patient must spend as many hours as possible out of doors. This means eight to ten hours daily on the verandahs, in walking or driving, or other outdoor recreation, summer or winter, rain or shine, the meals taken in an airy, well-ventilated dining-room, with in summer the windows wide open or out altogether, and likewise in the sleeping-room, no obstruction to the free entrance of fresh air; that is twenty-four hours daily breathing pure, out-of-door air. In the cold weather of winter, with the thermometer below zero, six to twelve hours can be spent in the open air, provided that the patient is well protected with rugs and furs. Patients need, of course, to gradually accustom themselves to this life in the open air.

With a temperature of 102 degrees or over, a patient is kept at rest in bed with the windows well open; as the temperature diminishes, he is moved out on the verandah, where he spends the day in a reclining chair. When for three or four days the evening temperature has not risen above 100 degrees, short walks may be taken in the morning, before the daily rise in temperature begins. As the temperature approaches more nearly to normal, the exercise is increased. Anemia and rapid pulse are also considered in the regulation of exercise. The clinical observations on the value of rest in the treatment of anemia, must be applied in overcoming this condition in tuberculosis; and we may attribute a great deal of the improvement under the "rest cure" to the lessening of this more or less constant complication. The patient is taught the use of the clinical thermometer, and the significance of fever. On his leaving the sanatorium he is in a position to regulate his actions, diet, and proper time for rest and exercise, and can do so intelligently.

In the apyretic condition the patient has a fixed distance to walk each day until he has reached three or four miles, when he is allowed to come and go at pleasure, always observing the rule that he must return in time to rest for half an hour before meals.

Rapid walking is not allowed until the patient's general health is good, while at all times the avoidance of fatigue is strongly urged. No exercise is to be taken which will induce fatigue or perspiration.

The morning sponge is one of the important factors in treatment. Every patient must sponge at least the chest and arms each morning with cold water, to be followed by a brisk rubbing, or, if unable to do this himself, it is done by a nurse or attendant. Some patients find it rather unpleasant at first, but soon realize how invigorating it is, and would as soon think of missing a meal as the cold sponge each morning. When there are at first unpleasant effects from the cold water, the patient goes through a preparatory course of dry rubbing, rubbing with alcohol and water, and finally cold water. No exception is made, and no danger can possibly ensue; it is refreshing and invigorating, and serves well in overcoming the tendency to "catching cold," both in the consumptive and the predisposed.

Diet.—Nutrition is dependent upon the proper assimilation of food, while improvement must be proportionate to the increase in the amount of food assimilated. The diet is necessarily abundant and nourishing. It should be a mixed one, fresh meat, eggs, milk, cereals, fats and fruits, all contribute in proper proportion. The tuberculous patient requires a greater amount of food than the average person, for in addition to that needed to carry on the body functions, there must be sufficient to replace the daily waste caused by the disease, and an additional quantity to replace that already lost, and to restore the body to the former condition of health and vigor. With the commencement of the out-of-door life and careful attention by the physician to any pathological condition of the intestinal tract, there is an increased appetite. Much is said about hyper-alimentation, and the "stuffing process" of the sanatoriums, but this conveys an altogether erroneous impression. Taking food from a sense of duty, forcing upon the stomach more than it demands, applies only to the new arrivals at the sanatorium, or to patients with advanced disease. The patient who is eating daily and properly assimilating more food than the average working man is not undergoing a "stuffing process," but is simply gratifying the appetite induced by a change of scene, by a life in the open air, and by proper attention to meal hours, thorough mastication of food and a daily evacuation of the bowels. The rule is three meals daily, with the heavier meal at mid-day. Lunches, between meals should be avoided, except by (1) patients who take but little food at the meals, and who must take nourishment at intervals of three to four hours, to ingest a sufficient quantity, and (2) those so much in evidence in a sanatorium whose appetite is so great that the sensation of hunger must be appeased before the hour of the next meal. The lunches

are preferably liquid, eggs and milk being found most satisfactory. Many patients can take with advantage in addition to their regular meals, one to three quarts of milk and four to twelve eggs daily. With an evening temperature of 101 degrees or over, the patient will, as a rule, be able to assimilate more food, and better, if given at intervals of three to four hours, only easily digestible food being given while the temperature is highest.

In a disease where there is so much tendency to gastric disturbance, both at its inception and during its course, each patient must have separate consideration and personal idiosyncrasy regarding food allowed for. Placing and keeping the digestive tract in good order taxes the patience of every physician who has to deal with the consumptive, for he knows so much depends upon it.

The dress of the patient must vary with the climate and the season. As a rule the consumptive wears too many and too heavy undergarments in his endeavor to protect himself from the cold. As a result the skin becomes moist from perspiration when indoors, and the conditions are present for his developing a cold when going outside. Additional outer garments, not underwear, should be depended upon for warmth in the open air during the colder months. Fur coats and rugs are indispensable for open-air life in winter. The much-used chest protector is particularly to be condemned. Woollen garments, lighter or heavier, according to the season are to be recommended. Linen-mesh underwear has proven very satisfactory and is to be recommended to those who find woollen undergarments a source of irritation. Women should discard corsets, and the skirts should be suspended from the shoulders, so there will be no constricting bands or tight garments to hinder free movements of the chest, or to impede abdominal breathing. We must remember that in pulmonary tuberculosis, it is the diseased apices which require rest, while nothing must interfere with the free expansion of the lower and healthy portion of the lungs, which must perform all the work. Tight, high collars should not be worn; the head should be uncovered, except in winter, or when exposed to the direct sun or to storm; when the head must be protected the covering should be as light as possible. The feet should be kept warm and dry; in wet weather rubber boots should be worn when walking. Moccasins are most satisfactory for winter wear; tight shoes should not be worn, they are the most frequent cause of cold feet.

Disposal of Sputa.—In the sanatorium all expectorated matter is destroyed by fire. Each patient is provided with a sputum box or a pocket flask, or at times with tissue paper handkerchiefs. The patient learns that reinfection may occur if careless of his own sputa. Infection from droplets ejected during the act of coughing is prevented by the patient always holding a handkerchief or bit of cloth before the mouth; separate handkerchiefs are used for

the nose and mouth. Tissue paper table napkins are used and destroyed after each meal. All dishes, forks, spoons, etc., are scalded. Frequent washing of the hands is insisted upon when there is possibility of their contamination with expectorated matter. With every care and precaution used, there is no chance of infection. Amongst the attendants and staff of the sanatorium one might look for the same ratio of cases to occur as are found amongst the general population, but this is not the case. Statistics show that it is practically unknown for dissemination of the disease to occur in the sanatorium. Any sanatorium which would allow the possibility of this would not be worthy the name, and, fortunately, such institutions do not exist.

Medicinal Treatment.—Of this I need say but little. With a hygienic life few medicines are required. The patient being under constant supervision, early symptoms of an intercurrent affection are noted, and serious complications often anticipated. Medicines are used as indications arise, and are usually exhibited to meet symptoms. Cough, night sweats, anorexia, and anemia, as a rule, lessen at once, and soon disappear under the rest and fresh air. Hemoptysis, pleurisy, pneumonia are treated as elsewhere. Special attention is paid to the upper respiratory tract, and pathological conditions attended to. Very encouraging results are obtained in the local treatment of laryngeal tuberculosis.

The constant supervision of the patient is the most important point in which the sanatorium treatment must necessarily differ from that adopted by the general practitioner. Living with the patients, adopting their mode of life, having his meals in common with them, the physician is enabled to individualize the treatment. Perhaps in no disease is the patient so disposed to be erratic, or to do thoughtless, injurious acts, and to require this constant supervision.

The physician studies the patient from every aspect, and his life is laid out in detail. There is a fixed hour for rising and retiring. He is directed what time is to be spent in walking, and what in resting. He is told what to eat, and what to avoid, to rest half an hour before each meal, proper mastication of the food, care of the teeth, regulation of the body functions, proper attention to clothing, hours for temperature observations, care in the disposal of the sputum, and the absence of all danger when this is properly done. He receives a thorough education in hygienic living, and above all, is instructed never to hesitate to ask counsel or advice of his physician.

Results.—With the results of sanatorium treatment you are no doubt familiar; they are eminently satisfactory. Generally speaking, 20 to 30 per cent. are apparently cured, 25 to 35 per cent. disease arrested, 25 per cent. much improved. The results in any

sanatorium will necessarily vary from time to time, depending upon the class of patients under treatment.

The following excerpt from the fifth annual report to the Board of Trustees of the Muskoka Cottage Sanatorium will explain the enthusiasm of those who know intimately the work of our sanatoriums:

"May I draw your attention to the results in the tabulated statement below, showing that of 102 patients treated 28 were discharged apparently cured, and 45 with disease arrested. Of these 45 I have every reason to believe that at least 22 would have progressed to apparent cure had they remained under treatment a sufficient length of time, *i.e.*, a possibility of 50 per cent. of apparent cures in those accepted for treatment.

"You will also notice that of 84 patients with bacilli in the sputum on admission, 31, or 37 per cent., became free under treatment.

"Even more interesting and gratifying are the results shown in those patients who remained under treatment over three months. Eighty appear in this class; of these 28, or 35 per cent., are apparently cured, and 40, or 50 per cent., had the disease arrested, with 4, or 5 per cent., much improved, *i.e.*, of patients remaining under treatment over three months, 85 per cent. were either apparently cured, or had the disease arrested, while but 10 per cent. failed to improve. Also of the 80, 66 had bacilli on admission, while only 36 had bacilli on discharge; or in 45 per cent. of those having bacilli they disappeared under treatment, and 55 per cent. left the sanatorium with either no bacilli or no sputum."

Of 102 patients there were:

Discharged apparently cured	28
" with disease arrested	45
" with marked improvement	15
" unimproved	8
" failed	4
Died	2
	102
Average days stay	169

84 patients gained in weight—average gain ..... 13 lbs.
10 " lost in weight—average loss ..... 5½ "
8 neither lost nor gained in weight.

	On admission.	On discharge.
Number of patients whose sputa contained bacilli	84	53
" " " free from bacilli in sputa or who had no sputa	18	49
	102	102

CLASS III.—80 PATIENTS REMAINING OVER THREE MONTHS.

Condition on admission	Condition on discharge: Apparently cured.	Disease arrested.	Much improved.	Stationary.	Failed.	Died.	Total.
Incipient	22	5	0	0	0	0	27
Advanced	6	29	0	2	1	1	39
Far advanced	0	6	4	3	0	1	14
	28	40	4	5	1	2	80

Average days stay 215.

Of these patients 69 gained in weight—average gain..... 13½ lbs.
" " 7 lost " " — " loss..... 6 "
" " 4 neither lost nor gained.
(Maximum gain in weight 50 lbs. during a stay of 15 months.)

	On admission.	On discharge.
Number of patients whose sputa contained bacilli.....	66	36
" " " free from bacilli in sputa or who had no sputa.....	14	44
	80	80

A most important question is—are these results permanent, or will the patient, after his return home, remain fairly well for a time, only to gradually lose ground again? Dr. Weicker, of Goerbersdorf, reports on January 1st, 1899, that of the patients admitted in the first stage, and discharged during the years 1896, 1897, and 1898, as cured, 97 per cent. were then at work. Here let me quote from Dr. V. Y. Bowditch:*

"Of the 35 cases tabulated as 'arrested' at the time of discharge during the year 1898-99, all are believed to be alive and in good condition, with the exception of two, who died this year, after a residence of nearly two years on the coast. The circumstances involving the relapse and death make the result in each case anything but surprising. . . . Of the 56 cases tabulated as 'arrested' at the time of discharge during the year 1899-1900, all are alive and in good condition, with the exception of four, who have relapsed. . . . Fifty out of these 56 patients are known to have been engaged in employments as arduous as, although, as a rule, more healthful than, those in which they were engaged before their illness."

In a short note† on the present condition of 256 patients discharged during a period of five years with disease arrested or apparently cured, I have reported as follows: 96 patients apparently cured; of these 62 had bacilli in the sputum on admission, 9 were not heard from, of the remaining 87, 79 were in good health, 3 not perfectly well, but in fair health, 5 dead.

The five deaths occurring amongst the "apparently cured" cases call for a note of explanation. The first was a youth of 19,

*5th Annual Report, Massachusetts State Sanatorium. 1902.

† Some further results in the treatment of Pulmonary Tuberculosis. Canadian Medical Association, Montreal, September 17, 1902.

who on discharge appeared quite well. He was, however, growing very rapidly, and was not putting on weight quite in proportion to his height. He was advised to go to Calgary, or, if he remained in Ontario, to live on a farm. Contrary to all advice, he remained about his home in a large town, doing nothing, and spending the greater part of his time indoors. The result which followed could scarcely be unexpected. The second case died of tubercular meningitis a year after discharge, having been in the meantime at work on the farm, and having at no time any return of his pulmonary symptoms. The other three cases were women, all of whom returned to their household cares and worries, without allowing themselves sufficient relaxation and hours out of doors.

"These cases have only served to teach me, and impress me with the fact that the after history is almost altogether dependent upon the patient himself, and that the exercise of strict care is all that is necessary to keep well.

"A few patients have been sent to the West to live, but almost all have again taken up life in their former homes. They comprise tradesmen, clerks, book-keepers, stenographers dentists, barristers, farmers, engineers, tinsmiths, and men and women in many other walks of life. They are living in all parts of Ontario, and in the Lower Provinces. If a patient is cured in his home climate, there seems to be no reason why he should not remain well in it."

The following case well illustrates this: J.M., aged 22; dry goods clerk; always fairly healthy, April, 1897, became feverish; treated three weeks for typhoid, then sent to hospital. In June expectoration examined, and ordered to a sanatorium. Severe hemoptysis in July; improved till following June, when a fresh area was discovered, and he was kept at rest. Developed fresh cold in September, following a second hemoptysis. Came under my care January, 1899; sputum., 1. oz., purulent, tubercle bacilli abundant; impaired resonance left apex with moist rales to fourth rib; had two further slight hemoptyses. Discharged September, apparently cured; no cough, no sputum, pleuritic adhesions over apex. Examined 1901, health perfect, signs of adhesions still present. A recent letter from patient reads as follows:

———, N.H., Sept. 18th, 1902.

"I am in splendid health, and have been working every day since I saw you last summer, and have since that time taken out two life insurance policies of a thousand dollars each, and am about taking a third in our best of companies, so that can speak for itself. My weight at the present time is 129 1-2 lbs., but I held around 139 and 140 all last winter, and I have no cough whatever, and no temperature at any time since leaving the sanatorium. My strength is fully as good as ever in my life. I

am on my feet from 7 o'clock in the morning until 8 and 9 at night, and am kept very busy, and, to think of it, in the dry goods at that."

Scores of letters such as the following are received from discharged patients, who had bacilli on admission, but have returned to work after discharge:

(Patient discharged nearly four years ago.) "It is now nearly two years since I started to work for this institution (a bank), and during that time I have not lost a single day or part of a day through illness. I am thinner than when I was out of doors, but eat heartily and sleep like a top. Some time ago I had my lungs sounded, and they were pronounced to be in first-class shape, my expansion from smallest contraction being at that time six inches. I expand to about forty inches."

Though the results secured in the treatment of patients are so gratifying, this is but a small part of the work acomplished by a sanatorium. The patient has thoroughly learned the rules of health and hygiene. On his return home he teaches his friends the gospel of fresh air and sunshine in their homes; that regularity of life is essential to good health. Could this become more universal, not only tuberculosis, but many other diseases would rapidly diminish amongst us, and our coming generations would be better, and stronger, and healthier. There is no grander work than that undertaken by our profession in the prophylaxis of disease. The communicable diseases are lessening rapidly through improved methods of sanitation. In the fight against tuberculosis there can be no better object lesson than the sanatorium and the successful work done by it. We have too few of them. I hope the movement now on foot to erect a State sanatorium for Minnesota will receive every encouragement from every citizen of the commonwealth, that no feeling of personality or of politics will enter to interfere with its progress, and that your state will follow closely the excellent example already set by Massachusetts, the pioneer in the work, whose sanatorium at Rutland has been enlarged to its full capacity, and where there is already an agitation for the erection of a second. New York, Pennsylvania, and other states are rapidly following. May we soon see in Minnesota a model sanatorium, an educative centre to assist in overcoming the ravages of this dread though preventible disease. "If we can, by the creation of sanatoria for all classes, rich and poor, and by carrying on the hygienic, dietetic, educational, and symptomatic treatment for all consumptives outside such institutions, cure the curable and make harmless the incurable tuberculous patients, the problem of dealing with the most widely-spread of all diseases will have been solved." *

*Knopf, "Prophylaxis and Treatment of Pulmonary Tuberculosis," p. 332. Philadelphia, 1899.

A PLEA FOR THE OPEN METHOD OF TREATING FRACTURES OF THE PATELLA.*

BY F. N. G. STARR, M.B. (TOR.)

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Mr. President and Gentlemen:

About two years ago I read a paper before this society on the "Open Method of Treating Fractures." In the course of that paper I related a series of cases in which, by various manipulations it was impossible to secure accurate approximation of the broken fragments, and because of this I had cut down upon the recent fracture, brought the fragments together, and secured them by means of silver wire. Of course, it was urged against this procedure, that I had converted a simple fracture into a compound, and that such practice is to be deplored. With a still further experience in such cases, I desire to repeat here what I then contended, that an aseptic compound fracture with accurate apposition tends to a much better result than a simple fracture left to unite in a faulty position, with all its associated deformity and loss of use.

While I think I shall never be guilty of advising the open method of treatment for all fractures, yet in fractures of the patella I am inclined to advocate this method in all cases, and for the following reasons: (1) The fact that by this method one secures bony union; (2) that the period of convalescence is shortened from three or even six months to from three to six weeks; (3) that bony union never occurs in cases treated by the use of the time-honored splint and the various mechanical devices, because of the tension caused by the swelling and blood clot in the joint, and because of the fact that the periosteum is never or rarely torn at the same level that the patella is broken, and it therefore overlaps the fractured surface; (4) that in cases in which fibrous union only occurs there is a tendency for the fragments to become further separated, when the sufferer begins to walk; (5) that when fibrous union has allowed sufficient separation to occur to give rise to awkwardness in walking, it is then difficult to secure good approximation and an ideal result by an open operation, because of the atrophy that has occurred in the broken fragments; (6) that according to Dr. Powers,[1] the results are satisfactory in 94 per cent. of the cases treated by the open method. His observations include 711 cases, records of which he was able to collect.

My reason for bringing this subject before you is, that upon several occasions when I have advocated the treatment I have been

*Read at Meeting of the Toronto Medical Society.

somewhat severely criticized for suggesting such a dangerous procedure. At the same time I feel that an apology is due to some surgeons here for bringing such a well-recognized practice before you, and for advocating it as if it were something new.

If one adopts the open method, however, he must be most careful of his preliminary preparation, for the smallest amount of neglect on his or the nurse's part may mean the introduction of septic material into a cavity, more susceptible to infection even than the peritoneum, and the result would be an ankylosed joint or the death of the patient from sepsis. Lister has said:[2] "No man is justified in performing such an operation, unless he can say with a clear conscience that he considers himself morally certain of avoiding the entrance of any septic mischief into the wound." As "a word to the wise" is sufficient, I may add that certain men who frequently have occasion to blame the nurse or the house-doctor because of suppuration, will do well to leave these cases severely alone, lest the elasticity of conscience be too severely strained in conforming to Lister's injunction. In the cases collected by Dr. Powers,[3] already referred to, there were two deaths from sepsis, two in which total ankylosis took place, and twenty-eight in which "marked stiffness and disability" resulted.

In the case that I shall show you this evening, I adopted the vertical incision, but in future I shall use the "horseshoe" shaped incision, with the convexity looking upward, and for these reasons: (1) One does not then require to cut through the thickened skin over the patella, from the deeper layers of which it may be difficult to remove all septic material; (2) the buried silver wire sutures will not tend to irritate the skin wound; (3) the resulting cicatrix will be farther removed from the point of the knee.

The patient, a man aged 38, came to the General Hospital on November 15th, 1902, with the following history: He was standing up in an express waggon, when the horse started forward, causing him to lose his balance, and while he was trying to regain his centre of gravity, it stopped, throwing the man forward, his knee, striking the iron binding on the box of the waggon. Thus he met with direct violence to the patella, at the same time that his extensor tendon was exerting considerable force on the bone. Upon attempting to rise, he found his right leg useless. When examined a transverse fracture was found at about the middle of the patella. Into the space between the fragments three fingers could readily be placed. By means of a figure-of-eight bandage the space between the fragments could be reduced to about half an inch. For two days this bandage, with a carefully regulated pressure over the knee, was continued till all the oozing that was likely to occur had taken place.

Then the part was carefully prepared, and to make assurance doubly sure, it was again prepared upon the table. Of the pre-

paration of my own hands I was most careful, both Dr. Primrose, who assisted me, and I made still more certain of our own cleanliness, by wearing rubber gloves—a precaution that I consider a good one, providing care has been taken in the preparation of the gloves, for gloves will stand boiling, but the hands will not.

By a vertical incision I cut down over the patella and cleared out a large quantity of clot from the joint. The fracture was almost as clean a solution of continuity as if divided by a saw. The periosteum and the lacerated fragments of the extensor tendon overlapped the raw surfaces of the bone; these were raised, and some tags snipped away with scissors, then two holes were drilled in each fragment, from half to three-quarters of an inch from the edge of the fractured surface, taking an oblique direction, coming out on the raw surface just superficial to the cartilage, taking care to have the holes approximate accurately. Two heavy silver wire sutures were then passed through and drawn tight enough to bring together the broken surfaces, and made fast by two half turns and one full turn, the knots being hammered well down. A better plan, I think, would be to use a single heavy wire suture, passing each end through the holes in the lower fragment from below up, then through the holes in the upper, secure apposition and fasten. This would have the advantage of but one knot, and that would be well away from the point of the knee in the devotional attitude.

I did not use any silk or catgut to bring the periosteum together, for fear of infection, and because approximation was good without it. The skin wound was then closed with fishing-gut sutures, without drainage, dressed antiseptically, and the limb made secure by means of a posterior splint with a foot-piece. On the tenth day I removed the splint, and took out the silk-worm gut stitches, and found good union of the skin. I then applied a plaster splint from the ankle to the groin, cutting it on the inside while still soft to make its subsequent removal easy. At the end of two weeks from the operation, I completed the division of the splint, and allowed the splint to remain off while the patient was in bed, and had it applied when he was up. At the end of the third week he left the hospital, still wearing the splint, when walking, and this he managed remarkably well. Yesterday, seven weeks from the time of the operation, I called to see if he could come here this evening, and was informed that he was at work, and this he has been doing more or less continuously since leaving the hospital.

Surely this, to the man who "earns his bread by the sweat of his brow," as well as to the man to whom each day at business means hundreds of dollars, is better than a prolonged convalescence of from three to six or even more months.

1. Annals of Surgery. Page 67. July, 1898.
2. Jacobson's Operations of Surgery. Page 652.
3. Quoted in Jacobson's Operations of Surgery. Page 652.

ANNUAL ADDRESS OF DR. HARRY E. VAUX, CHAIRMAN OF THE PROVINCIAL BOARD OF HEALTH OF ONTARIO.*

To the Members of the Provincial Board of Health:

Gentlemen,—On re-assembling for this, the first session of the year, it is with sincere thankfulness that, as a Board, we can do so in the enjoyment of health and strength.

The year 1902 has not been marked by any epidemic of formidable character, although certain diseases are like the poor, "always with us."

As the years roll by, and sanitation becomes more of a fixed science, we find that our grasp of the essentials becomes more firm, and consequently results are more apparent and more prompt.

Through the kindness of our secretary, I am able to lay before you some statistics, showing the number of deaths from communicable diseases during the year, based on a return from 90 per cent. of a population of 1,982,000. The total deaths from all causes amount to 25,208, or an average of a little over 12 per 1,000. There has been a mortality from tuberculosis of 2,164; diphtheria, 444; typhoid fever, 363; scarlet fever, 282; whooping-cough, 144; measles, 106.

On comparing the number of deaths from contagious diseases in 1901 and 1902, we find a slight reduction on the whole. Thus, in tuberculosis, there is a decrease of 122; measles, 14; diphtheria, 68; increase in scarlet fever of 73; whooping-cough, 32.

The cool, wet summer has probably much to do with bringing about this improved condition.

Several valuable reports have been laid before us during the year by the Standing Committees, by Dr. Bryce, Dr. Cassidy, and by Dr. Oldright, who attended the Tuberculosis Conference as our delegate in New York, last May.

I do not intend to do more than call your attention to and ask your careful study of what these reports so fully deal with.

Those on tuberculosis naturally claim first place, in view of the heavy mortality. In these reports compulsory notification, isolation, disinfection of rooms lately occupied by consumptives, disinfection of sputum and generally strict attention to well-recognized hygienic measures for the prevention of contagion—at the same time care being taken that public antagonism is not aroused by too radical measures being adopted at first—are all fully emphasized. With this disease, the old adage, "prevention is better than cure" is increasingly proved to be true. Almost at

*Read at the fourth Quarterly Meeting of the Provincial Board of Health of Ontario, February, 1903.

the moment that positive assurances are given that tuberculosis is curable, reports come to us from eminent authorities that some apparent cures are only temporary, and that a large proportion of those who fondly hoped that they had conquered their foe have been doomed to disappointment by a return of their malady. While this may be true, it is our experience that personal hygiene and the hygiene of dwellings, shops, schools and factories will be found to exercise a far greater influence on the reduction of mortality from tuberculosis than will result from segregation in sanatoria.

The smallpox situation has certainly vastly improved since I had the honor of presenting my last annual report, and the very radical measures adopted in dealing with the sanitation of lumber camps have already, by their results, shown the wisdom of our secretary's prompt action.

The Committee on Epidemics has also laid before us a report on necessary sanitary precautions which it is advisable should be observed in barber shops. This is a matter which has forced its attention on sanitarians, and we are glad to know that the barbers are equally anxious, with ourselves, to close every avenue of danger so far as their shops are concerned. This being the case, it cannot be very long before the excellent regulations adopted by the Board will materially improve the sanitation of such shops.

The reports of the Committee on Sewerage are of very great importance, and should be given our special attention, more especially the one dealing with Berlin sewerage, taken in conjunction with Dr. Amyot's exhaustive report, which was laid over for consideration until this meeting of our Board.

You will remember that in response to the appeal made by the mayors of several municipalities, the Government consented to conduct a series of experiments last summer in connection with the Berlin sewage farm, Dr. Amyot being placed in charge. It is now for you to formulate such deductions from the results of his work as may indicate to Berlin and other similarly situated places, some solution of the great difficulties with which they have to contend.

In closing, I would desire to point to the gratifying results which have been secured by the adoption of better sanitary measures in dealing with sewage in suburban houses, and, in fact, wherever other safe means of disposal cannot be adopted, notably in summer resorts, where it is absolutely essential that the lakes and rivers should not be contaminated.

The report of our secretary, Dr. Bryce, on this subject, in the last annual report of the Board, gives his plan in detail, and I am glad to be able to state that it appears to work admirably in practice. Thus, at the Royal Hotel at Muskoka last summer, the sew-

age, even when the hotel was crowded, was disposed of without any contamination of the lakes, and in the city of Brantford, at the pork packing establishment, from 15,000 to 20,000 gallons per diem is successfully disposed of.

REPORT OF A FATAL CASE OF SECONDARY HEMORRHAGE, FOUR DAYS FOLLOWING THE REMOVAL OF ADENOIDS.*

BY PERRY G. GOLDSMITH, M.D., C.M.,
Fellow British Laryngological, Rhinological and Otological Association, Oculist and Aurist Ontario Institution for the Deaf and Dumb, Belleville, Ont.

Mr. President and Members of the Canadian Medical Association:

Secondary hemorrhage following the removal of adenoid masses in the naso-pharnyx, is, I think, sufficiently rare and of sufficient practical importance to merit a few minutes of your attention. No doubt many of you, and all of you who are engaged exclusively in special practice, have on many occasions curetted the naso-pharnyx free of its hypertrophoid lymphoid tissue without any bleeding, more than is usual in such cases. Still, I assume few of you have had occasion to be called in to see your patients, more particularly the younger ones, for hemorrhage, following as late as the fourth day. In fact, I believe it is common practice to practically ignore the question of hemorrhage in young children, when we have no reason to suspect a hemophilic taint.

These following brief notes from a case I recently had under my charge, may be of interest to you. E. S., age 3, was brought to me by his father, with a history of gradually increasing deafness. He was a fine healthy boy, and there was nothing in the family history worthy of note. The examination of the ears showed a considerable degree of retraction of both ear-drums, with marked deafness. There never was any discharge noticed, nor was there any evidence of post-suppurative trouble to be found. He breathed somewhat noisily at nights, and had a very large mass of adenoids in the naso-pharynx, associated with enlarged fancial tonsils.

I advised operative measures on the naso-pharnyx in order to improve and probably cure his deafness. As he lived about one hundred miles from my office, it was arranged that he come to a town twenty miles away, where he had some friends. Under chloroform anesthesia, I removed both tonsils with a ring knife, and while removing the adenoids with the forceps remarked on the unusual degree of toughness in a child so young. The hyper-

*Read at Ottawa Meeting Canadian Medical Association, September, 1902.

trophied pharyngeal tissue was large in amount, but did not bleed any more than such cases ordinarily do.

The child vomited some blood soon after coming out of the anesthetic, but this is quite the usual occurrence, as in most cases considerable blood finds its way into the oesophagus. Nothing transpired to cause any comment for the next three days, when he returned to his home. That evening he was quite playful, and was about the house as usual. Early in the morning of the fourth day a violent hemorrhage came on, during which he lost a large amount of blood, both from his nose and mouth. This was repeated twice within two hours. Assistance was called, but no effort was apparently made to even find out where the bleeding point was. During the next twelve hours there were periodic attacks of vomiting, which consisted mostly of clotted blood. Evidently the blood was being swallowed, and subsequently vomited, thus leading to a sense of false security.

Very severe exhaustion ensued, and I think, owing to the excessive loss of blood, symptoms similar to meningitis occurred but these could all be accounted for by shock and hemorrhage.

That the hemorrhage came from the naso-pharynx I am firmly convinced, though the physician in attendance did not look. The mother, however, subsequently informed me that all day after the first hemorrhage she picked clots of blood from the baby's mouth, and noticed when he cried (without my suggestion) that the tonsils were grey in color, and the clots came from behind the palate. Evidently the greyish eschar found on the tonsillar stump was intact.

The literature on secondary hemorrhage following the removal of adenoids is very scant. In some recent books no mention of it is made at all. In a few instances death has occurred at the time of the operation. Secondary tonsillar hemorrhage is not so infrequent. Cartaz has observed in two instances of hemorrhage an undue fibrous density of the vegetations. As this was marked in my case, it may have a considerable bearing on the result. Schmieglow, quoted by Lennox Browne, has reported a case in which fatal hemorrhage after removal of adenoids was due to a wound of the carotid, which took an unusual course. These are not instances of secondary hemorrhages, but of bleeding at the time of operation.

While a case terminating as this one unfortunately did does not add any credit to any operator, it is one few will ever be unfortunate to have, and should, I think, be reported, as one may learn more from bad results than good ones.

Selected Articles.

A NEW LOCAL ANTIRHEUMATIC.

BY T. FLORET, M.D., ELBERFELD.

Although salicylic acid and its derivatives justly deserve the name of specifics against rheumatic affections, especially against acute articular rheumatism, the physician is often compelled to abstain from their use for prolonged periods and in large doses, owing to the occurrence of unpleasant concomitant effects, particularly upon the heart and stomach. There has been no lack of attempts to exert the effect of salicylic acid directly upon the affected parts through the skin, thus avoiding the stomach, but these experiments have hitherto not given any satisfactory results, and the only preparations suitable for this purpose seem to be the methyl ester of salicylic acid, the oil of gaultheria, and its congeners. But these have been employed only to a limited extent, especially on account of their penetrating odor, which in many persons causes headache.

About one-half year ago a methyloxymethylester of salicylic acid, having the formula—

$$CH_{a4} < {}^{OH}_{COO\ CH_2O\ CH_3}$$

and known as mesotan, was given to me for clinical investigation.

Mesotan is a clear yellow fluid, almost odorless, and miscible with oils and other organic solvents. As has been shown by pharmacological tests, it is readily absorbed by the skin and then easily decomposed in the tissue fluids. A short time after its application salicylic acid can be detected in the urine. In contrast with oil of gaultheria it is saponified to a slight extent by weak alkalies. This behaviour of the product leads one to expect a priori that it would be well adapted for external treatment of rheumatic conditions. The experiments made for over half a year in 120 cases, mostly at the polyclinic, have afforded me abundant opportunity to test the therapeutic properties of the new preparation and to determine its clinical value.

The results of my observations are in every way very interesting and in many respects most surprising. In cases of marked rheumatism in which the diagnosis was beyond doubt mesotan

never failed to manifest the desired effect. This occurred so promptly and constantly that in articular and muscular affections of doubtful character it served me as a diagnostic measure; for my clinical experiments, to which I will revert later on, have shown that while rheumatic or similar diseases reacted to mesotan, this was not true of diseases due to other causes.

Undoubtedly the most brilliant results from the local application of mesotan were obtained in acute muscular rheumatism, and these were sometimes remarkable. Recently a vigorous and otherwise healthy workman, 38 years old, was assisted to my office by two persons. Two hours previously he had carried some lead plates weighing from eighty to ninety pounds, and during his work was suddenly attacked with violent pains in the sacral region. When seen by me he was in a wretched condition; the face was drawn with pain, he was unable to walk, sit up or stand up. Inasmuch as an objective examination failed to reveal anything of special character, the diagnosis was doubtful. It was uncertain whether he was suffering from a rheumatic myalgia or from a traumatic laceration or rupture of the muscles. The latter seemed not improbable. After a single application of mesotan to the painful area, with massage, the pains were relieved to such an extent that the patient was able to walk home, a considerable distance. This reaction was the best evidence for me that the condition was of rheumatic origin and not a traumatism. I had an opportunity to test mesotan on myself for the same indication. While on my way home at mid-day I was suddenly seized with violent pains in the back, radiating to the hips, and I had to exert all my will power in order to reach home. Upon arriving there I resorted at once to mesotan, with the result that I was able to sit down almost without pain at the dinner table. About five o'clock in the afternoon the pains recurred, and the second application of mesotan was as efficient as the first, so that I could walk about without any difficulty for two hours. Towards evening, when the pains returned, the third application was made, and on the following morning I was completely cured.

The following case is very characteristic.

I. R., aged 40, a weakly man, has been repeatedly attacked with muscular rheumatism. At my first visit, April 12th, the patient stated that on the previous evening on stepping into bed he had suddenly experienced violent pains over the sacrum, which were still present. I made a diagnosis of rheumatic lumbago, and ordered a capsicum plaster. April 15th, when the plaster was removed, the patient stated that he was not at all improved. Aspirin was then given three times daily, together with applications of chloroform oil. April 18th, the patient was only slightly improved. Mesotan was ordered to be rubbed in three times daily.

April 21st, the patient was completely free from disturbances, and could be discharged from treatment.

In twelve other cases of rheumatic lumbago the effect was equally satisfactory. My case-book of last year contained thirty-two cases of true rheumatic lumbago in which the treatment consisted of the customary remedies, plaster, liniments, Turkish baths, electricity, and the administration of the salicylates and other internal medicaments. Under this treatment the average time during which the patients were incapacitated from work was five and one-half days. On the other hand, in eight cases treated with mesotan the average period was three and one-half days. Equal success was obtained in nine cases of rheumatism of the muscles of the shoulder, two cases of torticollis rheumatica, and one case each of multiple muscular rheumatism, rheumatism of the abdominal muscles and of the calf, all running an acute course. Here also the pains subsided after the rubbing in of mesotan, and the edematous swelling and the stiffness disappeared quickly, on the average in two or three days. In a few instances other treatment had been previously employed without success. Frequently besides the local application, salicylic acid preparations, usually aspirin, were administered.

No less satisfactory was the action of mesotan in the treatment of acute articular rheumatism. My experience relates to twelve cases. Among these there were three severe cases of acute multiple articular rheumatism, in which mesotan was employed in connection with the internal administration of salicylic acid preparations. The combined use of these remedies was much more effective. The course of the disease seemed to be considerably shorter and attended with less pain. Complications failed to occur in these three cases. In two other patients in which the acute stage had run its course under internal treatment, there were still present in one instance radiating pains in the various joints, and in the other chronic swelling and painfulness of the right ankle. The internal administration of aspirin was of no distinct benefit, while mesotan removed the pains and swelling completely in a few days. My seven other cases comprised slight recurrences and monarticular abortive forms of acute rheumatism. In these especially, mesotan gave surprisingly good results. Two cases are particularly worthy of note.

A. M., aged 28, laborer, repeatedly suffered from acute rheumatism. He complained since a few days of pains and stiffness in the left knee-joint, as well as of slight pains in the left arm and right ankle. Objectively an effusion into the left knee-joint was demonstrated. Mesotan was ordered to be rubbed in three times daily, and after five days' use the patient was completely cured.

K. D., mechanic, aged 32, had suffered since fourteen days with

pains in the left elbow-joint, which was slightly swollen and stiffened. Two years previous the patient had been confined to bed for ten weeks with acute articular rheumatism. Applications of mesotan were ordered twice daily, and three days later the patient was able to return to work.

It is well known that in acute non-articular inflammation of the joints in which the anamnesis showed no previous existence of rheumatism the diagnosis is always to be made with special caution. The localization of articular rheumatism to one joint is exceptional. I believe, as already indicated, that we have in mesotan a most reliable diagnostic means in doubtful cases in which the anamnesis leaves us undecided as to the cause of the disease, for I have found that the drug does not exert the least influence upon the non-rheumatic inflammations. I have had an opportunity of testing it in numerous acute and chronic articular inflammations of traumatic character, such as those resulting from strains, contusions, and over-exertion, but without any appreciable success. Furthermore, in two cases of gonorrheal inflammation of the shoulder and knee-joint as well as in a case of tuberculous arthritis of the knee-joint mesotan proved ineffective.

On the other hand, it acted well in the following case: A workman, aged 29, whose previous health had always been good, was suddenly seized with circumscribed swelling of the right ankle, which was completely removed by nine applications of mesotan in the course of three days. This successful outcome justified the diagnosis of articular rheumatism, and that this was correct was shown by the fact that three weeks later the patient was attacked with acute endocarditis.

In the chronic forms of articular and muscular rheumatism, as is well known, internal medication often leaves us in the lurch. The effect, even of the salicylates, often leaves much to be desired. The extraordinary large number of methods of treatment recommended in these affections demonstrates their imperfections. Undoubtedly the best therapeutic agents are baths with the simultaneous use of massage and the electric current. For many reasons, however, the general practitioner is often unable to adopt this plan of treatment. The many external medicaments are of less value than the massage required for their application. It is here that mesotan acts as a specific, removing promptly the pain, so that the patients, after each application, obtain a relief of their sufferings for several hours, and later for a longer time. Some of my patients had been treated for several years with various customary measures with variable results. These especially were enthusiastic in regard to the new remedy. Frequently I was told by an old rheumatic that no other remedy had helped him so much as mesotan. Its success must appear the more striking as

salicylic acid is of so very doubtful value in chronic rheumatic conditions. Of course, in isolated cases of suspected chronic rheumatism the patients professed to receive no benefit. Among forty-four subjects there were nine of these. In view of the brilliant results produced in the vast majority of instances it would seem that in cases of failure the disturbances were not due to rheumatism, but to some other condition. In one instance chronic alcoholism was probably responsible for the paroxysms of muscular pains, while in another neurasthenic disorders seemed to be the cause, which naturally could not be influenced by mesotan. It must also be remembered that muscular and articular pains are very favorite complaints of those who simulate their sufferings.

Even in diseases which are closely related acute articular rheumatism etiologically mesotan acts very favorably. I employed it with good results in a case of chronic dry pleurisy, in which it materially relieved the pains in the chest, which had been present for a number of years, and also successfully used it for the relief of pains in the joints in cases of angina and influenza. On the other hand, it was ineffective in neuralgic pains of various kinds and in cases of myocarditis, attended with pains in the chest.

There is scarcely any external medicament which now and then does not produce cutaneous irritation, varying in degree from a slight dermatitis to extensive eczema. Even after the application of an innocuous liniment or ointment, or a mild plaster, or even after cold water compresses, such undesirable by-effects may manifest themselves. Individual disposition and idiosyncrasies play an important part in this respect. It is therefore not surprising that mesotan occasionally excites an eczema, as is shown by the following case. Mrs. M. K., aged 48, consulted me for chronic articular rheumatism, especially marked in both knees. She requested me not to prescribe the salicylate of sodium, because in previous administrations it had always caused an eruption. I gave her mesotan as a local application and aspirin internally. The patient, however, was not well satisfied. She stated that aspirin was no better tolerated than the salicylate of sodium, while after the application of mesotan vesicular eczema developed, which spread to the middle of the thigh. This, however, disappeared rapidly. In two other cases there was an irritation of the skin, which prevented the further application of the drug. For these reasons it is desirable, especially in persons with sensitive skin, to dilute mesotan with olive oil to such an extent as to obviate any irritating action. Lately I have employed the drug almost exclusively in a mixture with olive oil. In most instances a mixture of equal parts is sufficient to produce a full effect, and only exceptionally it was necessary to increase the strength. After about

twenty applications of this mixture I observed a slight dermatitis in only a single instance. Systematic effects were never noticed, and it was well borne by a weakly child, two and one-half years old, suffering from articular rheumatism.

It is further to be noted that in consequence of its energetic action only a small quantity need be rubbed in; and even if the drug is to be applied to extensive areas a teaspoonful is entirely sufficient, and two or three applications a day will suffice. It is to be rubbed in gently over the affected area, and it is not necessary to apply any covering to the parts. The effect manifests itself at once, the patients experiencing first a feeling of warmth or slight tickling and burning of the skin, after which the pain subsides.

As the result of my careful clinical tests of mesotan I consider myself justified in concluding that it constitutes a valuable acquisition for the treatment of rheumatic diseases. I feel convinced that it will be welcomed by physicians as well as by the large number of rheumatic patients as an invaluable, indispensable and entirely safe remedial agent.—*Deutsche Med. Wochenschrift,* October 16th, 1902.

THE LESSON OF COLNEY HATCH ASYLUM.

An annex to the lunatic asylum of the London County Council at Colney Hatch was burnt to the foundations before sunrise on the morning of January 27th. In spite of heroic efforts by the staff, 51 out of the 320 patients sleeping in this annex were suffocated and cremated in a few minutes.

The annex was called "temporary," but had been in use for seven years. There are similar buildings in use at the Manor and Horton Asylums. The Asylums Committee has under consideration a proposition to erect temporary buildings as an annex to Bansted Asylum. The first lesson of Colney Hatch would seem to be that the plan of housing lunatics in annexes made of felt, matchboard, and corrugated iron must be improved upon.

The Burned Buildings.

The "temporary annex" at Colney Hatch which has now disappeared, consisted of a group of one-story buildings of corrugated iron, lined with pitch-pine, matchboarding, and in the air space between a layer of felt, treated, it is said, with tar as a protective against damp. The only brick portions were the foundations and a separating wall in the assistant resident medical officer's residential block. There were five sections, connected by a central corridor, 200 yards in length. Three of the sections crossed the corridor transversely, a day room being on one side and a dormitory on the other; the other two blocks were entirely

on one side of the corridor, and constituted the infirmary wards, near which was the resident medical officer's quarters. At the opposite end of the long corridor was a boiler room. The building was warmed throughout with hot-water pipes and radiators, and lighted by gas.

The Fire.

It is believed that the fire broke out in a linen room, near the boiler room—which, it may be remarked, was heated by a gas stove. It began about 5.30 a.m., and an alarm was at once given; the resident medical officer in charge was on the spot within three minutes of the sounding of the steam siren. The ward first involved was occupied by chronic lunatics, almost entirely epileptics. As it happened, a strong wind was blowing across the annex from the point of origin of the fire in the direction of the corridor to the main asylum buildings. Even at that interval of time—three minutes—this ward was absolutely untenable. The heat was intense, but the worst obstacle to the rescue of the patients was the smoke and fumes, which were pungent, thick and quite unlike those from burning wood. So irrespirable and even narcotic were they that one of the medical officers nearly "went down" no less than three times. The dense smoke speedily filled the corridor, and made it impassable. In a few minutes the adjoining block was in flames, the galvanized iron of the earliest involved being now at white heat. In five or six minutes after the alarm the second block was untenable, owing mainly to the fumes, nevertheless most of the patients were saved. In the first block there were 90 patients, and of these 34 are missing; in the second 76, of whom 16 are missing; in the third 75, of whom 1 is missing; in the second 50, and the first 49, all of whom were saved. Thus of 320 patients who slept that night in the annex, 51 were incinerated, after having been, as is practically certain, judging from the attitudes of the dead and from the effects experienced by the rescuers, rendered insensible by the fumes. In one hour the whole place was gutted and levelled to the ground. The bent and reddened frames of the bedsteads and the cremated remains of the deceased are only too good evidence of the intensity of the heat. The baths in the bath rooms vanished in the heat, and the hot water pipes are to be seen in places melted off short.

How the Fire Was Met.

All accounts agree as to the splendid heroism displayed not only by the nurses and the medical superintendent, Dr. Seward, but by all concerned. Of course, the first and only objective was to save the patients, and it seems, indeed, a little short of miraculous that only 51 out of 320 met their death under the awful conditions which existed. Many of the patients were dements, and

some resisted the efforts to save them; but, on the whole, they behaved extremely well, and not even a shriek was heard, although such sounds certainly came from excited patients in the adjoining main building.

The water supply was at first good, but as the demands on it became excessive, it failed somewhat. Owing to work in progress, the supply was not the ordinary one of the asylum, but was temporarily obtained from the East Barnet Water Company. To meet the emergency, a brook running through the ground was dammed up, and a supply thus obtained. From the construction of the building, intended to keep insane persons safe at night, there was difficulty in opening the doors of exit, and getting the patients out quickly. But it is very clear that everything possible was done to save life, and that the success was greater than could reasonably have been expected under the circumstances.

The work of rescue was made much more difficult by the fact that the fire occurred while it was yet dark. Those on the spot believed that had there been daylight every one of the patients might have been saved, but it is evident that, under any circumstances, it would have been very difficult rapidly to empty wards constructed as were these, with three rows of beds and a narrow exit.

While the fire was raging in the annex no less than 682 patients in part of the main building abutting on the burning building were moved away. As these happened to be in considerable proportion refractory patients, they gave much trouble. Only one patient who survived was slightly burned. Two nurses were rather severely burned, but no other member of the staff was seriously injured.

The Defects Revealed and Some Remedies.

The danger—not to use a stronger term—of such temporary buildings for the incarceration of the poor insane is now very obvious to everybody. The buildings were only temporary, but they were opened in May, 1895, and were then licensed for five years. They were subsequently licensed for another five years. The building was erected by the Works Department of the London County Council, and it is stated that the Lunacy Commissioners were greatly opposed to it from the first. It is to be presumed that an expert opinion in regard to the risks from fire was obtained in the first instance, but it must also be assumed that it was not acted on.

This fire also points to the inadvisability of herding masses of afflicted humanity in such large institutions—this asylum contained about 2,500 patients. It raises the question again of the unnecessary certification of many patients—technically and actually incapable of managing their own affairs—such, for example,

as senile dements, who, with assistance, might possibly be well looked after by their friends or boarded out; it raises the question of the need for colonies of epileptics, of the need for hospitals for acute cases, of the way in which patients are drafted from workhouses after certification. Above all, the incident ought to raise the question of provision of accommodation for chronic lunatics; their number, from the protracted nature of the disease, is necessarily an increasing quantity, and it would seem fairly obvious that provision for them should be made on a settled continuous policy. The catastrophe is an urgent appeal to the London County Council to pursue a settled policy, and in particular to forswear the use of "temporary" structures except for actual emergencies having a speedy term to their existence.—*British Medical Journal.*

IS THIS WOLF-WOLF?

For years the medical journals have been trying to convince the practitioner of the widespread evil of substitution and adulteration in drugs. But the profession has turned a half-credulous, half-indifferent ear, as if bored at the familiar sound of "Beware of Substitution," and "None genuine without this mark." They have in some instances hinted that it was necessary for the journals to support their advertisers; and have firmly believed that the adulterations were confined to proprietary medicines put up in labelled bottles and taken at the public's risk.

How many physicians make a practice of going behind the scenes and watching the preparation of a prescription, and how many if they did so would be able to tell by the form in which the crude drugs were handled whether they came originally from reputable sources, or whether they were bought by the honest but misled druggists from middlemen who successfully adulterated their wares?

From the laboratories, where the exact potency of an absolutely pure drug is determined for endorsement in the U.S. Pharmacopeia, to the druggist's counter, where supposably the same potency is being handed out on a physician's carefully written prescription, there is often so wide a variation that one wonders whether it would not be safer for us to go back to the days of herbs and simples, and to cull and brew our own remedies.

At last the Health Department of New York has brought to the attention of the medical profession through the daily press, a forcible reminder of the widespread practice of substitution and of the adulteration of drugs. The medical profess on has for years been thwarted in the greatest emergencies by the false values of the remedies furnished to their patients in their prescriptions. But the public has treated them with that tolerant, easy-going air of

good-natured understanding, as though one should say, "It *is* hard to see another man getting one's profits," and has given the warning no more thought than would be bestowed upon a patent medicine vendor's earnest plea to "Take no other," and "Beware of substitutions."

Commissioner Lederle has set in operation a wholesale examination of the stuff that is commonly sold as phenacetin. His physicians and staff have purchased phenacetin powders from 373 drug-stores, in Manhattan and Brooklyn. The official report gives the names of all, and includes many well-known drug stores and department stores. *Among these samples, only 58 were found to be pure phenacetin, while the greater number, 315, were adulterated.* The chief adulterant was found to be acetanilid, selected undoubtedly because of its cheapness, and its similar effects, in part, to phenacetin.

In the sale of an ordinary ten-grain pure phenacetin powder, the druggist makes a little over 200 per cent. He buys the phenacetin at $1.00 per oz., and retails it in small quantities at $3.20 per oz. If his adulterant be acetanilid, it is bought at the rate of 2 1-2 cents an ounce, leaving him his sales almost clear. This mean and petty money traffic need not, however, be laid at the door of the retail druggist alone. It is important to lay the blame, however, where it is due, for the question is one with a double moral issue. The physician does not trouble himself about the druggist's profits, or his sense of honor in dollars and cents; but he has his patient's health in his hands, and when he finds, if he ever does learn, that a cheap heart depressant such as acetanilid is given in his prescription instead of the drug on whose certain action he is depending, he is justified in his honest indignation.

This is by no means a single instance. Nearly every drug in the Pharmacopeia is adulterated, and as such fails to give the desired action. So great has this evil become that we often confess to one another that we prescribe less and less, and confine ourselves to a few fundamental drugs, remedies which we think we obtain from reliable sources, and give in case of necessity, leaving our patients to take their favorite compounds of tonics and appetizers on their own responsibility.

If drugs could be treated sacredly, exactly, and conscientiously by the druggists and the public, as they are in hospitals, in experimental laboratories, and as physicians themselves treat them, the practice of medicine would be a much more satisfactory profession than it is at present.

We trust that in this particular case the New York Board of Health, which does nothing by halves, will trace this scandal to its source, and further, we hope that physicians and druggists will prove as energetic as are the manufacturers of cereals and baking powders in establishing pure food laws, and will bring the enact-

ment about pure drug laws, that will at least serve as a warning to offenders, and a caution and protection to the trusting prescribers and buyers of drugs.—Editorial in *Medical News, N.Y.*

THE NEW PRINCIPAL FOR THE UNIVERSITY OF EDINBURGH.

The appointment of Sir William Turner, K.C.B., to the Principalship of the University of Edinburgh is a suitable occasion on which to recall the leading incidents in his public career. Sir William Turner was born in Lancaster in 1832. His father was English, but his mother was a Miss Logan, a Berwickshire lady. He received his medical education at St. Bartholomew's Hospital, where he studied under Sir James Paget. He obtained the Membership of the Royal College of Surgeons of England, and graduated as M.B. of the London University. In 1854 he came to Edinburgh as senior demonstrator of anatomy under Professor John Goodsir. This post he held until 1867, when, on the death of Professor Goodsir, he was appointed to the chair of Anatomy. During the 36 years of his occupancy of the chair Sir William Turner has held an unrivalled position as teacher in the Edinburgh School of Medicine. He has also, as is universally acknowledged, added to the lustre of the chair which has been held by Munro and Goodsir. He has done this in virtue of his contributions to comparative anatomy. He has, moreover, during the whole period of his occupancy of the chair, taken an active and energetic interest in all university matters, and has shown himself to be possessed of great organizing and administrative ability. In 1873 he was elected to represent the University of Edinburgh on the General Medical Council, and on the death of Sir Richard Quain he was elected president of that body, an office which he still holds. He took an active part in the scheme for the erection of the new buildings for the accommodation of the medical faculty of the University, and also took a large share of the arrangements in connection with the erection of McEwan Hall. He is the author of several works on anatomy, and he edited the second and third editions of Sir James Paget's classical lectures on surgical pathology. He was the joint founder of the *Journal of Anatomy and Physiology,* of which he is still an editor. He was knighted in 1886, and in 1901 he was made a K.C.B. He has honorary degrees from the Universities of Glasgow, St. Andrews, Montreal, Oxford, Durham, Toronto, Dublin, and Cambridge. He is a Fellow of the Royal Society of London, a Fellow of the Royal Society of Edinburgh, a Fellow of the Royal College of Surgeons of Edinburgh, and a Fellow of the Royal College of Surgeons of England.

When Sir William Turner met the class of anatomy on January 21st, his appointment to the principalship had become widely known. His appearance in the lecture room became, therefore, the signal for a great demonstration of approval and enthusiasm on the part of the students. When quietness had been restored Sir William Turner addressed the students. He thanked them for the overpowering reception which they had accorded to him, and dwelt upon the responsibility of the position to which he had been chosen. He referred to the line of distinguished men who had preceded him in the principalship. Speaking of Sir William Muir, he said, "I feel, gentlemen, that I cannot assume the duties of the new office which has been conferred upon me without referring to that courteous gentleman, that kind-hearted man, who has always throughout his eighteen years of service here acted towards his colleagues in a noble and impartial way, and who, as regards the students of the University, has shared their feelings and sentiments in a way which has most thoroughly endeared him to them." Sir William Turner then intimated that his having accepted the office of principal implied his relinquishing his position as Professor of Anatomy. He finished his speech with a warm expression of gratitude to the generations of students who had attended his lectures for the sympathy, kindness, and affection which had subsisted between him and them. Sir William Turner then proceeded with his lecture.—*Lancet.*

THE NEW HOSPITAL AT MONACO.

A MEDICAL correspondent residing at Monaco writes that, owing to the enormous development of Monaco in recent years, it was found that the old Hotel Dieu on the rock of Monaco was insufficient to met the demands of the place. As soon as the Prince recognized the need he took the matter in hand, with his usual largeness of ideas and appointed a commission composed of medical men and architects, with Dr. Colignon at their head, to make a tour of inspection of the great modern hospitals of Europe. In the building that has been erected for the new hospital is to be found nearly every novel and perfect idea that could help to realize the Prince's directions to the commission, "I desire a model hospital." Our correspondent continues as follows:

Situated on the western frontier of the principality, some 300 feet above the sea, protected by the precipitous cliffs of the Tete du Chien from the north-east to the north-west, and fully exposed to the Mediterranean, the hospital is approached by broad, gently sloping terrace roads, through woods of olive, caroub, and eucalyptus and sub-tropical plants. The principle of separate blocks has been adopted as the one most suited to carry out to the fullest

extent hygienic conditions. A very handsome broad passage-way runs the entire length of the blocks of buildings, forming a means of communication between them, and also a covered promenade for convalescents in wet or very hot weather. From this gallery are obtained magnificent views over Monaco, the Italian coast, and the Mediterranean.

Here he enumerates various structural details which have already been described in the *Lancet* of April 26th, 1902, p. 1212, and he concludes as follows:

It is under consideration to allow foreigners to be attended by their own medical men, subject, of course, to certain restrictions. The Emperor Napoleon built his grand opera house in Paris first and his great hospital afterwards. The Prince of Monaco, although deeply interested in the magnificent marine museum in course of construction, has made his hospital his first care and thought. It has now been open and in full work for over six months, and has been an enormous boon not only to his own subjects, but also to the very large population in the surrounding French and Italian districts.

His Highness the Prince of Monaco has hitherto been known to science by his valuable researches in marine biology, but by the munificent gift to the principality which is described by our correspondent, he has shown himself no less eager to promote the comfort and well-being of his fellow-creatures, whether by offering them the means of care in sickness or by providing methods for the prevention of disease. It is to be hoped that the concession alluded to by our correspondent will be carried out, and that foreigners will be allowed to have the option of selecting a medical attendant of their own nationality during their stay in hospital.—*Lancet.*

AN AMERICAN MENTONE.

One of the most charming and most ideal winter and all-year-round health resorts is Citronelle, Ala., which has already acquired great fame and is attracting a great number of health-seekers and tourists. The town has an elevation of 360 feet, the highest in the government survey between the Rio Grande and the coast of Maine. The site is a high rolling plateau in the heart of the long-leaf yellow pine forest of South Alabama. The soil is sandy; there is no malaria; there are no poisonous insects. The climate is simply delightful—at all times of the year. The salt air of the Gulf commingles with the fragrant, delicious ozone of the pine woods; it is absolutely clean and clear, and, therefore, of great benefit to all persons suffering from catarrh, bronchial and throat troubles, and from the depressing effects of the grippe. Medical authorities are agreed that Citronelle is an ideal place for

those who wish to recuperate from nervous prostration and kindred ailments.

The town is within a short distance of Mobile. It has a population of one thousand, which is, of course, considerably increased during the winter months. There are public and private schools, churches of various denominations, stores of all descriptions, a well-equipped and strictly up-to-date hotel, and first-class liveries.

The proximity to Mobile makes Citronelle a particularly attractive place for those who are fond of city amusements. The hunter is offered ample opportunity to enjoy his sport. Small game abounds. In the shadows of the forest deer may still be found, and then there is the agile squirrel, the turkey, the rabbit, the fox, and quail. As Mobile Bay is only a few miles away, fishing is one of the best and most enjoyable sports. Neighboring streams are also well stocked with various varieties of savory fish.

Citronelle has a gun club, which all guests are invited to join, and also golf links. The surroundings of the place are both picturesque and romantic. They are a veritable paradise for the enthusiastic lover of nature. Here can be found blooming in winter the beautiful camellia japonica, yellow jasmine, trailing arbutus, mountain laurel, roses, violets and other flowers and shrubbery. In March and April the woods are aglow with blooming trees and wild flowers.

It will probably surprise many to learn that at Citronelle was made the last surrender of the Civil War. Reliable old citizens report that on May 5th, 1865, General Taylor signed negotiations for peace to General Canby, at a spot under a clump of oak trees, a mile and a quarter south of the depot.

The water of Citronelle is famous for its curative qualities in cases of kidney and stomach troubles. It is preferred by many to any of the well-known leading mineral waters.

Hotel accommodations are ample and are obtainable at very reasonable rates.

It is no exaggeration to say that nowhere along the Gulf or Atlantic coast is there any more ideal and more attractive health resort than Citronelle. The location cannot be excelled, and the climate is considered by various authorities to be more beneficial than that of any other resort on the coast. It is said that many business and professional men have already located there, principally for reasons of health.

Citronelle is easily accessible, over the Mobile and Ohio, which furnishes a speedy and luxurious service.—From *St. Louis Mirror*, January 22nd, 1903.

Public Health and Hygiene.

. . . IN CHARGE OF . . .

J. J. CASSIDY, M.D., AND E. H. ADAMS, M.D.

FIRST QUARTERLY MEETING OF THE PROVINCIAL BOARD OF HEALTH OF ONTARIO, 1903.

The first quarterly meeting of the Provincial Board of Health of Ontario for the current year was begun in the office of Dr. Bryce, the secretary, February 11th, and continued during the two following days. The following gentlemen were present during the sessions: Dr. Vaux, chairman; Dr. Bryce, secretary; Dr. Oldright, and Dr. Cassidy, Toronto; Dr. Kitchen, St. George; Dr. McCullough, Owen Sound, and Dr. Douglas, Cobourg.

In his quarterly report, Dr. Bryce said the public health had remained fairly good as regards contagious diseases, with the exceptions of scarlet fever and smallpox. Both had existed in a more severe type than we had had for some time. Of smallpox the statistics showed that there had been 2,500 cases in the province during 1902, resulting in ten deaths. Of scarlet fever there were 3,402 cases and 290 deaths.

Dr. Bryce then interpolated an interim report by Dr. Hodgetts, Provincial Health Inspector, on the smallpox situation in January of this year. The disease had existed in forty-two centres and there had been 196 cases and 10 deaths, compared with 650 cases and one death a year ago. In eight instances the infection had come from outside the province. The most serious outbreak had been at Galt, where there were eighty-five cases and five deaths. The doctor reported that he had examined thirty of the cases and found that none of them had been vaccinated or revaccinated in the past seven years. Of the thirty cases seventeen were never vaccinated, four, upwards of thirty years of age, were vaccinated in infancy and had a scar now; six were vaccinated after exposure. It was significant that not one of the five who died had been vaccinated.

As further illustration it was noted that Mrs. H., aged 32, vaccinated 17 years ago, was the only one of four in a house who did not contract the disease; Mr. R., aged 43, vaccinated in childhood, with two scars now, was the only one in a house of nine to escape the disease.

A similar case was quoted from Wilmot Township. Two regrettable facts were the persistent manner in which medical men continued to diagnose the disease as chicken-pox, until many people had been exposed, and the general neglect of vaccination. Health officers, for their meagre pay, hesitated to pronounce a disease smallpox for fear of alienating their practice. For this Dr. Hodgetts suggested a union of municipalities, say in each county, and the appointment of a competent officer at a good salary.

Dr. Bryce, resuming his own report, remarked that 5,000 of the total population of 8,000 in Galt had been vaccinated during January. In Ottawa, in 1901, 20,000 persons had been vaccinated, and in Deseronto in 1901 practically the whole population had been vaccinated, and the result was seen recently in the existence of only one case under constant exposure from a neighboring Indian reservation. In 1900 the municipalities had spent $450,000 in suppressing smallpox, not to speak of the expenditures by the government and the loss to people who had been quarantined. In the face of all this, there were only two or three municipalities, including Toronto, Windsor and Walkerville, where there was general vaccination, although there had been a law on the statute books for forty years, calling for compulsory vaccination of infants born every year by public vaccination. It was clear that a better law was necessary, to meet the present conditions, and a proposed act would be submitted to the Board later during the meeting.

The scarlet fever had been more virulent than for years past. In Toronto last year there had been 701 cases and 88 deaths. The death rate in 1902 had been 9 per cent. in the cities generally, and 12.5 per cent. in Toronto, while in January, 1903, there had been 106 cases and 21 deaths in Toronto, a much higher percentage.

The chairman, Dr. Vaux, then read his annual address (*vide* page 168.)

The address was adopted, and was ordered to be printed with the next annual report of the Board.

Regulations *Re* Scarlet Fever.

Adopted by the Provincial Board of Health at Its First Quarterly Meeting, February 12th, 1903.

The entire afternoon session, February 11th, was taken up in discussion on the regulations for the control of scarlet fever. The following is the text of the regulations as adopted:

The Provincial Board of Health, subject to the approval of the Lieutenant-Governor-in-Council, enacts the following regulations:

1. Whenever scarlet fever is present in any municipality, and the Medical Health Officer requires the assistance of sanitary police

for the purpose of assisting such officer or officers in carrying out the health regulations in force in the municipality, he shall temporarily employ one or more persons as sanitary police until the council of the municipality shall have appointed such officer or officers. Should such council refuse or neglect to make such appointments on the request of the Medical Health Officer, they may be made by the Provincial Board of Health.

2. The Local Board of Health of any municipality, and where there is no local board, the Medical Health Officer, may, either with or without prior agreement, take possession of any non-occupied land or building not being nearer than 150 yards to an inhabited dwelling, for the purpose of an isolation hospital, subject to the provisions of sections 22 to 28, R.S.O., Cap. 248, 1897, both inclusive, with reference to compensation and otherwise. Any title acquired shall vest in the municipality. The health authorities shall establish on said land, or in said building an hospital temporarily, with necessary appliances for the reception and care of patients, and shall equip the same to the satisfaction of an officer of the Provincial Board of Health. An ambulance or other suitable conveyance shall also be provided.

3. Any default on the part of the authorities of any municipality in taking immediate and effective action in carrying out the regulations of the Provincial Board of Health, or any of the Health Acts of this province, or any health by-law in force in the municipality, shall be at once reported by the Medical Health Officer to the secretary of the Provincial Board of Health, in order that the said Board may take such measures as it deems requisite for placing the said municipality in a position, as regards its sanitary arrangements, to effectively combat the said disease.

4. Every physician or householder who has reason to know or suspect that any person under his charge has scarlet fever shall report the same within twenty-four hours to the health authorities of the municipality, in the manner provided by the Public Health Act.

The Medical Health Officer of a municipality, or any of his medical assistants, having received information of a suspected case of scarlet fever therein, shall immediately enquire into the facts, either by consultation with the attending physician, or by his own personal observation, or by both.

If the characteristic symptoms of the disease are not sufficiently developed at the time of investigation, the Medical Health Officer shall keep the case under his personal observation until its true nature is discovered.

Until the time has arrived when, in the opinion of the Medical Health Officer, all cause for suspicion of danger is passed, the suspected case shall be isolated and otherwise dealt with in the same manner as prescribed for a case of scarlet fever.

5. On the occurrence of the first or any case of scarlet fever in them unicipality, the Medical Health Officer shall at once place the person attacked in the isolation hospital, tent, or other place provided under the Act, and shall take proper measures for the disinfection, or, if necessary, the destruction of all clothing which may have been exposed to the contagion, and for the disinfection and purification of every house, conveyance, rail-car, steamboat, sailing vessel, carriage, or other vehicle which may have been exposed to the contagion.

6. Where the emergency demands such measures, he shall further place in another building or tent, which shall be provided as prescribed in the Act, all persons who may have been exposed to the contagion, and shall supply them with all necessaries until the period of incubation of the disease shall have elapsed, as provided in section 93 of the Public Health Act. No person who has not had scarlet fever shall go, or be permitted to go, abroad until the period of incubation of the disease has elapsed, and until the clothing or effects worn or carried by or with all persons exposed to the contagion have been disinfected as provided in the Act.

Whenever in a house there is a case of scarlet fever, or wherever there are persons isolated in the same on account of exposure or supposed exposure to scarlet fever, no children or other persons shall be permitted to leave the premises until in the opinion of the Medical Health Officer, they and their clothing are free from infection.

7. Whenever a case of scarlet fever has occurred in a child attending any school, the Medical Health Officer shall personally, or through another physician, cause a daily examination to be made of all the children of the school for at least one week from the date of the occurrence of the last case amongst such children. If any children are absent from such school, a medical examination shall be made of them in the same manner as if they were in attendance at the school.

8. The minimum period of isolation of any case of scarlet fever shall be six weeks from the onset of the disease; and any person then having any discharge due to scarlet fever shall be isolated for such further period as in the opinion of the Medical Health Officer may be necessary for the safety of the public.

9. In case of the death of any person suffering from scarlet fever, the Medical Health Officer shall at once be notified by either the physician or the party in charge of the body, and cause same to be enveloped in a sheet thoroughly saturated with a solution of mercuric chloride, in the proportion of one to five hundred parts (two drachms to the gallon), or in a carbolic acid solution of five per cent. strength. An outer sheet shall also be applied to prevent evaporation. As soon as possible thereafter the body must be placed in a coffin and

permanently closed. It shall be the further duty of the Medical Health Officer to see that the funeral be strictly private, and that the body be buried in some cemetery commonly used for the burial of persons dying within the said municipality, and that all infected apartments, clothing and other effects be speedily and thoroughly disinfected, and that no such apartments be entered or occupied by members of the family or other persons until they have been so disinfected.

These provisions shall equally apply to all undertakers' apartments and furnishings.

10. The last Revised Rules for Checking the Spread of Contagious and Infectious Diseases, issued by the Provincial Board of Health, shall be the guide for the specific performance of such instructions as are contained in the regulations.

On February 12th, at the morning session, the Board approved a draft bill, which will be introduced at the next session of the Legislature, making more effective provision for the prevention of the spread of smallpox. By this measure it is hoped to nip the disease in the bud by a more thorough vaccination, commencing in the homes and in the schools. By the bill, the secretary of every Local Board of Health is required to supply to the Medical Health Officer of the municipality a list of all children whose births are registered in each year after the passage of this Act, in order that he may offer vaccination of such child to the parents at their home within six months after the birth of the child, without cost to the parents, and at the expense of the municipality.

The Medical Health Officer is also authorized to offer vaccination to any other unvaccinated person found in such home in the same manner. The Medical Health Officer of each municipality is appointed public vaccinator to carry out the provisions of the Act. He is required to notify the Provincial Board of Health of any neglect on the part of the Local Board of Health, and also to make an annual return of the result of the vaccination of each person. The secretary of a Local Board of Health is also required to notify the Provincial Board of Health when his Board neglects to appoint a medical health officer.

The responsibility is placed upon Medical Health Officers of obtaining from every child attending any school within the municipality a certificate of successful vaccination. Unvaccinated children are prohibited from attendance at schools, and any school trustees who fail to exclude such children upon notice from the Medical Health Officer would forfeit the government grant. Parents who neglect to comply with the terms of the Act are to be held responsible, and the existing regulations for compulsory vaccination when smallpox is present in a municipality are made a part of the Act.

Upon motion of Dr. Cassidy, the bacteriologist of the Board

was requested to report upon the practicability of the adoption in Ontario of the method, which has been in use in Chicago, of assisting practitioners to combat the spread of scarlet fever by furnishing the means of laboratory experiment for identification and detection of the bacilli of the disease.

At the afternoon session the Board considered amendments to the regulations relating to diphtheria. The regulations as amended are as follows:

In view of the fact that a copy of the diphtheria regulations of the Provincial Board of Health may not be in the hands of every Local Board of Health, the Provincial Board has reprinted the subjoined for the guidance of Local Boards, and for the information of the public.

Copy of an Order-in-Council approved by His Honor the Lieutenant-Governor, the 23rd day of December, A.D. 1891.

Upon the recommendation of the Honorable the Minister of Agriculture, the Committee of Council advise that the annexed regulations respecting diphtheria, adopted by the Provincial Board of Health at its fourth quarterly meeting, 20th November, 1891, be approved of by your Honor.

(Certified)

P. H. Bryce, *Secretary Provincial Board of Health.*
J. Lonsdale Capreol, *Asst. Clerk Executive Council.*

Regulations *Re* Diphtheria.

Adopted by the Provincial Board of Health at its Fourth Quarterly Meeting, November 20th, 1891, as Amended February 12th, 1903.

The Provincial Board of Health, subject to the approval of the Lieutenant-Governor-in-Council, enacts the following regulations:

1. Wherever diphtheria is present in any municipality in Ontario, and the Medical Health Officer requires one or more sanitary police for the purpose of assisting to arrest the spread of the disease, he shall temporarily employ one or more persons as police until the council shall have appointed such officers.

If the Medical Health Officer of the municipality, or the Provincial Board of Health, require the appointment of any specified number of sanitary policemen, then such number shall be appointed.

In case the council of any municipality neglects or refuses to make the required appointments, the Provincial Board of Health may appoint as many sanitary policemen for such municipality as it deems necessary.

2. Any default on the part of the authorities of any muni-

cipality in taking immediate and effective action in carrying out the regulations of the Provincial Board of Health, or any of the Health Acts of this province, or of any Health By-law in force in the municipality, shall be at once reported by the Medical Health Officer to the secretary of the Provincial Board of Health, in order that the said Board may take such measures as it deems requisite for placing the said municipality in a position, as regards its sanitary arrangements, to effectively combat the said disease.

3. (*a*) Every physician or householder who has reason to know or suspect that any person under his charge has diphtheria, shall cause the person to be isolated until an examination of swabs taken from the throat and nose shall have proved the absence of the disease.

(*b*) The Medical Health Officer of every municipality having received information of a suspected case of diphtheria shall immediately enquire into the facts, either by consultation with the attending physician or by his own personal observation, or by both. If the characteristic symptoms are not sufficiently developed at the time of investigation, the Medical Health Officer shall keep the case under his observation until the true nature of the disease is discovered. Until the time arrives when, in the opinion of the Medical Health Officer, all cause for suspicion of danger is past, the suspected case shall be isolated and otherwise dealt with in the same manner as prescribed for diphtheria.

4. On the occurrence of the first, or any case of diphtheria in a municipality, the Medical Health Officer shall at once place the person attacked in the isolation hospital, tent, or other place provided under section 106, Cap. 248, R.S.O. 1897, and shall take proper measures for placarding houses, for the disinfection of personal clothing, and, if necessary, the destruction of clothing which may have been exposed to the contagion, and for the disinfection and purification of every house, conveyance, rail-car, steamboat, sailing vessel, carriage or other vehicle which may have been exposed to the contagion.

5. Whenever, in the opinion of the Medical Health Officer, it is absolutely necessary for the safety of the public that a case of diphtheria be isolated in a hospital or hospital tent, he shall be empowered to supply, at the expense of the municipality, a vehicle for the purpose of carrying said person to the hospital. He shall also supply nurses and such medical aid and other necessaries as in his judgment are required, and charge the cost of same as provided in section 93 of the Public Health Act.

6. Whenever the emergency demands such measures, the Medical Health Officer shall further place in another building or tent, which shall be provided by the municipality, all persons who may have been exposed to the contagion of diphtheria, and shall

cause them to be supplied with all necessaries until the period of incubation of the disease shall have elapsed, as provided under section 93 of the Public Health Act.

No children or other persons who have been exposed to diphtheria shall leave their dwelling or premises without the permission of the Medical Health Officer, who shall satisfy himself that such person or persons and their clothing are free from infection.

7. The disinfection of houses, clothing, carpets, and any other articles which may convey infection shall be carried out under the supervision of the Medical Health Officer, as provided in sections 81 and 82, of Cap. 248, R.S.O. 1897, after the sick person has been declared free from the disease as provided in these regulations.

8. Whenever a case of diphtheria has occurred in a child attending any school, the Medical Health Officer shall personally, or through another physician cause a daily examination to be made of all the children of the school for at least one week from the date of occurrence of the last case amongst such children.

If any children are absent from such school, a medical examination shall be made of them in the same manner as if they were in attendance at school.

9. Every person who has had diphtheria shall be isolated for a period of not less than twenty-eight days from the onset of the disease, unless swabs taken from the throat and nose shall sooner, by bacteriological culture, have proved the absence of the bacilli of the disease. In cases isolated, where, owing to the presence of nasal or glandular discharges, the Medical Health Officer has reason to doubt freedom from the bacilli of the disease, he shall continue the isolation of the person until swabs taken from the discharges shall, after bacteriological culture, have shown freedom from the disease.

10. In case of the death of any person suffering from diphtheria or croup, the Medical Health Officer shall at once be notified by either the physician or party in charge of the body, and the Medical Health Officer shall take such steps in the preparation of the body as he may deem necessary. He shall cause the body to be enveloped in a sheet thoroughly saturated with a solution of mercuric chloride, in the proportion of one in five hundred parts (two drachms to the gallon), or in a 5 per cent. solution of carbolic acid. An outer sheet shall also be applied to prevent evaporation. As soon as possible the body shall be placed in a coffin, which shall be immediately thereafter permanently closed. It shall be the further duty of the Medical Health Officer to see that the funeral be strictly private, and that the body be buried in some cemetery commonly used for the burial of persons dying within the said municipality, and that all infected apartments,

clothing and other effects, be speedily and thoroughly disinfected, and that no such apartments be entered or occupied by members of the family or other persons until they shall have been so disinfected. These provisions shall equally apply to all undertakers' apartments and furnishings.

Recommendation.—In view of the undoubted value of antitoxin as a prophylactic and curative measure in the prevention and treatment of diphtheria, the Provincial Board of Health would strongly urge all Local Boards of Health to provide antitoxin for the treatment and prevention of diphtheria in the poor, when affected with or after exposure to the disease, and that all medical practitioners be urged to use it both as a preventative and curative measure.

At the morning session on February 13th, Dr. Amyot reported against the adoption of the method of assisting practitioners to diagnose scarlet fever which is now used in Chicago. He said he did not believe that the true germ of scarlet fever had yet been discovered, and he was therefore opposed to making such efforts to diagnose the disease in question as would be based on the recognition of the Class bacillus.

The Board approved of the plans submitted by Listowel for a septic tank system of sewage disposal, the effluent from which is to flow to filter beds half an acre in extent. The works are based on a daily flow of 40,000 gallons. The approval is conditional upon the purification of the sewage being effective in bringing it to a certain chemical standard. In the event of the proposed plant failing to do this then extra filtering beds are to be provided.

In committee of the whole the Board discussed the experimental sewage purification work done by the laboratory of the Board last year at the town of Berlin. Dr. Amyot, the bacteriologist, whose exhaustive report of the experimental work done last summer at Berlin by himself and his assistant, Mr. Nasmith, had already been presented, then addressed the Board at some length upon the subjects referred to in his report. The conclusions arrived at were that a certain standard of purity may properly be demanded of all towns disposing of their sewage in inland waters. This standard has been attained both in England and Massachusetts, and can be arrived at by any town which supplies a sufficient extent of tanks for the treatment of one day's sewage by septic action, and by running the effluent therefrom upon either natural or artificial filtering beds. The conclusions referring especially to the Berlin sewage disposal works are that manufactories, such as tanneries and gas works, may be properly required to remove a certain amount of their wastes before pouring their sewage into the town sewers, it having been demonstrated that the sewage of Berlin is at least three times as strong as the average sewage. It also recommends that additional tank area is necessary, it hav-

ing been demonstrated that the present capacity is insufficient to ensure proper septic action. As the soil of the sewage farm is of clay, the report advises that the purchase of a neighboring property, which is higher and is composed of sandy soil, will enable the town to provide an efficient intermittent system of filtration which will supply the required standard of purification.

The report was adopted.

The report on the amended diphtheria regulations was adopted.

Dr. Cassidy moved that the Committee on Epidemics be instructed to continue their efforts to secure a thoroughly satisfactory settlement of the hygiene of barber shops.—Carried.

The Board then adjourned.

SCHOOL HYGIENE.

Sunday Schools.—It is no uncommon thing for cases of infectious disease to be traced to Sunday-school entertainments or other meetings. Three cases of scarlet fever were recently proved to have such an origin. Superintendents, teachers, parents, and physicians should bear this in mind.

Myopia.—Dr. J. E. Widmark, of Stockholm, and Dr. E. Guttman who has recently been making observations on this subject in the Eye Hospital of Professor Magnus, of Breslau, believe it is not "near work," but hyperemia of the fundus of the eye, the result of over-use, insufficient food, and the accumulation of the products of fatigue, which is the real cause of this affection.

Color-Blindness.—The power of discriminating colors depends, like every other power, on training and exercise. In 10,000 men 369 are partly or wholly color-blind, but only 9 women out of 10,000 are color-blind. Five hundred and eighty boys in the primary schools of New York, who had received a training in discriminating colors, were tested in color vision, with the result that only one was found defective. This interesting fact is stated by Alida S. Williams in the *Educational Review*.

Disease in Brooklyn Schools.—Since September 18th last 6,347 children have been excluded from attending the schools on account of disease. Of these 1,979 were excluded because of eye diseases; 2,920 for diseases of the head and body; 75 for diphtheria; 14 for measles; 40 for chicken-pox; 879 for skin diseases; 74 for whooping-cough, and 336 for mumps. A strong plea is

made by Dr. Raymond, assistant sanitary superintendent, for the appointment of more inspectors, who shall devote their time exclusively to the schools. It is stated that 4,000 pupils were found who had never been vaccinated, and 41,000 children whose first vaccination had "run out."—*Philadelphia Medical Journal.*

The Widener Memorial Industrial School.—Thirty-two acres on the Old York Road, near Philadelphia, and the sum of $3,000,000 for building and endowment, have been given by a rich man, Mr. P. A. B. Widener, for the use of children who are cripples. The school will be residential, and will offer great advantages to the scholars, who will be taught to maintain themselves at the work for which they are best fitted. This is not by any means the first benefaction from the kind giver. Mr. Widener's old home, a beautiful brown stone mansion, at the corner of Broad Street and Girard Avenue, in Philadelphia, was given to the city as a Memorial Library, in memory of his wife, Josephine Widener, who died there after a long illness. The Memorial Industrial School is in memory of his wife and his son. *O, si sic omnes.* H. M'M.

TEN COMMANDMENTS FOR THE NURSE IN THE SICK ROOM.

1. Thou shalt remove surplus rags, furniture, etc., and make ample room for thy work.

2. Thou shalt maintain perfect ventilation without draughts.

3. Thou shalt keep the patient clean and quiet.

4. Thou shalt foresee the needs of thy patients; do not let them ask for everything.

5. Thou shalt promptly remove and burn sputum, and thoroughly disinfect all culinary utensils and vessels used by the patient.

6. Thou shalt restrict visiting, loud talking, and, above all, whispering, in the sick room.

7. Thou shalt not ask the sick what he wants to eat; rather say, "I have prepared something dainty, and I want you to eat it."

8. Thou shalt not annoy the sick by telling thy troubles, sad experiences, and all thou knowest.

9. Thou shalt let in the sunshine, and try to be a sunbeam thyself.

10. Thou shalt remember that the tenth commandment is to mind thine own business, follow directions faithfully, cheerfully, and promptly, and the sick will arise and call thee blessed.—*Medical Brief.*

The Canadian Journal of Medicine and Surgery

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Editorials.

NEW TENDENCIES IN THERAPEUTICS.

IN an able paper read at the Cairo Congress of Medicine, December, 1902, Professor Charles Bouchard, of Paris, drew attention to the success obtained by himself and others in treating local manifestations of certain general diseases by the topical application of specific remedies. Moreover, he showed that curative results ensued, although a very small dose of the agent was employed. For instance, a syphilitic patient, who had an ulcerated

gumma of the lumbar region, had received treatment with mercury and iodide of potassium, these drugs having been used singly and afterwards in combination. Mercury had also been applied by friction with mercurial ointment, and by hypodermic injection of mercurial salts in those parts of the body usually selected for such methods, but at a distance from the seat of the lesion. These treatments having proved ineffective, Bouchard injected sub-cutaneously into the periphery of the gumma, at first 1 centimetre, and subsequently 2 centimetres of a solution of iodide of potassium, each cubic centimetre containing 3 centigrammes of iodide of potassium (6-13 grain). After seven such hypodermic injections of from 3 to 6 centigrammes of iodide of potassium (6-13 to 12-13 grain), the gumma sunk below the level of the patient's skin and cicatrized. Under similar conditions, after experiencing failure from a general treatment with specifics of another patient, who had a gumma, the tumor disappeared after three injections, containing 6 centigrammes each of iodide of potassium (12-13 grain). Bouchard does not discredit general specific treatment in syphilis. He thinks it is always required, but he holds that, with or without general treatment, a practitioner by employing the local treatment indicated above, can cure an isolated lesion, or one the progress of which has been checked, and may thereby rapidly get the better of certain unsightly, painful and dangerous manifestations of syphilis, such as those appearing on the face, the eye and the tongue. He even hopes that in the future we may succeed in thus curing the deeper lesions of syphilis.

In rheumatism (not the gonorrheal form) equally beneficial effects have been obtained from hypodermic injections of salicylate of sodium. This result has been more particularly observed when the rheumatic affection is no longer increasing, or when it no longer exists as a general disease, but has left certain persistent vestiges behind it, and especially in cases in which it assumes a local type at the very beginning of the attack.

Bouchard states that an injection *in situ* of 3 centigrammes of salicylate of sodium (6-13 grain) cured a case of marked arthritis, and that he cured a case of arthritic effusion into a joint by injecting 10 to 20 centigrammes of this salt (1 7-13 to 3 1-13 grains), dissolved in 2 and 4 cubic centimetres of water respectively. He also tried it successfully in sciatica, in the severe neuritis of

zona, and also in painful muscular contracture of the adductors of the thigh, making the injections into the tendinous insertions of these muscles. He has several times observed that, in cases of commencing pleurisy, an injection of the salicylate has relieved the pain in the walls of the thorax and caused the pleurisy to recede. He guards himself by saying, that even when successful in relieving rheumatism of an acute or an erratic type by this treatment, the practitioner should not consider it as all-sufficient. It lowers febrile temperature if the disease is monarticular; but does not prevent the development of arthritis in other joints, or the invasion of the larger serous membranes. In such cases general treatment must be continued. If it is insufficient, the local treatment will prove useful.

Bouchard thinks that the rationale of cure by his method is that the specific acts on the diseased part in a proportion, which renders it antiseptic to it, without its ulterior diffusion into the surrounding parts of the organism rendering it a toxic agent. He illustrates this remark by showing that, if 5 grammes of sulphate of quinine were dispersed through the totality of the body of a man weighing 50 kilogrammes, this man would have in each kilogramme of his body, and consequently in each kilogramme of his nervous system, 1 decigramme of the drug, which might be sufficient to cause his death. But the quinine could be introduced into the man's cellular tissue in the proportion of 200 to 1,000, a proportion 2,000 times stronger, without doing any damage to the cellular tissue.

He also thinks it possible that the hypodermic injection of specifics in small doses may excite solicitation of the natural acts by which the animal economy struggles against infection.

Bouchard shows that the ophthalmic surgeons have preceded general practitioners in local therapeutics by applying specific and non-specific medicines, mercury, idoin, eserin, atropin, and pilocarpin as closely as possible to the diseased parts. In applying local treatment to the local fossæ to relieve coryza, the practitioner seeks to prevent a generalisation of an infection towards the respiratory organs. The local application of cocain to the nasal mucous membrane arrests an epistaxis, even when due to a cirrhosis, and a few drops of a 1-1000 solution of adrenalin applied superficially to a bleeding pile arrests the hemorrhage and causes the pile to wither. On two occasions he has observed a disquieting

hemoptysis checked by a hypodermic injection of adrenalin made into the trachea.

He stated that while medicine combats infections by general means, it employs the local method more and more, either because the latter exercises an antiseptic effect or because such treatment evokes antitoxic acts in the organism, and by such means becomes really curative. He finished by declaring that modern therapeutics seeks its inspiration in the doctrine of infection, which is the principal medical glory of the nineteenth century, and which will receive further expansion during the twentieth century, thus preserving the teaching and the memory of these two benefactors of all the ages, Pasteur and Lister. J. J. C.

VITAL STATISTICS OF ONTARIO FOR 1901.

THE report of the Registrar-General of Ontario for 1901, showing the births, marriages and deaths in the province for that year, has just appeared, and we take occasion to place a few excerpts from it before our readers. The population of this province is computed at 2,184,144, and the registered births number 46,061, as against 46,127 in 1900, being a rate of 20.1 per 1,000 for 1901. Compared with European countries and some of the American states, the Ontario birth rate is decidedly low. It may be that all the births are not recorded, but this objectionable neglect of registration is not peculiar to Ontario. The birth rate in England and Wales in 1899 was 29.3; in Scotland, 30.5; in Norway, 30.9; in Massachusetts, 25.8; in Rhode Island, 25.9. Among the cities, the highest birth rate, 27.5, was in Ottawa, where there is a considerable French-Canadian element in the population; the lowest, 17.1, was in Belleville.

There were 18,035 marriages in 1901, a rate of 8.2 per 1,000, which compares favorably with that of England and Wales for 1900, viz., 8. The total is, however, in excess of the actual marriage rate of this province, since at certain border cities and towns, especially Windsor, Sandwich, Sarnia, Kingston, and Brockville marriages are regularly effected between persons who are residents of the United States. The Windsor rate, 68.5, is marvellous, and is largely due to the influx of strangers bent on matrimony. Persons from the new settlements also go to points where licenses and the services of clergymen are available. Thus Bracebridge

has a marriage rate of 16.5; L'Orignal, 15.6, Lindsay, 13.3; Napanee, 21.0.

There were 29,608 deaths in 1901, a mortality of 13.6, which certainly speaks well for the salubrity of our climate, the effective action of municipal and provincial sanitary authorities, and the rarity of epidemics.

A remarkable circumstance in connection with the mortality of the year is the number of persons dying at threescore and more years. Thus there were:

	Deaths.
Between 60 and 69 years.....	3,036
" 70 " 79 "	4,051
" 80 years and over.....	3,336
Total	10,423

Or, 35 per cent. of the total deaths for 1901. Many of these were the deaths of pioneers, the sturdy men and women who emigrated to this country between 1840 and 1860, and helped to reclaim Ontario from the forest condition. On the other hand, the percentage of deaths in the 1-4 year period is small, viz., 28.2 per cent. of the total deaths. This circumstance would be a matter for congratulation, were it not that it is partly due to a low birth rate. To illustrate this point, we may cite Scotland, where the birth rate for 1899, being 30.5 per 1,000, the percentage of deaths for the age period 1-4 years, was 32.06. Deaths from the more noted communicable diseases were not numerous. From typhoid fever there were 500, as against 682 the previous year. There were 7 deaths from smallpox, out of 3,000 cases, a mortality of less than one-fourth of 1 per cent. Other deaths were: Measles, 181; scarlatina, 268; whooping cough, 166; diphtheria and croup, 772; influenza, 694. Of deaths from diphtheria and croup, Toronto recorded 174. Throughout the province the mortality from influenza was larger than the previous year, when there were 324 deaths from this cause.

Pyemia and septicemia were responsible for 572 deaths. This is a large number, and it appears that in cities at least the great majority of decedents were women. Cancer caused 1,094 deaths. The deaths from tuberculosis were 3,405, or 241 less than the previous year. Of late years the deaths from tuberculosis in Ontario have been: 1897, 3,145; 1898, 3,291; 1899, 3,401; 1900, 3,484.

Of deaths from tuberculosis, 994, or 30.65 per cent. of the deaths from that cause, occurred in the cities; in 1900, the mortality from the same cause in cities was 1,081, or 31.02 per cent.

As a slight summary of some of the more important information respecting births, marriages and deaths in Ontario for 1901, the following table, a modification of one of those found in the Registrar-General's report, is presented:

		Ratio to 1000 of the population.		
Cities.	Population.	Births.	Marriages.	Deaths.
Toronto	208,040	21.4	10.3	16.5
Hamilton	52,634	18.7	9.7	15.4
Ottawa	59,928	27.5	9.5	22.7
London	37,981	18.6	9.3	15.9
Kingston	17,961	17.8	10.2	21.0
Brantford	16,619	25.4	11.1	15.5
St. Thomas	11,485	17.1	12.9	14.5
Guelph	11,496	19.6	8.2	13.6
St. Catharines	9,946	20.9	8.4	16.9
Belleville	9,117	17.1	10.3	16.8
Stratford	9,959	17.4	6.7	13.9
Windsor	12,153	21.2	68.5	15.5
Chatham	9,068	14.5	15.0	15.8
Woodstock	8,833	19.3	8.6	17.1
	475,220	21.1	11.5	17.0

J. J. C.

DR. UZZIEL OGDEN'S JUBILEE.

Dr. Uzziel Ogden, of this city, recently celebrated the fiftieth anniversary of his professorate at Toronto University. It is now a little over fifty years since Dr. Ogden delivered his first lecture in medicine at Dr. Rolph's medical school, and Dr. R. A. Reeve, Dean of Toronto University Medical Faculty, tendered a dinner in his honor a few weeks ago, at which a few medical friends were present to congratulate their confrere on his successful career as a teacher of medicine.

Dr. Ogden began to study medicine in 1845 in the Toronto School of Medicine, Dr. Rolph at its head, the lecture hall being a part of Rolph's stable. The dissecting room was in the loft above. In 1849, Dr. Ogden took his license from the Medical Board and at once went to the then village of Aylmer, Ont., where he quickly acquired a large practice. The three years or more spent at Aylmer were full of associations pleasant to be remembered, and that Dr. Ogden has not been forgotten was evidenced by an invitation received last autumn urging him to be present

at an anniversary of the Bible Society, the Aylmer branch of which he had helped to organize, and of which he had been the first president. In 1852 Dr. Rolph went into the Government, and his colleagues were left to look about for fresh forces to strengthen the Faculty. At a consultation held over the matter, Dr. Joseph Workman said, "If you can persuade Ogden to come back to Toronto and go into the School, you will make it a success." An invitation to return was at once sent to him, and after some consideration, at the cost of giving up a lucrative practice, he consented to take a place in the School. After his return he

DR. UZZIEL OGDEN.

took his M.D. at Victoria College, and entered Toronto University as an occasional student, where he attended lectures for two or three years, on subjects calculated to help him in his own lecturing. He first took the chair of Physiology, afterwards transferring to Materia Medica, Therapeutics and Midwifery. After some years additions were made to the Faculty, and the chair of Midwifery was assigned to Dr. Hodder. On the death of Dr. Hodder, other additions were made to the Faculty, Dr. Ogden handing over to the newcomers Materia Medica and Therapeutics and again taking Midwifery and Diseases of Women and Chil-

dren. This position he held until the establishment of the Medical Faculty in the University, seventeen years ago, when he was appointed to the newly-established chair of Gynecology, which he held until his resignation in January of this year.

In 1853 he was appointed physician to the Protestant Orphans' Home, just then founded, through the generosity of the famous singer, Jennie Lind, a position held by him for nearly thirty years. More than once substantial tokens of appreciations from the Board of Management attested to his faithfulness and tenderness in the care of his little patients, and he was also made a member of the staff of the Sick Children's Hospital when that institution was first established, and was appointed to the staff by the Board of the Home for Incurables at its beginning. He was appointed physician to the House of Industry in 1861, a position which he still fills, and was made a member of the staff of the General Hospital in 1878, having twice previously refused appointment in favor of his friends, Henry H. Wright and W. T. Aikens.

He was Dean of Victoria Medical Faculty from 1880 until the College went into confederation with the University of Toronto in 1892. He was also Dean of the University Faculty for three years. He was a member of the old Provincial Medical Board of Examiners for many years, at one time holding the position of secretary. He was for a time editor of the *Canadian Journal of Medical Science*, now known as the *Canadian Practitioner*.

One by one the University of Toronto has lost from its staff four men, giants in their day, H. H. Wright, W. T. Aikens, James H. Richardson, and Uzziel Ogden—men of whom any medical school and city may well be proud—whose places a younger generation strive to fill.

From the apprenticeship and saddle-bags of the old-time doctor to the modern physician, with his automobile; from a loft in the stable to the palatial dissecting room of the Biological Department, seems a far cry, yet such are the extremes in the professional life of Dr. Uzziel Ogden, who has, after over half a century as a teacher of medicine, resigned the chair of Gynecology in the University of Toronto.

To have taught and to have practised medicine for the fifty years during which the healing art has made its greatest advances; to have seen the introduction of chloroform, ether and cocaine, to

have realized the marvels of antisepsis and asepsis, to have witnessed the growth of abdominal surgery, and the wonders of the Roentgen rays, is a lot one may well envy him.

Dr. Ogden has always been known as a thorough and conscientious teacher to whom the practical was of greater importance than the theoretical, whose first and last consideration was not the self-glory of the lecturer, but the education of his students, and the welfare of their future patients. Naturally shy and diffident, Dr. Ogden has always been free from the vulgar desire to shine in the public eye, but who shall estimate the influence of one who has had a hand in the education of nearly three generations of practitioners.

May he in retiring from the professional chair long continue to enjoy the *otium cum dignitate* so worthily won, his teaching ever green in the memory of his students, his life and example their emulation.

W. A. Y.

IS MENTAL ILLNESS A CRIME?—SURELY NOT.

Again has come to the public notice the heart-rending condition of Toronto's insane, when poor, while awaiting (?) admission to one of the asylums. For the benefit of those who reside elsewhere may we repeat again briefly the facts of the situation: If a person of means becomes insane, their family can pay two physicians, and if they in turn pronounce the case a suitable one, the person is immediately admitted (if there is any room at all) to a "pay ward" in one of the Insane Asylums. If the unfortunate person, however, be very poor, he is placed under arrest, driven in a patrol waggon to the police station, arraigned before the magistrate, referred to the jail physician, and, if pronounced insane, confined in the county jail, awaiting a possible recovery, it may be, years hence. The asylums, in the free wards, are filled almost to overflowing, and even the recent opening of "Rockwood" Hospital for the Insane at Kingston, has only temporarily relieved the congestion. Now, here's the rub: the poor, mentally diseased one must remain indefinitely in the ward in the jail until room somewhere can be made for him. Is not this surely putting the misfortune of a mind diseased on a par with crime?

The Provincial Government, on the one hand, say they have done what they can to provide asylums (which we much prefer to

call Hospitals for the Insane), and that it is the duty of the city of Toronto to provide a tarrying place for its insane paupers until they can be made room for in the regular Institutions—and so the fight goes on, and the poor victim suffers, grows hopelessly incurable, and often dies amid shamefully unsuitable surroundings. In the name of humanity, cannot some one Corporation do something, no matter whether it is clearly defined as under their departmental duty or not? If not—will not another Carnegie, a Canadian this time, arise and erect an Institution for the temporary accommodation of such unfortunates?

All hats off to our confrere, Dr. John Noble! He has recently had something worth saying on this subject in his capacity as alderman, and he has spoken in clarion tones. Let something more than an echo be his answer. W. A. Y.

EDITORIAL NOTES.

Etiology of Infantile Scorbutus.—This disease, which has been described by Barlow, is said to be much more common in the United States than in Europe. It is almost solely confined to hand-fed infants, especially those reared on infant foods, including condensed milk, etc. An investigation of the American Pediatic Society (*Medical Record,* July 2nd, 1898) showed, that of 379 cases, the majority occurred between the ages of 7 and 14 months, inclusive, and that the disease has a greater tendency to occur among the children of the well-to-do. One of this committee's conclusions was as follows: "The farther a food is removed in character from the natural food of a child, the more likely its use is to be followed by the development of scurvy." Baginski reports that although infantile scurvy is partially observed in infants fed on sterilized milk, it has also occurred in other infants nursed at the breast. It seems to be generally recognized as true that repeated heating and overheating of the milk used in feeding hand-fed babies, exercises a powerful etiologic function in developing this disease. Some observers think that over-feeding constitutes an etiological feature of the disease. Budin, of Paris, says that it would be more satisfactory to all concerned if pediatrists would, when reporting cases of Barlow's disease, give particulars not only as to the kind of milk employed, but also the quantity of milk used.

Do Mercury and Iodide of Potassium Penetrate Beyond the Meninges?—Several physicians in France have made observations on this important question, notably Dr. Sicard, and recently Drs. Lannoy and Leroux. Dr. Sicard says that the meninges are impermeable to these remedies. In one case only of chronic hydrargyrism, reported by Dr. Raymond, had Dr. Sicard been able to discern minute traces of mercury in the cerebro-spinal fluid. In two other cases of chronic hydrargyrism arising from professional avocations, not so well marked as the preceding one, no mercury could be found. Chemical analysis similarly failed to reveal any trace of mercury in the cerebro-spinal fluid of three patients who had tabes and had been put on an intensive treatment by injections of gray oil, these results made with gray oil coinciding with those made by Drs. Lannoy and Leroux with calomel. Dr. Sicard thought these results might help to explain the uselessness of mercurial treatment in checking the progress of certain syphilitic affections of the nervous system. He even went so far as to say, that they might justify the employment of subarachnoid injections of soluble mercurial salts in cases of syphilis of the nervous system, which had proved rebellious to all kinds of treatment.

A Compliment to Parke, Davis & Co.—In *Progrès Médical*, January 10th, 1903, appears a lengthy paper entitled, "The Employment of the Extract of Suprarenal Capsules and its Alkaloid Adrenalin," by Dr. Suarez de Mendosa, which was read before the Society of Medicine of Paris, 27th December, 1902. After quoting from the literature of the subject remarks made by several writers on the use of adrenalin in internal medicine, he proceeded to show from his own experience, its great hemostatic powers in the surgery of the eye, ear, nose, and throat. He stated incidentally that he has used in his practice the solution of adrenalin, 1-1000, made by Parke, Davis & Co., of London, and another preparation made by Clin & Co., of Paris, which had also given satisfaction. For a French surgeon speaking to Frenchmen, at a regular meeting of a scientific society, this notice of an American pharmacist is flattering. We reproduce it in this journal with pleasure.

Intimate Relations Between the Heart and the Lungs.—In *Wiener Medicinische Wochenschrift*, June 14, 1902, Burwinkel alludes to the intimate relations existing between the heart and the lungs. In a certain sense the functions of the heart and the lungs

supplement each other; for instance, when the activity of the heart is lessened, the increasing activity of the respiratory function annuls the hurtful influence of pulmonary stasis by increasing the activity of the process of oxidation. It has for a long time been noted that consumptives are immune to valvular heart affections. On the other hand, patients who have a hereditary tendency to cardiac weakness, to gout, to arterio-sclerosis, offer a bad soil for the growth of tuberculosis, but of 1,225 autopsies Burwinkel found only 52 tubercular cases, which revealed the lesions of arterio-sclerosis, and in 27 of these cases the arterial degeneration had assumed the most chronic character, and appeared quite stationary. Burwinkel thinks that emphysema is a cause of arterio-sclerosis. Two factors, according to him, predominate in the genesis of arterio-sclerosis: a slowing of the blood circulation in the walls of the blood-vessels, and an alteration in the liquor sanguinis. Both these conditions are observed in emphysema.

Hypertrophic Cirrhosis and Chronic Icterus.—Dr. Gerundel, who has studied histologically two cases of Hanot's disease, reports as follows: In spite of an evolution of several years (six years in one case, three years and a half in the other), an examination of sections of these livers, in a series, revealed the complete integrity of the biliary passages. Neither angiocholitis nor periangiocholitis could be discovered, and Glisson's nodules (inflammatory nodules) were quite independent of the biliary passages. He concludes, therefore, that it is impossible to trace the sclerosis as well as the chronic icterus observed in cases of this disease to a prior biliary lesion. Consequently the term biliary cirrhosis cannot be applied to this category of facts, and the icterus present should be ascribed to the hepatic cells. Dr. Gerundel thinks that the icterus present in Hanot's disease is derivable from the secreting and not from excreting element of the organ,—is a hepatitis and not an angiocholitis.

A Notable Work in Medicine.—Dr. Sajous, of Philadelphia, whose "Analytical Cyclopedia of Practical Medicine" is favorably known, is about to issue an important work, dealing with modern views as to the true origin of diseases and diseased conditions, and also the methods by which therapeutic agents control these morbid manifestations. We have had the privilege of looking over advanced sheets of the preface and summary of con-

tents of the first volume, which would seem to suggest "that the ductless glands afford elements for future labors leading to a new era in practical medicine." Special pharmaco-dynamics and physiological pathology, both subdivisions of Applied Therapeutics will be considered in the second volume. Dr. Sajous writes to say that the first volume will appear in the latter part of February, and the second one a few months after the first one. The work promises to be highly interesting and instructive.

Relative Merit of Butter or Oil in Cookery.—Recent experimental work done by P. Carnot and Miss Deflandre show that subsequent to the digestion of fatty matters, the quantity of liver fat revealed by the action of osmic acid on a section of liver substance was considerable. The quantity of fat obtained from the liver was much greater after the ingestion of butter than after cod-liver oil, and particularly neat's-foot oil. Vegetable oils, such as olive oil, are not so well assimilated by the liver as animal oils. In one experiment, for instance, the proportion of liver fat, which was 7.03 per cent. six hours after the ingestion of 10 grams of butter, was only 2.60 per cent. six hours after the ingestion of 10 grams of vegetable oil. From the superior ease of assimilation possessed by animal oil over vegetable oils, the advantage of the former for culinary use is readily established.

Action of Quinine on the Uterus.—After the inception of labor quinine frequently seems to stimulate the uterine contractions. It also increases a scanty menstrual flow. There appears to be no authoritative evidence that quinine is an abortifacient. O. Frecrici reports in *Clinica Osletrica* that, during the summer of 1901, he treated several pregnant women with quinine, which was required for malarial attacks. There were in all 49 cases—in 47 the cases terminated normally in the birth of a living child. Two of the patients miscarried. Frederici thinks that miscarriage resulted in these cases from the severity of the fever. He thinks that medical doses of quinine cannot cause miscarriage, and that this drug may be safely given during pregnancy. J. J. C.

A Man Worthy of the Honor.—To-day as an inspiration, and to-morrow, perchance, as a lasting memory, the pupils of the venerable and respected James H. Richardson wish, by the help of an artist through the media of canvas and brush, to have looking

down on them from the walls of Varsity the face of their old teacher in Anatomy. The pleasure will indeed be unalloyed, as the original and the copy are to be placed, we believe, *vis-a-vis* at the dinner table on the presentation evening, where an almost unprecedented toast is to be honored—think of it—to the health, happiness, and continued usefulness of the physician who for fifty years has been the able and convincing teacher of Anatomy in Toronto. W. A. Y.

Regulations of the Provincial Board of Health Respecting Diphtheria and Scarlet Fever.—Readers of this journal, who are interested in the new regulations respecting diphtheria and scarlet fever, will find a text of these regulations quoted in full in our report of the first quarterly meeting of the Provincial Board of Health of Ontario. (*Vide* page 186.)

An Erratum.—An error occurred in a quotation from Dr. Amyot's report of the analysis of Berlin sewage (CANADIAN JOURNAL OF MEDICINE AND SURGERY, Feb., '03, p. 131). Instead of "parts per 1,000,000," it should have been "parts per 100,000." All the other figures are correct.

PERSONALS.

SINCLAIR.—At Woodstock, February 14th, the wife of Dr. D. J. Sinclair, of a son.

DR. MACNAMARA was reappointed Medical Health Officer of Toronto Junction last month.

THORBURN.—In this city on the 12th ultimo, the wife of J. D. Thorburn, M.D., of a daughter.

MACLEAN.—At Meaford, on Monday, February 16th, 1903, Surgeon Lieut.-Col. Caird Ryerson Maclean, in his 66th year.

DR. C. M. FOSTER, of 1101 Yonge Street, and his sister, Miss C. Foster, left for Boston, to sail on the 18th ult., for Jamaica, to spend a couple of months or more.

THE following Canadians were successful at the recent January examination in medicine and surgery for the membership degree, M.R.C.S. and L.R.C.P. of London, England: R. C. Redmond, Lansdowne; W. T. Frizzell, M.B., Owen Sound; Drs. Pope and Robinson, Montreal.

Dr. J. Algernon Temple expects to move into his new residence on Bloor Street West next month.

Dr. G. R. McDonagh left for the South on the 9th ult., but will return and be in his office again on the 15th inst.

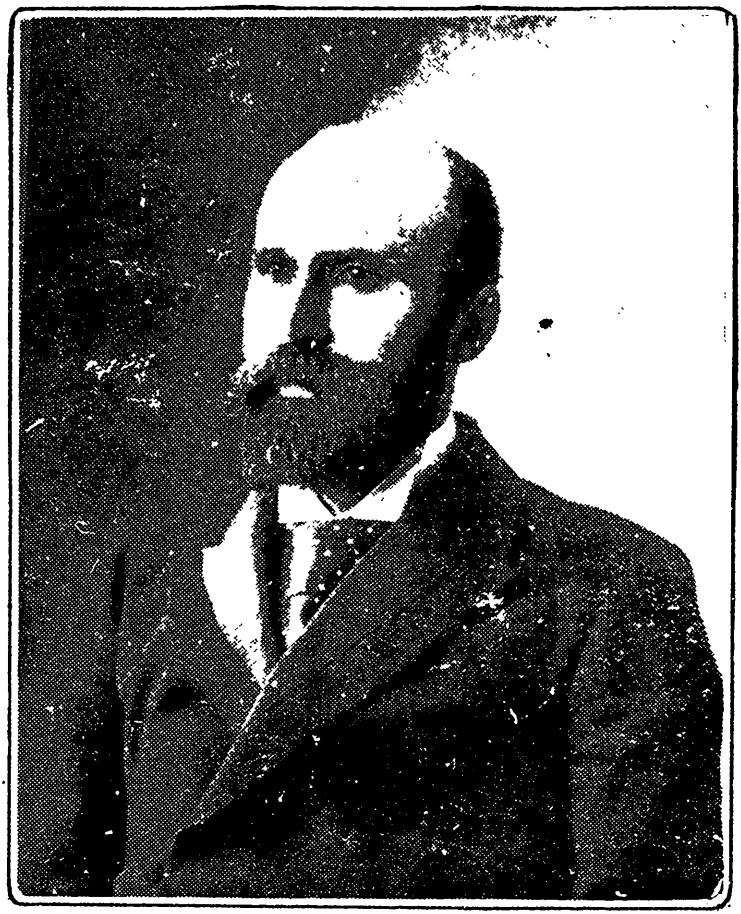
We are glad to be able to announce that Dr. J. H. Lowe, of 154 Crawford Street, has recovered from his recent illness.

Dr. Perry G. Goldsmith, of Belleville, has been appointed oculist and aurist to the Deaf and Dumb Institute of Ontario. We think those responsible for making this appointment have done the institute a good turn in choosing Dr. Goldsmith, who is now looked upon as a very able practitioner in diseases of the eye and ear.

Dr. R. B. Granger, for many years managing editor of the *New York Medical Journal,* wishes to inform his medical friends and acquaintances that he has become associated with the medical publishing house of W. B. Saunders & Co., of Philadelphia, as its representative in New York city. A fine set of offices has been opened in the Fuller Building, at the junction of Fifth Avenue, Twenty-third Street and Broadway, where he will be happy to receive all who honor him by calling.

The Canadian Medical Exchange for the purchase and sale of medical practices and properties, under the charge of Dr. W. E. Hamill, is an important department of medical affairs, and is of great service and benefit to those who wish to buy or sell a practice, and it is fortunate that it is in the hands of such an able business confrere as Dr. Hamill, who has for 10 years proved himself an expert along medical transfer lines, and we advise our readers to take advantage of his accumulated experience when wishing to either buy or sell a medical practice.

Dr. J. Orlando Orr was appointed on February 7th Manager and Secretary of the Industrial Exhibition. Dr. Orr, who is in his forty-second year, is the son of Mr. W. A. Orr, now of Parkdale, but formerly a farmer in Vaughan Township, where the new manager was born. Dr. Orr's first public school teacher was Mr. W. J. Gage, head of the well-known and prosperous firm of W. J. Gage & Co., Limited. After passing through the public school and Grammar School, the doctor graduated from the University of Toronto, and afterwards took a course in bacteriology and public health at King's College, London, Eng. He first entered the City



DR. J. ORLANDO ORR.

Council, as alderman, in 1890, and was re-elected for 1891-92-93, retiring after the completion of the latter term, and making a tour of Europe. For two years he was chairman of the Parks and Exhibition Committee of the City Council, and was the first chairman of the Technical School Board. He has been actively associated with the Exhibition almost since he entered the City Council, and was vice-president of the board during the past year. His fellow-directors have always had the greatest confidence in him, and they believe events will amply justify their unanimous choice of him as manager and secretary. We congratulate Dr. Orr on his appointment.

Items of Interest.

Polk's Medical Register.—The eighth revised edition of this well-known work is now under way, and will appear in due time. Send for descriptive circulars, and do not be deceived by imitators. Polk's Medical Register and Directory has been established sixteen years. R. L. Polk & Co., Publishers, Detroit, Mich.

Russian Universities.—The Report of the University of Jurjew (Dorpat) for 1902 shows that during the course of that year the degree of doctor of medicine was conferred on six, and the diploma of medical practitioner on 144 persons. The total number of students on the books of the University of Kieff in December, 1902, was 2,441. Of this number, 537 belonged to the Medical Faculty.

Torontonians Granted License.—The following Toronto graduates were, at a meeting on February 2nd, granted licenses to practice physic in England by the Royal College of Physicians: G. W. Badgerow, Toronto and University College, London: W. T. Frizzell, Toronto and University College London; S. H. McCoy, Toronto University; Mr. G. W. Howland, B.A., M.B., Toronto, L.R.C.P., Toronto Hospital and University, was admitted a member of the College.

A Famous Surgeon's Retort.—Sir James Paget, the famous surgeon who attended Queen Victoria, was staying at a country house with another surgeon of great fame, and somehow the talk had turned on the number of letters which each received. When the post arrived only one or two letters came for Sir James Paget, while his friend received an imposing batch. The friend proudly called attention to his mail, and Sir James Paget, with a twinkle in his eye, observed, "Yes, but I see yours are all in black envelopes."

Dr. Munroe is Dead.—Dr. D. Munroe, one of the most prominent physicians of Perth, Ont., died suddenly on February 6th, at his home of heart failure. He was born in the township of Lanark, and was a son of the late Dr. D. Munroe. He practised his profession in Lanark village until about the year 1882, when he moved to Winnipeg and practised in that city for a short time. Returning for his family, he was prevailed upon to remain and practice in Perth. Deceased was 61 years of age, and leaves behind him to mourn his loss a widow and two daughters.

Congress of Russian Surgeons.—The Congress of Russian Surgeons held its third meeting at Moscow from December 30th, 1902, to January 2nd, 1903, under the presidency of Professor W. Rasumowski, of Kasan. About eighty surgeons attended the Congress. The principal subject of discussion was the treatment of surgical tuberculosis. The next meeting of the Congress will be held at St. Petersburg in 1904.

Medical Faculty of Toronto University Seeks Money to Complete Building.—A deputation representing the medical faculty of the University of Toronto waited on Premier Ross on February 9th, and asked for an additional loan of $50,000 to provide for the completion of the new building. The previous arrangement was for a loan of $125,000. The deputation included Dean Reeve, Dr. John Hoskin, Chairman of the Board of Trustees; Drs. McCallum, Mackenzie, McPhedran, Primrose and Starr. The Premier received the deputation very courteously, and made what amounted to a promise that the money would be forthcoming.

Memorial to Professor John Young, Glasgow.—Steps are being taken to raise a memorial to the late Dr. John Young, Professor of Natural History in the University of Glasgow, and a committee of about sixty members has been formed for the purpose of carrying out the intention. The committee is very desirous that all old friends and pupils of Professor Young should have this matter brought to their knowledge so as to give them the opportunity of contributing if so disposed. It is intended that the memorial shall be identified with the Hunterian Museum (founded by Dr. William Hunter) in Glasgow University, and that it shall include a likeness of Professor Young.

Deaths in the Profession Abroad.—Among the members of the medical profession in foreign countries who have recently died are Dr. Isidor Albu, of Berlin, some time professor in the Medical School of Teheran, Persia, aged 67; Dr. Alfred Kast, Professor of Medicine and Director of the Medical Clinic in the University of Breslau, aged 46; Dr. Bernardo de Serra da Mirabeau, for many years Professor of Physiology, and some time Dean of the Medical Faculty in the University of Coimbra, aged 87; Dr. M. Lawdowski, Professor of Histology and Embryology in the Military Medical Academy of St. Petersburg; Dr. M. V. Pereira, Professor of Clinical Surgery in the University of Bahia; and Dr. Carl Wenzel, formerly Surgeon-General of the German Navy, aged 71.—*Lancet.*

Gravenhurst Sanitarium in Need.—The Executive Committee of the National Sanitarium Association has issued an open letter, asking for aid for the Hospital for Consumptives at Gravenhurst. The letter states that the pressure on the increased accommodation has become very great, and further admissions are necessarily

refused, until further extensions are made. Buildings to accommodate at least fifty more patients are said to be immediately required. The institution has now an overdraft of $10,709 in the Imperial Bank, and the estimated shortage between revenue and maintenance account for the year is $20,000, making total obligations of $31,709. The cost of the increased accommodation required is placed at $10,000, so that $41,709 is required by the association. Subscriptions may be sent to the National Trust Co., King Street East, Toronto.

Toronto University Senate.—At the last meeting of the Senate of the University of Toronto a statute was passed providing that the gift of $200 from the Board of Trade of the city of Toronto should be divided into two scholarships of $60 and $40 respectively, to be awarded to the students who matriculate and enter on the commercial course in October, 1903, and into two scholarships of the same amount, to be awarded at the examination on the first year's work in May, 1904. The examiners in pharmacy for 1903, are as follows: Pharmacy, Dr. Harrison; prescriptions and dispensing, Dean Heebner; chemistry, Dr. Chambers; materia medica, Dr. Fotheringham; botany, Dr. Paul Scott. Miss A. M. Rowson has been appointed examiner in French and German for agriculture. I. H. Rumble and J. H. Roebuck were admitted to the degree of B.A., and W. H. Anderson to that of M.B.

Foreign Practitioners in Spain.—The Spanish law of September 9th, 1857, gave to the Government, acting on advice of the Council of Public Instruction, power to recognize medical studies pursued abroad, and to grant to persons holding a regular diploma obtained in another country the temporary right of practising medicine in Spain. On the downfall of Queen Isabella, a more liberal spirit prevailed, and on February 6th, 1869, Senor Zorilla issued a decree declaring that foreign degrees should be held as equivalent to Spanish, and granting foreign doctors the right to practice in Spain, on production of their diplomas and payment of 500 pesetas ($100). This ministerial order has recently been rescinded. A royal decree, dated November 7th, 1902, revives the law of 1857, but suspends its application till a new ordinance has been promulgated. Foreign doctors now practising are to be compelled to comply with the new enactment within six years.

Reed & Carnrick's New President.—Reed & Carnrick are to be congratulated upon the election of Dr. Edwin Leonard, Jr., to the presidency. This action is along the line, which we have attained, that a sharp demarcation must be drawn between reputable pharmaceutical houses and those mushroom growths, which treat the physician in a most unethical fashion. The election of Dr. Leonard, who is an alumnus of Amherst, and received his

medical degree from Harvard, and has had years of training in three of the largest and best-known hospitals of Massachusetts, and is also a member of the American Medical Association, the Massachusetts Medical Society, and other similar medical and scientific societies, starts a new and pleasing era that sooner or later must be followed by other reputable houses, *i.e.,* that the control of pharmaceutical products should be in the hands of trained medical men. We feel assured by the action on the part of Reed & Carnrick that the high standard of their products will be maintained.

Contract Medical Practice.—The *Fleetwood Gazette* states that the medical men of Fleetwood have notified the members of the Oddfellows, Mechanics, Rechabites, and Orangemen lodges that in future the rate for medical aid must be 4s. a member, with a fee of 1s. for each adult member examined on entrance to a lodge. At a joint meeting of the members of the lodges, held recently, it was decided, after a long discussion, to offer 3s. 6d. a member; and it was suggested that if this was not accepted the services of a medical man should be obtained for the different societies, and that he should be guaranteed a salary of £180 a year. The rate of 3s. 6d., we are informed, has not been accepted by the medical men, and every one who has looked into this question must be aware that such terms cannot be remunerative. It appears that the clubs in Fleetwood have hitherto been paying 2s. 6d. a year, and have thus existed through the charity of the medical profession. In our opinion it is a disgrace to working men who desire independence and fair dealing to offer such rates.

"Biochemisches Centralblatt."—The great strides made in medical chemistry and in those fields of medicine verging on chemistry necessitated the publication of a central organ. This is now published in Berlin by Carl Oppenheimer, under the direction of Ehrlich, Fischer, Kossel, Liebreich, Muller, Proskauer, Salowski, and Zuntz, and they have appointed Heinrich Stern, of New York, editor for the United States and Canada. The object of the publication will be: (1) To report such experiments and observations of physical and employed chemistry, which are of importance to the physician. (2) Reports on the physiology of plants. (3) Physiological chemistry in the narrower sense (constituents of the body and their derivates). (4) Chemistry of the tissues and organs under normal and pathological conditions. (5) Chemistry of digestion, secretions and excretions, metabolism and blood. (6) Ferments and fermentations, toxins of a non-bacterial nature. (7) Chemistry of the pathogenic, micro-organisms (toxins, antitoxins), phenomena of immunity. (8) Toxicology and pharmacology. (9) Hygienic chemistry, disinfection, examination of water. As this is the only international organ devoted

to these scientific fields, American observers and investigators will find it to their interests to prepare abstracts of their papers which have appeared since January 1st, and will appear hereafter, and send them to Heinrich Stern, No. 56 East Seventy-sixth Street, New York City.

Two Retirements from McGill University.—The action of the Board of Governors of McGill University, in retiring Dean Johnson and Professor Clark Murray of the Faculty of Arts is defended by Principal Petersen. He remarked that in almost every university it was the custom of the Governing Board to fix an age limit at which professors might or might not be pensioned off, according to the option of the Board. In several institutions this age limit was fixed at 66 years. No such limit, however, had been placed at McGill. On the contrary, it was felt that the question of age was one that should be largely left to the discretion of the Board of Governors. No professor, said the Principal, had a right to expect that he would be continued in service until he dropped in harness. With respect to the retirement of Dean Johnson and Professor Clark Murray, the Principal stated that the conditions governing such retirement were considered to be most generous. Each would remain in active service until September next. Then their active connection with the University would cease. But for two years longer they would each receive their present salary in full. Then they would be paid an adequate and generous pension. Dr. Petersen denied that it was the intention of the University authorities to retire all their old professors. It was learned that Dean Johnson and Professor Murray were permitted to resign, and that their resignations were accepted at a special meeting of the Board of Governors on Tuesday last.

The Uselessness of Kernig's Sign.—In 1884, when Kernig described what is now known as his sign, *i.e.*, inability to extend the leg passively and fully when the thigh is flexed at right angles to the body, he asserted that it was pathognomonic of some form of meningitis. Afterward, from time to time, various observers noted its presence in cases of epidemic cerebrospinal meningitis and tubercular meningitis. But it was not by any means constant in either form of the disease. In 1898 Netter again discussed the regular presence of this sign in all cases of meningitis. These statements led to renewed investigations, and the results have not been at all similar. Men who have written books, Rotch, Griffith, Holt Cromby and others, state that it may or may not be present in meningitis. Some find it more often in epidemic, others in tubercular meningitis, but never constantly in either. In a recent article, Randolph (*American Medicine,* November 8, 1902) says that he has found Kernig's sign in a great number of patients with other

diseases, in fully 60 per cent. of children suffering from various disorders, and most observers agree with him. In fact, many clinicians have observed that, in conditions in which there is rigidity of all the muscles, Kernig's sign is often easily elicited. But it is never found in healthy, active children. Randolph explains that, when the cerebellum is irritated, this sign is present in cases of meningitis; when it is absent the meningitis is probably not situated near the cerebellum. But from all this there remains one simple conclusion, namely, that, as a symptom either of tubercular meningitis or of epidemic cerebrospinal meningitis, the presence of Kernig's sign, since it may or may not be present, and is often elicited perfectly when there is no question of meningitis at all, is absolutely useless in diagnosis.—*Philadelphia Medical Journal.*

Serum-Therapy in Typhoid Fever.—Over a year ago Chantemesse published his first article showing the results of his antityphoid serum in the treatment of typhoid fever in Paris (*Bulletins et Memoires de la Societe Medicale des Hospitaux de Paris*, November 15, 1901). At the Egyptian Medical Congress, held last month, he reported later results from April, 1901, to December, 1902 (*La Presse Medicale*, December 24, 1902). A review of the statistics of the various hospitals of Paris, omitting that under the direction of Dr. Chantemesse, showed that the combined mortality from typhoid fever was 19.3 per cent. While there were naturally variations, the lowest recorded mortality in any hospital exceeded 12 per cent. In the hospital in Dr. Chantemesse's charge, where serum-therapy was adhered to in every case, there were but 7 deaths out of 186 patients, a mortality of 3.7 per cent. Other treatment employed was practically the same in all the hospitals. Three out of the 7 deaths were due to perforation, one to purulent peritonitis, and one to intestinal hemorrhage. All these patients came under treatment late in the disease. Chantemesse has noted no complications in patients coming under treatment early. So necessary does he consider immediate serum-injections that he gives them even before the diagnosis is certain, for 2 cc. can do no harm. So far in Paris 356 patients have received this serum-treatment, with but 17 deaths, a mortality of 4.7 per cent. At Toulon, out of 151 patients treated, 13 died. Adding this, the mortality was 6 per cent. The German army statistics, always held up as a model in France, give a mortality of 9.5 per cent. in typhoid fever. Chantemesse explains the effect of this serum in that it is not only both anti-infectious and antitoxic, but, above all, it excites phagocytosis. Thus it is almost specific in typhoid fever. Besides, he calls attention to the necessity of isolating typhoid fever patients for the protection of other patients. This he considers an important means of prophylaxis.—*Philadelphia Medical Journal.*

The Topical Treatment of Specific Vaginitis.—Gonorrheal vaginitis is, and ever has been, the *bete noir* of the gynecologist. Rebellious to the treatment, the pharmacopeia has been ransacked to furnish remedies to control the disease, and not with the best of success. Of all the older medicaments that have been employed there is but one that has consistently given any degree of satisfaction. Silver nitrate, when applied directly to the spots of active inflammation, has been instrumental in arresting the progress of the disease. Solutions of the strength of 10 to 15 per cent. have been largely used for this purpose. A few years ago Doederlein and other German gynecologists claimed that by the use of silver nitrate in very strong solutions they could abort an acute gonorrheal vaginitis. Under local or general anesthesia the vagina was painted from the fornices to the vestibule with the silver salt, in a solution of one dram to the ounce. Owing to its severity, this method has not come into general favor. The suggestion, also made by Doederlein, that the restoration of the acid environment in the vagina would result in the cure of chronic vaginitis, has not been altogether substantiated. According to this authority, the normal bacilli of the vagina secrete a lactic acid which is inimical to the growth of pathogenic germs. Accordingly, he introduced various solutions (one to 5 per cent.) of lactic acid into the diseased and alkaline vagina. This method has been tried by others with varying degrees of success. A 2 per cent. solution is as strong as it should be applied in order to avoid a cauterizing effect. Many of the newer silver salts have been used with considerable satisfaction in recent years. Especially is this true of protargol in a 2 per cent. solution, argyrol in a 2 per cent. solution, and itrol in preparations of weak strength. Under the action of these silver salts the vaginal mucosa does assume a condition much nearer the normal. Probably, however, the best results in the chronic cases of this disease have followed applications of trichloracetic acid (1 per cent. to 2 per cent) and methylene blue (1 per cent.), especially the latter. Painting of the vagina by methylene blue from the vault to the vestibule once or twice weekly has been most prompt in arresting the disease and restoring the character of the mucous membrane. A curious feature associated with this treatment is the rapid discoloration of the painted mucosa. Although of an intense blue color at the time of treatment, within twenty-four hours the normal coloration will be restored.—*Philadelphia Medical Journal.*

DR. R. LORNE STEWART, who enjoyed a lucrative and extensive practice in Bolton for a number of years, has recently moved to Toronto and located at the corner of Gloucester and Church Streets.

The Physician's Library.

BOOK REVIEWS.

Modern Eloquence. A Library of Famous After-dinner Speeches, Classic and Popular Lectures, the best Occasional Addresses, Anecdotes and Short Stories. Ten volumes. Hon. Thos. B. Reed, Editor-in-Chief, in collaboration with Hon. Justin McCarthy, M.P., Rossiter Johnson, Albert Ellery Bergh, assisted by fifteen distinguished gentlemen as a Committee of Selection. Elaborately indexed; profusely illustrated. Philadelphia: John D. Morris & Co., 1201 Chestnut Street.

This work is without precedent, and no matter how large one's library, it will not duplicate a single volume. For the first time the best after-dinner speeches, lectures, addresses, anecdotes, reminiscences and repartee of America's and England's most brilliant men are collected, edited, arranged, by an editorial board of men, themselves eloquent with word and pen—friends of Mr. Reed, who have achieved eminence in many fields of activity. North, South, East and West, and the Mother Country as well, have been searched for masterpieces in every field of eloquence. The work is enticingly entertaining, but it is much more; American literature does not elsewhere afford so valuable an exposition and discussion of the important events and questions of national history, nor as many specimens of purity and grace of style, and beautiful and classical English. The work contains a perfect wealth of information, and is a wise purchase at double the figure asked for it. There are seven special articles, however, by the editor-in-chief, and six of his associates, worthy of special comment. "The Influence and History of Oratory," by the Hon. Thomas B. Reed. A very comprehensive and instructive article by the editor-in-chief, on the various forms of oratory—the after-dinner speech, the lecture, the literary address, the commencement address, the eulogy, etc. This article will prove exceedingly valuable to young men. "Introduction," by Albert Ellery Bergh. This is written from the standpoint of an associate editor; but it is more than an introduction; it displays a general experience in the highest fields of literature, and a very intimate acquaintance with the vast literary labors involved in gathering,

editing and classifying "Modern Eloquence." "After-dinner Speaking," by Prof. Lorenzo Sears. Prof. Sears, of Brown University, is the foremost American authority on after-dinner speaking, and in the article he has written for "Modern Eloquence" he traces from primitive days to the present, and in a most charming manner, man's tendency toward the combination of feasting and speech. Prof. Sears also gives many very practical and helpful suggestions, and much wholesome advice to the after-dinner speakers. The reader of his masterful and entertaining article will acquire a thirst for the great gems of post-prandial oratory contained in this library. "The Lecture and the Lecture Platform," by Edward Everett Hale. From a long and intimate acquaintance with the lecture and with lecturers, this king of the platform combines an interesting narrative and valuable suggestion in a very happy manner. "Literary and Occasional Addresses," by Hamilton Wright Mabie. This article by the noted author and essayist affords an admirable introduction to the department in which are presented specimens of those polished and highly instructive addresses which occupy such a fitting place in this series. "Wit, Humor and Anecdote in Public Speech," by the Hon. Champ Clark. Another happy selection. Since the death of "Sunset" Cox, probably no other man in America—certainly no other man in public life—could write on this subject from such a boundless fund of experience and genius as the distinguished Congressman from Missouri. "The Eloquence of the Stump," by Jonathan P. Dolliver. The eloquent Western Senator deals most instructively and skilfully with the subject of "Campaign Oratory." He furnishes bounteous entertainment, enlightens with reminiscence, and makes suggestions which might profit the most skilled and famed campaigner. The set is complete in ten sumptuous volumes, uniform in size and appearance. The type is a Caxtonian old style, a clear black letter, cast especially for this work. The paper is made by contract especially for this work. It is soft and smooth, of medium weight, high quality, and is ultra-durable. It will never crack or fade. The printing is done with scrupulous care. In order to ensure the most perfect register and impression, the presses are run at half-speed in printing this edition, and only half the usual number of pages are printed in each "form." The illustrations are printed by hand from engraver's original plates on Imperial Japanese vellum. Great attention has been paid to the selection and reproduction of the illustrations. They are executed in photogravure, full-page size. There are seventy-five of them, all direct "positive" reproductions from original sources, without the usual intermediate steps of one to three "negatives," in each of which some detail would be lost. There are three styles of bindings—fine English art cloth, three-quarters Persian morocco, and full Persian mor-

occo. Each binding has gold tops, and is stamped in gold from specially made designs befitting the nature of the work. Write to John D. Morris & Co., publishers, 1201 Chestnut Street, Philadelphia, for sample pages, etc.

A Manual of Medicine. Edited by W. H. ALLCHIN, M.D. (Lond), F.R.C.P., F.R.S. (Edin.), Senior Physician and Lecturer on Clinical Medicine, Westminster Hospital; late Examiner in Medicine in the University of London, for the Royal College of Physicians of London, and for the British and Indian Army Medical Services. Volume IV., Diseases of the Respiratory and of the Circulatory Systems. New York: The MacMillan Company. London: MacMillan Company, Limited. Toronto: The George Morang Company, Limited. 1902. All rights reserved.

This volume contains 493 pages, including the index. There are 32 illustrations, 3 colored plates, a table showing the levels of various structures in the thorax in relation to the spines and bodies of the vertebrae and charts of respiration and temperature curves. The contributors are such well-known men as J. Mitchell Bruce, M.A., LL.D., M.D., F.R.C.P., on Diseases of the Heart and Blood Vessels; Francis DeHavillard Hall, M.D., F.R.C.P., on Diseases of the Pleura; Leonard Hill, M.B., F.R.S., on the Physiology of Respiration and Circulation; Hector Mackenzie, M.D., F.R.C.P., on Diseases of the Lower Respiratory Tract; Lewis Smith, M.D., M.R.C.P., on Disorders of the Upper Respiratory Tract; the Editor, on Disorders of Diaphragm and Dropsy. A physiological introduction to the Respiratory System, the Morbid Anatomy, General Pathology and General Symptomatology, take up the first 138 pages. Diseases of the Respiratory System are then dealt with in a very clear and comprehensive manner. In the section devoted to the Vascular System the same plan is adopted, viz.: A Physiological introduction, followed by the General Pathology, Morbid Anatomy, Physical Examination of the Heart and General Symptomatology. The above arrangement will be found very helpful to a good understanding of the diseases treated. The work is thoroughly up to date, is very concise, and is easy reading. The tubercular test, serum diagnosis, the uses of the X-ray, and the latest advances in bacteriology and blood examination are treated of in connection with the various diseases. We are much pleased with the work, and can highly recommend it to our friends. W. J. W.

Confessions of a Wife. By MARY ADAMS. Toronto: The Copp, Clark Co., Limited.

The book department handed this book for review to one of its bachelor collaborators. Quoth he, what's this? Confessions of a

wife? Same game as the confessions of a converted nun, or confessions of a converted Mormonist? Mary ought to be ashamed of herself, giving the thing away! However, I'll read it, and see why she left him. The bachelor editor thought to shorten his labors, and asked a woman friend, "What sort of a love story is this anyway?" and the answer he got was concise. "Unsatisfactory." So he was forced to read for himself. After he had read the first few chapters, he said, "I see my finish. No young girl is mine! A widow with experience is my fate." This story girl is a regular cloud hunter. But patience had its reward. The cloud hunter develops into the neglected wife, while Hubby goes across the street and flirts with his wife's best friend. Then appears the wife's old lover, true to the very best ideals—and, of course, he was a doctor! Well, he pulled the baby through diphtheria, or something—the fatigue we doctors undergo in pulling patients through things is so tiring—almost as fatiguing as getting there "just in time"—and then he set out on a still hunt after the erring husband. Now, what was the matter with Hubby? You can't guess—you, a doctor, can't guess! Why, he was a hop fiend, of course. Hit the pipe, worked the growler, took morphine. Something lingering for him—cloud-hunters and carbolic acid for me. Yes, it ended happily! The husband reformed, thanks to the doctor, and in a measure regained his wife's affection. After all, the story is interesting. We doctors sometimes deem it necessary to expose by means of the knife even the pulsations of the human heart. We consecrate the action by giving it the name of science. A woman, in this story, draws aside the curtain of silence, and reveals the emotion of her soul, and the world calls her a fool. "Mary Adams" is said to be Mrs. Elizabeth Stuart Phelps, which explains much. J. M.

Medical Microscopy. Designed for Students in Laboratory Work and for Practitioners. By T. E. Oertel, M.D., Professor of Histology, Pathology, Bacteriology and Clinical Microscopy, Medical Department, University of Georgia. With 131 illustrations, some of which are colored. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Canadian Agents: The Chandler & Massey Limited, Toronto and Montreal. 1902.

Dr. Oertel evidently fully appreciates the many difficulties encountered by the student who would learn how to use the microscope so that it should be of every-day practical use to him in his profession. Many of these difficulties will at once vanish, and many disappointments be averted by the careful perusal of this book. Sufficient space is devoted to optics to enable the student to understand with ease all that it is necessary to know about the composition of the lenses. The preparation of the various tissues is thoroughly and scientifically gone into. The student is not told

of a score of different ways in which to prepare any given tissue, but is told simply how best to carry out what he wants to do. One good way is described, and that is made easy and intelligible. A good feature of this part of the book is a simple domestic way of carrying out many experiments, which makes them inexpensive, and places them within easy reach of every enquirer. The subject of urinalysis is written with so much practical care, and detail so fully gone into, that one is almost forced to the conclusion that the writer had his microscope beside him, and saw at the moment of his writing the objects described. Any student or practitioner with a fairly good microscope can follow, step by step, the directions laid down, and can verify the correctness of the statements and of the plates, which latter are numerous, and very well executed. The book is an ideal of simplicity, and can be understood alike by the beginner, and by those who have neglected this branch of study, by reason of active practice and want of proper appliances, and wish again to take it up and fit themselves for the practice of to-day. The microscope as a means of diagnosis is absolutely necessary now, and this little book will teach anyone how so to understand it and its revelations that the greatest possible good may be obtained with the least possible expenditure of time and trouble. A. J. J.

A System of Physiologic Therapeutics. A Practical Exposition of the Method, other than Drug-Giving, useful in the Prevention of Disease and in the Treatment of the Sick. Edited by Solomon Solis Cohen, A.M., M.D., Senior Asst. Professor of Clinical Medicine in Jefferson Medical College; Physician to the Jefferson Medical College Hospital, and to the Philadelphia, Jewish and Rush Hospitals; one time Professor of Medicine and Therapeutics in the Philadelphia Policlinic, etc. Volume V. Prophylaxis, Personal Hygiene, Civic Hygiene, Care of the Sick, by Joseph McFarland, M.D.; Henry Leffman, M.D.; Albert Abrams, A.M., M.D., and W. Wayne Babcock, M.D. Illustrated. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Canadian Agents: The Chandler & Massey Limited, Toronto and Montreal. 1903.

Though Volume V. is quite late in appearing, yet its contents are fully up to those of its predecessors, if not in some respects their superior. As shown on the title page, the volume is devoted to the subject of prophylaxis and hygiene. In other words, it deals with "the preservation of health and the prevention of disease," in fact, "forms an introduction to the science of medicine." The book is divided into Parts I., II., and III. Part I. is devoted to the origin of disease, the diffusion of disease, the prevention of disease, and the prophylaxis of special infections Part

II. covers civic hygiene, and Part III. domestic and personal hygiene, and the nursing and care of the sick room. The book is full of what interests not only the medical profession, but also engineers, manufacturers, architects, and those who take an interest in municipal government in almost any branch, especially public school hygiene.

A Handbook of Materia Medica, Pharmacy and Therapeutics, including the Physiological Action of Drugs, the Special Therapeutics of Disease, Official and Practical Pharmacy, and Minute Directions for Prescription Writing, by SAMUEL O. L. POTTER, A.M., M.D., M.R.C.P. (Lond.), formerly Professor of the Principles and Practice of Medicine in the Cooper Medical College of San Francisco; Author of the "Quiz Compends of Anatomy and Materia Medica"; an Index of Comparative Therapeutics; several articles in Foster's "Practical Therapeutics," and "Speech and Its Defects"; Major and Surgeon of Volunteers U.S. Army. Ninth Edition, revised and enlarged. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Canadian Agents: Chandler & Massey Limited, Toronto and Montreal. 1902.

The favor with which this book has been received during the last fourteen years cannot but be flattering to the author. His experience while serving as attending surgeon at the headquarters of the Department of the Pacific and Eighth Army Corps in a tropical climate, among soldiers and civilians, men, women, and children, has been of inestimable value in preparing this present edition. In the section on Materia Medica, many articles were re-written and new ones inserted; in the section on Therapeutics new articles were inserted and several re-written. The text throughout the book has again been subjected to a thorough and critical revision, has been largely written, and has been expanded by the introduction of much new matter. It is one of the best books that has been written in any language in any country up to date. It should be in the library of every student and practitioner. A. J. H.

Encyclopedia Medica. Under the General Editorship of CHALMERS WATSON, M.B., F.R.C.P.E. Vol. XII., Syphilis to Typhus Fever. Edinburgh: William Green & Sons. 1902.

It was expected that Volume XII. would complete the work, but only typhus fever has been reached and there will be sufficient material left for another volume. This volume opens with an excellent article on Syphilis by D'Arcy Power of St. Bartholomew's Hospital. Active mercurial treatment is advised in the primary stage as soon as the diagnosis is made. In regard to the danger of transmitting syphilis it is said that the father is un-

likely to transmit the disease after five years, especially if well treated. "But cases are recorded where a syphilitic child has been born twenty years after the father's inoculation, and it is notorious that such children may be born in spite of all treatment of the parents."

The article on Tabes Dorsalis by F. W. Mott is an excellent presentation of the subject. He is a strong advocate of the view that syphilis, if not the cause, is at least the most important factor in the causation of the disease. He says that another factor is undoubtedly necessary for the production of this disease, as also of general paralysis, viz: the nervous instability of civilization, and quotes approvingly Kraft-Ebing's summing up of the causes of general paralysis as civilization and syphilization.

A long section is devoted to Physicial Therapeutics by Ernst Flodin, a Swedish medical gymnast. While much of it is not of practical application except by a specialist, yet some of it can well be referred to as a guide to exercises by patients themselves. Much too little is made of systematic exercises as remedial measures by physicians.

Several other articles are quite long, such as those on Tuberculosis, Typhoid Fever, and Tumors. A very interesting short contribution on Tremor is made by E. Farquhar Buzzard.

The volume as a whole is good, at least up to the average of the work, and the publishers have done their share creditably. When projected, the work was to be completed in twelve volumes, but it will require another volume at least to complete it. A. M'P.

Bacteriological Technique. A Laboratory Guide for the Medical, Dental and Technical Student. By J. W. H. EYRE, M.D., F.R.S. (Edin.), Bacteriologist to Guy's Hospital, and Lecturer on Bacteriology at the Medical and Dental Schools, etc. Octavo of 375 pages, with 170 illustrations. Philadelphia and London: W. B. Saunders & Co. Canadian Agents: J. A. Carveth & Co., Toronto. 1902. Cloth, $2.50 net.

The bulk of the matter in this book is simply an elaboration of the author's typewritten notes, which he had distributed to his laboratory classes in practical and applied bacteriology; consequently the methods used are only the simple, tried, and reliable ones, and the elements of technique are presented in their logical sequence. Much space is occupied by the illustrations, which are good, and will be found useful. We find the methods of Chester in his recent work on "Determinative Bacteriology" have been closely adhered to, methods which are calculated to induce in the student habits of accurate observation and concise description. The work has been arranged in such a way that the technical student, whether of medicine, dentistry, brewing, dairying, or agriculture, will find it a useful guide in the laboratory. The author aims at instructing the student how to fit up and adapt

apparatus for his daily work, how to thoroughly and systematically carry out the various bacterioscopical analyses that are daily demanded of the bacteriologist by the hygienist, and after a careful perusal of its pages we consider he has made a *ringer*. The book is unusually well bound in cloth, an essential feature in an ever-ready reference book, and is a decided credit to the publishers, W. B. Saunders & Co. W. H. P.

Diseases of the Pancreas and Their Surgical Treatment. By A. W. Mayo Robson, F.R.C.S., Senior Surgeon, Leeds General Infirmary; Emeritus Professor of Surgery, Yorkshire College, Victoria University, England; and B. G. A. Moynihan, M.S. (Lond.), F.R.C.S., Assistant Surgeon, Leeds General Infirmary; Consulting Surgeon to the Skipton and to the Mirfield Memorial Hospitals, England. Octavo volume, 293 pages. Illustrated. Philadelphia and London: W. B. Saunders & Co. 1902. Cloth, $3.00 net.

This work deals with both injuries and disease of the pancreas, and is a full, clear, and practical exposition of the subject. In these days of more marked specialism than has hitherto existed, we have become accustomed to look upon monographs on special subjects as affording the best guide for the practical treatment of different diseases, or of special organs. This book on the pancreas is well-timed, appearing, as it does, at a time when unusual attention is directed to the subject by the profession, when medical literature contains records of recent advances in the surgical treatment, and when more perfect methods for the diagnosis of pancreatic affections have been elaborated. The work contains a valuable summary of the literature, and is also based upon the practical experience of the authors. We heartily approve of the manner in which the subject has been dealt with, and we recommend it as a most useful addition to the library of either physician or surgeon. A. P.

Biographic Clinics. The origin of the ill-health of DeQuincey Carlyle, Darwin, Huxley, and Browning. By George M. Gould, Editor of *American Medicine*, etc. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Canadian Agents: Chandler & Massey Limited, Toronto and Montreal. 1903. $1.00.

The title of this book at once attracts attention. The five celebrated men, the subjects of the clinics, are of interest to physicians not merely because of their literary or scientific achievements, but also because that in spite of the load of lifelong ill-health they reached the highest rungs in the ladder of fame. The physician naturally asks himself what was the cause of their ill-health. Does the world owe the sardonic contempt of Carlyle to too much oat-

meal; are the beauties of DeQuincey but the products of opium? Dr. Gould, who delights to wander in all the bypaths of medicine, has another solution. These men were the victims of eye-strain. One has but to look at the picture of DeQuincey to realize how probable this explanation. No greater advance has been made in medicine than our knowledge of the intimate relationship between eye-strain and the protean manifestations of disease—a knowledge, which, to a great extent, we owe to the Philadelphia School of Ophthalmology, of which Dr. Gould is so brilliant a member. J. M.

The Practical Medicine Series of Year Books, comprising ten volumes on the Year's Progress in Medicine and Surgery. Issued monthly, under the general editorial charge of GUSTAVUS P. HEAD, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Volume II. General Surgery, edited by JOHN B. MURPHY, M.D., Professor of Surgery, North-Western University Medical School, November, 1902 (price $2); and Vol. III., The Eye, Ear, Nose and Throat, Edited by CASEY A. WOOD, C.M., M.D., ALBERT H. ANDREWS, M.D., and T. MELVILLE HARDIE, A.M., M.D., December, 1902. Chicago: The Year Book Publishers, 40 Dearborn Street. Price, $1.50; price of series, $7.50.

Volume II. contains 553 and Volume III. 321 pages, including index. These volumes are nicely arranged and neat and convenient to read. The selections are especially good, and cover the year's work very fully. The busy general practitioner cannot possibly read all the journals, and when he does read a few good articles they are lost in the general journal accumulation in his office. The Year Book forms a ready reference and the selections are full enough for all practical purposes. W. J. W.

Text-Book of Jurisprudence and Toxicology. By JOHN J. REESE, M.D., late Professor of Medical Jurisprudence and Toxicology in the University of Pennsylvania, late President of the Medical Jurisprudence Society, of Philadelphia. Sixth edition, revised by Henry Leffman, A.M., M.D., Professor of Chemistry and Toxicology in the Woman's Medical College of Pennsylvania; Pathological Chemist to the Jefferson Medical College Hospital; Vice-President (British) Society of Public Analysts. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1902. Canadian Agents: The Chandler Massey, Limited, Toronto and Montreal.

"Reese's Jurisprudence and Toxicology" has always been looked upon as a stand-by, though it has never been as large a volume as some others on the same subject. Much advance has

been made during recent years in toxicology, so that Dr. Leffman acted judiciously in re-writing Dr. Reese's work and bringing it up to date. The book is considerably larger than the last edition and will be found to be exceedingly practical.

The Care of the Skin and Hair. Containing suggestions as to Diet, Clothing, Bathing and Cosmetics. By JAMES STARTIN, M.R.C.S. (Eng.) Senior Surgeon and Lecturer to the London Skin Hospital, Fitzroy Square, London. Bristol: John Wright & Co. 1902.

This dainty little book is written in a pleasing, yet rather flowery style. The first chapter deals with a healthy skin, and the author shows his good sense by his evident admiration of a beautiful complexion. The statement that "the skin is the greatest medium for purifying our bodies" is misleading, and is not in harmony with the teachings of standard text-books on physiology. In the second chapter the author is right in urging the great importance of regularity of meals and the taking of sufficient time to eat them. Under the head of Cosmetics all powders which contain preparations of mercury, bismuth, arsenic and lead are emphatically condemned. The chapter on baths and bathing is an interesting one. A. E.

How to Succeed in the Practice of Medicine. By Jos. McDOWELL MATHEWS, M.D., LL.D., President of the American Medical Association, 1898-99; author of "Mathews on Diseases of the Rectum," Ex-President Mississippi Valley Medical Association, Kentucky State Medical Society, American Proctologic Society, Louisville Surgical Society, Louisville Clinical Society, President Kentucky State Board of Health, etc., etc. Louisville: John P. Morton & Co., 1902.

If the medical profession as a body were to read and inwardly digest Dr. Mathews' work, "How to Succeed in the Practice of Medicine," there would be much less opportunity for doctors to be accused, as they so often are, of being unbusinesslike. Our profession, we consider, is under a debt of gratitude to the author for his book, as it is full of the most practical kind of information and replete with facts of the greatest value to doctors who wish, as all do, to make a success of the business side of the practice of medicine.

Thoroughbreds. By W. A. FRASER, Author of "Mooswa," "The Eye of a God," "The Outcasts," etc. Toronto: Geo. N. Morang Company, Ltd. 1902.

No one who has a fondness for "man's noblest friend," the horse, can but enjoy a perusal of "Thoroughbreds." The book

is full of interest, and the author has outlined a story, which is, like the horse race it depicts, interesting from start to finish. Honest John Porter, and the prefix was well given, who would just as soon sleep in a straw stall as not, in order to be with his stable companions, persists that there is no sport like horse racing, providing it is honestly carried on, and though luck seemed against him from the first, yet, like the story with its moral, it turned round in his favor, and all through courageous Allis riding good old Lauzanne to victory. Buy "Thoroughbreds," it is worth more than the price charged for it. W. A. Y.

Diseases of the Skin. A Manual for Students and Practitioners. By Jos. Grindon, Ph.B., M.D., Prof. of Clinical Dermatology and Syphilis, Washington Univ.; Dermatologist to the O'Fallon Dispensary, St. Louis Mullanphy Hospital, St. Luke's Hospital, and the Missouri Baptist Sanitarium; formerly physician to the Smallpox Hospital, St. Louis; Member of the American Dermatological Association, etc. Series edited by Bern. B. Gallaudet, M.D., Demonstrator of Anatomy and Instructor of Surgery, College of Physicians and Surgeons, Columbia University, New York; Visiting Surgeon Bellevue Hospital, New York. Illustrated with 39 engravings. Philadelphia and New York: Lea Brothers & Co.

This small volume, like its companions in the series, is more suitable for medical students perhaps than for practitioners, who must of necessity have something more comprehensive. The book, however, contains material in every respect up to date, especially as regards diagnosis and treatment, and will be found quite useful to the physician for refreshing his memory on skin diseases in its different phases.

Regional Minor Surgery. Describing the treatment of those conditions daily encountered by the general practitioner. By George Gray Van Schaick, M.D., Attending Surgeon to the French Hospital, New York. Published by the International Journal of Surgery Company, Medical Publishers, 100 William Street, New York.

This is a work of 226 pages. The paper is good and the type clear. It contains a number of good wood cuts. After treating of asepsis and some very practical points on suturing, the minor surgery of the body is taken up, beginning with the head, including eye, ear, throat and nose, antrum, lips and tongue. Then follows the extremities, chest, genito-urinary system and rectum. Just such a work as the general practitioner needs every day is treated of, e.g., Hare Lip, Tracheotomy, Injuries to the Various Parts, Amputations in Hand and Foot, Hammer Toe, Ingrowing Nail,

Benign Tumors of Breast, Hydrocele, Varicocele, Catheterism and Fistula. This will be found a very useful book by those engaged in general practice. Price, $1.50. W. J. W.

The Development of the Human Body. A Manual of Human Embryology. By J. Playfair McMurrich, A.M., Ph.D., Professor of Anatomy in the University of Michigan. With two hundred and seventy illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1902. Canadian Agents: Chandler & Massey, Limited, Yonge Street, Toronto. $3.00.

This is a creditable addition to our literature on the subject of embryology. The author has succeeded in presenting a concise statement of the development of the human body. Wherever it is necessary for him to have recourse to the facts of embryological development in the lower animals he always points out clearly in what respect such development resembles, and in what respect it differs from development in the human ovum.

The publishers have done their part well. The type is clear and plain, and the illustrations are excellent. It is a first-class text-book for students and practitioners. A. E.

Cecilia. By F. Marion Crawford. Toronto: The Copp, Clark Company, Limited.

The story of a beautiful young girl, living in modern Rome, capable of self-hypnotism. In this state she imagined herself one of the vestal virgins; but her trance was always brought to an awakening by the kiss of a "mere man." In time, though the affianced wife of another, she meets and is introduced to the real man who for years she has seen in her dreams. He has also this strange power, and after a while they find that they dream the same thing concurrently, and he cannot explain it, except that it is a sort of "mind telegraphy." In loving him, and dismissing her former fiancee, for truth sake, she feels she has fittingly answered two of the most important of life's questions: "What ought I to do?" "What may I hope?" W. A. Y.

Fuel of Fire. By Ellen Thorneycroft Fowler. Toronto: William Briggs. Cloth, $1.25.

Again has this clever authoress struck from her anvil the sparks of wit. As ever, her story is of the county-side in and around "Mershire" in Old England. A love story, of course, and also, as ever, a heroine whose tongue never tires, and whose speeches dazzle, amuse and entertain unceasingly the reader who has courage enough to open a book with such an atrociously ugly cover.

W. A. Y.

Memoranda on Poisons. By THOMAS HAWKES TANNER, M.D., F.L.S. Ninth Revised Edition. By HENRY LEFFMAN, A.M., M.D., Professor of Chemistry in the Women's Medical College of Pennsylvania, etc. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1902. Canadian Agents: The Chandler & Massey Limited, Toronto and Montreal.

"Tanner on Poisons" has always been looked upon as a very handy vest pocket manual for reference in a moment of hurry. The ninth edition has been added to and brought fully up to date, the chapter that is of most interest being the one devoted to the toxicology of poisonous food.

The Mattison Method in Morphinism. A modern and humane treatment of the morphine disease, by I. B. MATTISON, M.D., Medical Director Brooklyn Home for Narcotic Inebriates. E. B. Treat & Co., New York City.

This little book is confined to about 40 pages, and gives in an interesting manner the experience of the author in the treatment of morphinomania.
