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No. 1.

Original Contributions.

THE ETHICAL VALUE OF EDUCATION IN PREVENTIVE MEDICINE.

BY PETER H. BRYCE, M.A., M.D.

Mr. President, Ladies and Gentlemen,—I have thought it worth while to attempt to present a phase of preventive medicine which, though playing an important part in our social welfare, is often not consciously realized by us. We are so occupied with the practical concerns of our intense, everyday life, and so often fail to recognize those influences which direct and govern our acts, that in a certain sense we are automata, dependent upon our sensations and impulses.

Now, none who realizes man as a highly organized member of the animal kingdom can fail to see that, as Carlyle remarks of the peptic countryman who did not know he had a stomach, the very perfection of health is, where the several elements of life are so harmoniously adjusted that, like a perfect machine, "life, from its mysterious fountains flows out as in celestial music and diapason, while it is only discord that loudly proclaims itself." Hence it is apparent that, if man were but the perfect animal, his life, in harmony with its environment, would begin, develop, and perform its destined purpose and functions, and as gradually and quietly proceed to its euthanasia. But he who gives even the most superficial thought to the problem of human life, and especially to that of modern civilized life, must recognize that the very conditions of human progress which have made society so complex, indeed so artificial, compared to that of man in a primitive state, have created problems which demand their solution, whether we attempt them or not; and it will be he who, realizing this, and

heroically taking up the task, that will personally reap the most precious fruits of his human existence and carry out most perfectly the purposes of the Creator in His universe. It must often have occurred to many that the old proverbs and sayings, which have become a part of our daily language must have had their beginning in the minds of thinkers at one time or another, and have been accepted either because of the manifest truth in them, or because they have been associated with the name of some great personage, whom we have been taught to think of as very wise or divinely inspired. Doubtless both reasons are correct; but we have, I doubt not, been accustomed to accept many such as true, which, if analyzed and examined in the light of modern knowledge, are in fact the opposite of truth. We say "the sun goes down," but as a fact it is the earth which, in performing its daily revolution, produces the phenomenon. We say, "I have caught cold," when as a matter of fact the result is due to the too rapid or unequal loss of body heat. So it is apparent that, dependent upon our knowledge of physical causes, we form our conclusions as to the nature of the phenomena, which we observe whether in the natural world about us or in the mental or spiritual world within us. In nothing, however, are we so constantly engaged in drawing inferences as in the relation which our health holds to our environment; and in no field of human thought has the scientific progress of the last century produced more profound impressions than in that of medicine. Amongst all early peoples, and amongst many semi-civilized peoples to-day, sickness was associated with demoniac influences, and Christian peoples were long accustomed to associate plagues and outbreaks of disease with the anger of an offended deity. Without dilating upon this fact, it need only be pointed out that, with the constantly increasing extent of our knowledge of physical laws, the realm of the supernatural has become more limited, and we are now beginning to closely inquire, whenever disease appears in any community, not what deity is offended, but whence did the cause arise? Now, if I am right in this, and I am certain of it, you will agree with me that our changed mental attitude is due to some cause, and it is quite evident that it is the result of education in what we call Preventive Medicine. I think I am not wrong in saying that the old idea of Medicine that was presented to most of us was that of a person becoming ill, and that something placed in a bottle, an infusion from some one or several herbs, and called *medicine*, or the healing potion, was absolutely demanded, if recovery was to be expected. Now, as a matter of fact, the old Greeks, who gave us the first comprehensive idea of Medicine, and raised Aesculapius, the Father of Medicine, to the rank of a divinity, had a much wider and wiser conception of its meaning than many have to-day. His very name, meaning blameless physician, recalls the legend how, under his master, Chiton,

he became so skilled in healing that Jupiter became jealous lest through him men might escape death altogether, and, to please Pluto, killed Aesculapius with a thunderbolt. He left Epigone (soothing), his wife, and his children, Alexenor (aider of men), Aratus (the prayed for), Hygieia (soundness of body), Jaso (a remedy), and Panacea (a healing herb), and as appears from these names in their order, those children concerned with the healing art, Jaso and Panacea were placed last. Without, however, pushing this illustration further, it is apparent that to those open-eyed Greeks the preventive side of Medicine stood in highest honor, and to-day we are similarly realizing the superior value of this side of the science. It is somewhat remarkable that, with the practical application of preventive measures in every other art and science, preventive measures in Medicine were so long overlooked. The mariner knew that a leak in his boat must promptly be stopped, otherwise it would soon swamp and so he stopped it; the engineer knew that one slight breach in the embankment, if not remedied, meant an inundation, and so repaired it; while the threatening conflagration is prevented when but a small fire. But for the reasons already referred to, physical sickness was carried into the moral sphere and was dealt with along other than physical lines. Public prayers were called for, and general humiliation during the outbreaks of cholera and small-pox, even in Canada within the past fifty years; while people continued to drink polluted water and refuse vaccination.

It seems quite evident, therefore, that the subject of our paper is not an inappropriate one for us to discuss and to endeavor to comprehend in its bearing, not only upon personal well-being, but upon good citizenship. If we analyze the reasons for the material and industrial progress of one of Ontario's cities, if we ask why the Province of Ontario has become the garden of the Dominion, and a hive of manufacturing industry, we all are quite ready to answer, "Because the intelligent energy of our people has taken advantage of physical conditions, as of soil and climate, and water-power, and wind-power, and, by utilizing natural forces, has produced an abundance of raw materials and has converted them into the manufactured article. Such has supplied in over one hundred cities, towns, and villages, public water for common convenience and economy, and for preventing losses by fire. In every one of these particulars we have the measure of an elevation in the social scale through the intellectual advancement of the people. Natural causes produce their inevitable effects, and material comfort, social happiness, and individual well-being are all advanced in a most logical and natural manner. If I am right in carrying this line of thought into the sphere of Medicine, and the mortality statistics of the Province support the argument, then it would seem apparent, in proportion as we understand the causes productive of

disease, that invariably such are directly or indirectly ascribable to some physical reason, and we shall be able equally to promote social well-being, and individual health and happiness, as we take advantage of the teachings of Preventive Medicine for the prevention or suppression of physical disease. It is a remarkable fact, with the many examples coming down to us through the centuries with regard to physical education, so important an element in Preventive Medicine, that we have lost or never taken advantage of some of the first principles taught us by the peoples of the older civilizations. For instance, Plutarch, in his life of the Spartan Law-giver, tells us that Lycurgus began the education of youth at the very source. Not only were marriages regulated, but he ordered maidens to exercise themselves in running, wrestling, and throwing quoits, that they might be the more vigorous as mothers. I am not aware that the nursing-bottle was then a part of the nursery furniture. When a woman of another country said to Gorgo, the wife of Leonidas, "You of Lacedaemon are the only women in the world that rule the men," she replied, "We are the only women that bring forth men." But need we more than glance at the delicate mothers and their weakling infants struggling into childhood on artificial foods, in order to comprehend that in a country which, forty years ago, had only 17 per cent. of its population living in cities, and now has 45, the very lack of knowledge or practice of the principles of Preventive Medicine has produced and is producing a race which, in many respects, bears the marks of degenerating influences, which must be reckoned with if we are to maintain that physical pre-eminence inherited from our British forefathers.

Observe it at another stage, that of childhood. Amongst the most delicate indications of robust health is the state of children's teeth; and statistics have been given us by physicians and dentists in Canada and the United States, showing that in a very large proportion of school children, decay of the teeth has taken place, due to innutrition which is ultimately associated with another effect, that of abnormal vision. The causes are patent to all of us. Instead of the plain foods, as whole wheat bread, or even oat or rye bread, the soft starchy foods and sugars are increasingly being used; fats are used decreasingly, resulting in bone and muscle being notably deficient. It is the palate that is tickled, and the innocent child suffers accordingly. But the evil does not stop at this stage. Our social customs seem specially formed to complete the evils already accentuated. I have taken the trouble to tabulate the deaths by ages in some of our counties, and find that from fifteen onward, the age at which that ever-present result of innutrition, consumption, begins to make itself evident, the deaths amongst females was, in a five-year period, as two to one in males, the latter fortunately, owing to out-door life, more largely escaping

the danger. When it is understood that for a single county, taking a five-year period, the total deaths in females between 10 and 20 was 100 to 54 in men, and that it was one-seventh of the whole, we can appreciate the truth of the remark of Sir Frederick Treves, the great surgeon of England, who says: "The physical condition of a large proportion of the girls and women in this country (England) is quite deplorable, especially among the middle and upper classes. The girl spends hours in an ill-ventilated school-room and upon a piano-stool, and the rest of her time is occupied in eating and sleeping, in preparing lessons, in stooping over needlework, and in taking formal walks with the governess. Her clothes are probably a collection of hygienic errors."

"A good digestion and an active liver are more useful in the battle of life than a knowledge of advanced mathematics, and sturdy limbs and strong hands are of more value to the mother of children than even decimal fractions and a familiarity with irregular verbs."

With such words from so great an authority, following the statistics I have given, it will not be difficult to appreciate the ethical value of education in Preventive Medicine. It is quite evident that it involves education against doing those things we ought not to do, and leaving undone those things we should perform. What is further most apparent is that this education has the highest ethical or moral value, since the mother who understands the laws of hygiene and practises them will not fail to exert her authority in enforcing them by example and precept upon her children. I have but recently returned from spending a few weeks among the dwellers of one of our summer resorts, and have observed how closely *cause* and *effect* are related. You go to a summer hotel, and the usual sight is to see many children and most young ladies dressed in the height of fashion, taking every opportunity to buy sweetmeats from the supply boats, while in the evening for the older ones dancing is often kept up to a late hour, but little real outdoor exercise being taken. On the other hand, if one visits a summer cottage he sees barefooted children dressed in a sweater or an old skirt, offending against all the social proprieties by running about like savages—swimming, paddling, rowing—while ravenously devouring at meal-time the plainer foods, which are most readily obtainable in such camps. The life in the one case has been often a dissipation of energy, and in the other the storing up of a reserve of bone and sinew for the work or studies of a coming winter.

A similar comparison may be made regarding the modes of spending their holidays by persons of maturer years. Many will actually engage in some physical occupation to assist in the elimination of the wastes of the body, while at the same time promoting reconstruction of tissue. Many years ago, Dr. Lauder Brunton,

a leading physician of England, pointed out that for persons engaged in intellectual pursuits, a summer holiday of six weeks is demanded, during which absolute freedom from anything except agreeable outdoor exercise is demanded, in order that nerve tissue—that which, while most resisting, requires the longest rest—may, by new material, have its energy restored.

Many will have read with amusement the newspaper reports of the many notables recently present in London at the Coronation. Probably, however, the most interesting was Ras Mackonnen, the Abyssinian Prime Minister. While amused, edified and instructed, he has also been an acute observer. A Mohammedan, he obeyed with all his suite the injunctions of his religion, and abstained wholly from alcohol and tobacco. He marvelled at the London policemen, saying, "All is so orderly, all is system." But he also noted, watching the London crowds, "I see that everybody hurries." And if one were to crystallize our social and business sanitary shortcomings into a single phrase, it would be that of the perpetual rush and hurry which mark increasingly our people everywhere. The countryman notices it in the town, the townsman sees it in the city, we in the cities are beginning to observe it ourselves. I have recently had several conversations with a New York friend engaged in large business transactions, who has come home to Canada and bought a small farm to retire to soon, he says. He is not yet fifty, but says that that is an old age for a modern New York man to be able to do hard work at. He has mentioned one after another of his many friends of the stock-market and amongst the merchants, who, strong and vigorous, have in a few short years died exhausted from brain disease, heart or kidney disease—those organs most affected by the stress and tension of high-pressure life. Some of us have marked and noted, even amongst our own friends, the number of comparatively young men who have died from these diseases, essentially old-age maladies.

I have used the word ethical, and have taken it in its usual secondary meaning, as pertaining to the habits and manners of the individual or community, and have desired to point out conditions with regard to the purely physical aspects of education in Preventive Medicine. But there is another result belonging to that distinctive side of morals, which we commonly define as character, which after all, as moral beings, we must always deem of first importance. The sages of every country, whether in ancient or modern times, were those whom Carlyle calls the seers or poets of their age; and, properly so, for their distinguishing characteristic has ever been to search into the heart of things, and ask not only *What am I?* but also, *Who am I?* and *Whence?* That Hebrew classic, of inestimable value, will ever be placed first, for the prominent place it has ever put man in in relation to the Divinity as regards his duty; but the literature of every classic country

has handed down to us the words of wisdom of the world's greatest thinkers. All will remember the problems presented in the marvellous drama of Job, revolving around the oft-asked question, "Do good men suffer, and why?" which was answered with a "no" by his Pharisaic friends, with the inference that Job's sufferings were punitive; just as the Greek poet, Aeschylus concludes, using the words, "Whatsoever evil men do, not less shall they suffer," while he further repeats, almost in the words of the Decalogue, that the punishment may extend to even the third generation.

But we turn from these stern teachers of an earlier time to those breathing a more generous spirit, and as in the beautiful Greek story of the self-sacrifice of Alcestis dying for her lord Admetus, and in the yet infinitely grander story of the gospels of that Christ who died for a whole world, see in these illustrations of another phase of morals, which our subject necessarily forces upon us.

In these days when, as in our wide country, possibilities of material success are ever opening up to every young Canadian, where ambition finds almost no trammels in the attainment of its ideals, we cannot but recall the last words of Tennyson's "King Arthur":

"For what are men better than sheep or goats
That nourish a blind life within the brain,
If, knowing God, they lift not hands of prayer
Both for themselves and those who call them friend?
For so the whole round earth is every way
Bound by gold chains about the feet of God,"

and endeavor to make ourselves realize in some slight measure, something of the pregnant meaning such words contain. The important matter, if we consider the question at all, is: What would seem to be the end and purpose of being, as regards either ourselves, the society or country in which we live, or towards the universe in which, however infinitesimal units we may be, we nevertheless form an integral part, without which the infinite whole would be incomplete. Gazing backwards, and endeavoring to imagine the beginnings of our world, so minute a fragment of the universe, arising as it did out of chaos, I think of its crude, uninhabited crust, and of the development of that infinite purpose of its Creator, since life upon it began. I read the story of its rocks, and see evolution from the simplest formless protoplasm to beings having an organized life, upwards through the numberless years of its geological Aeons, and find in all and everything that—

"Our little systems have their day;
They have their day and cease to be,"

with cosmic change and cataclysm burying all; but in all and throughout all I observe a movement upwards, an orderly pro-

gress toward a world-period, when man appeared. Seemingly, as we gaze back upon him, crude, uncouth, untaught, primitive, but as complete in his place and time, as completely in harmony with his environment, whether it be in the caves of Dordogne with his associates, the bear and reindeer of the great Ice Age, or in those long uncounted subsequent years, as when the man, god-like, with imperial front raised to the stars, told his love to the woman in that Eden where the Accad race placed the paradisaic abode of Adam, their patronymic founder and prototype, and raised its later towers to heaven. Now, within the period when this conquering, last-created race of men could not only acclaim its god-likeness, but could further transcribe its glorious achievements upon moulded tablets, we can still see material progress followed by moral declension, till a climax is reached, and a civilization, effete yet having accomplished its purposes, is buried under Syrian sands, remaining as a monument of something accomplished, and a lesson, to those who will read, of something passed, but which teaches not more the vanity of human things than of an

"Eternal process moving on."

Within the few short century-days since then, individuals and races have come, shone like falling stars for the moment, and gone; yet never failing to transmit to the generations following something of those forces with which they were endowed; whether physical or moral.

If, in our place in this ever-ending but never-ceasing stream of influence, we can even in a slight degree comprehend that all our individual and combined social, national and world-wide energies, with those yet to be of our century, are but one of the hours in the cycle of cosmic time, we must at least faintly realize that it is not ours alone to enjoy the gilded hours, but that we must also play a part in this drama of evolution; and that every physical, mental, and spiritual force with which we are endowed is dedicated to the work of a movement upward, whose end is the approximation of those primal atoms which, first endued with simple yet all-sufficient physical powers, have had added through aeon, age, cycle, and century some finer, higher manifestation of force, to those qualities, which, undiscoverable, unreal, as yet to us, are nevertheless to become cognizable and attainable, when the material, complete, adjusted to its infinite environment, shall no longer seem base or evil, unfitting or foreign, but shall prove to be but one with the spiritual from which it emanated, and with which it will find itself ultimately in complete harmony. Thus does Tenyson apostrophize his departed friend, Hallam:

"Since we deserved the name of friends,
And thine effect so lives in me,
A part of mine may live in thee
And move thee on to noble ends."

"In Memoriam."

Looking upon life from this standpoint, it is apparent that we must see in Preventive Medicine a science which, before all and every other, endeavors to illustrate the wisdom contained in that old-time riddle of the Sphinx, "Know thyself," and which Perseus, the hero of the light, succeeded in interpreting, amongst his many other labors for the good of mankind.

This is an essentially Herculean task, and one which brings happiness, honor, and glory to him who, like that mythical hero, slays the Medusa for the good of men.

I cannot in concluding do more than urge that the book of sanitary wisdom, which to-day is so wide open that he that runneth may read, be sought for by all; that in it we find, learn and follow the words of wisdom which teach us not more our duty to ourselves than our duty to others, and that in doing both we will best fulfil the purposes tending to that universal good to which all created things move.

PREVENTION AND TREATMENT OF TUBERCULOSIS.*

BY J. F. MACDONALD, M.D., HOPEWELL, N.S.

SCIENCE has demonstrated that tuberculosis, known under several names, as consumption, scrofula, lupus, marasmus, white swelling, etc., is an infectious and contagious disease. The infecting agent is the bacillus tuberculosis. Without this bacillus tuberculosis does not exist, every new case is the product of a preceding one. The source of infection is in the part from tuberculous sores or abscesses, wherever situated, in lung, bowel, bone, gland, etc. It is well to note some of the principal methods by which the infection is spread and brought into contact with the uninfected, with the whole human race, with the whole animal kingdom. The chief source of infection is in the sputa of tuberculous persons, and is most dangerous in its dried state—dust; in the moist state it is only dangerous by contact. The innumerable moist particles thrown into the air in the act of coughing, where they float for a time, are a source of danger to those in the immediate vicinity. Tuberculous persons are met with everywhere, in every profession, every business, trade and occupation. They handle our food supplies, sometimes cough over our groceries. The hands of the consumptive are seldom clean—free from disease germs, (bacillus) their mouths never. The sputum of consumptives is scattered broadcast wherever consumptives go. Generally, they are not particular as to where they spit. This filthy discharge is deposited quite liberally on streets, in public conveyances, about railway stations, and all places where people congregate, often to

*Read at the Canadian Medical Association, Montreal, September, 1902.

a nauseating extent. When dried, and in the dust form, it finds its way into all places where air and dust penetrate. In our educational institutions tuberculous teachers, and tuberculous pupils are often found; many of these institutions—especially among the lower grade schools, are incubators, and centres of distribution for infectious diseases and are a menace to health and life, not only to those attending them, but to the whole community. School sanitation is, to a large extent, bad.

The trailing skirts with which ladies sweep the streets, gather up the disease germs deposited by spitting consumptives and carrying the filth to their homes, is a very excellent way of propagating the disease. For cleanliness, if for no other cause, this practice should cease to exist. Promiscuous kissing—a very neat way of communicating the disease—should be discouraged. The danger from this habit (very pleasant though it may be) should be kept in mind.

Infection from tuberculous flesh and milk, denied by some and affirmed by others, is likely, in the near future, from investigations now in progress, to be definitely settled, as it is a matter of fact, not of speculation, so it must be settled—yea or nay. While we treat with profound respect opinions and results of investigations by so high authority as Dr. Koch, we cannot accept his conclusions as proven. The non-intercommunicability of human and bovine tuberculosis is not proven. The bacilli taken with the food enter the circulation and find a lodgment wherever a suitable soil for their growth is found. That may be in lung, bone, bowel or other organs. The late Sir Richard Thorne, of London, a very good authority, attributed the large and increasing mortality among children to the use of tuberculous milk, milk in the large cities entering more largely into infant feeding than formerly.

Behring's investigations are probably as worthy of acceptance as those of any living authority. His investigations show that human tubercle bacilli are capable of producing the disease in animals. Many other opinions on this side of the question might be cited. Considering the present state of our information, tuberculous meat and milk should be considered unfit for food.

Predisposing causes are hereditary and acquired. Consumptive parents, diseased persons, are not likely to produce healthy offspring. Parents' weaknesses, mental and physical, are liable to be transmitted to their progeny. No stock raiser expects to breed sound individuals from unsound animals.

Acquired predisposing are whatever lowers the vital resisting powers of the organism. These causes are many and are under control, if proper methods of living are enforced. Predisposition is, I suppose, what is meant by "the pretubercular state or stage." I do not like the term. It may be misleading. If it is intended to convey the idea that the system is in a condition peculiar to

the reception of the tubercle bacillus and not any other disease, it is decidedly wrong.

Prevention.—Tuberculosis, that universal scourge—being responsible for about twenty per cent. of deaths from all causes in Canada—though an infectious, deadly disease, is preventable. In one generation by proper methods of prevention it would be relegated to the class of rare diseases. To carry out a thorough system of prevention legislation is absolutely necessary. The sputa being the most prolific source of spreading the infection, spitting should be prohibited by law. Man is supposed to be a rational, reasoning being, who should do what is right without compulsion. Most men, apparently, are only reasoning beings when they get some other man to reason for them; for these the law-maker should be that man.

That it is difficult to control the actions of citizens I admit. Our laws are broken daily, many of them openly, yet the law is good and necessary for protection of life and property. The laws needed for prevention of disease and saving the lives of our citizens can be enforced as well as other laws. The intelligent, cleanly citizen, when informed of the danger to health and life of his neighbor, should refrain from the spitting habit. (Will he ?) But for the great mass of humanity, untouchable by moral influences, control is necessary.

1. "Thou shalt not spit" on streets, in public conveyances, public buildings, and in all places where people congregate. If such a law were enacted and enforced the beneficent results would soon be evident and the disgusting, nauseating sights witnessed in railway carriages, railway stations, and other public places would soon cease to exist. Wholesale, indiscriminate spitting should by law be made a crime.

2. An act to protect all food products from infection, not only from disease-laden dust, but also from contact with tuberculous persons who sell and handle food stuffs. Articles of food are often exposed for sale where they come in contact with dust from the streets. This is a common practice in our cities which should not be allowed.

3. A law to provide a system of sanitary inspection of all places where food supplies are prepared, manufactured, kept and offered for sale, including creameries, cheese factories and their products; inspection of meat, milk, and the animals from which these are gotten, also the place in which the animals are kept. The object of inspection in all cases is to remedy unsanitary conditions and prevent the sale and use of diseased and unhealthy articles of food.

4. Medical examinations of all persons in any way handling articles of food intended for sale and use, so diseased persons may be prevented from engaging in such business.

5. Sanitary inspection of educational institutions from the primary school to the university, that they may be kept in perfectly sanitary conditions, a work that is greatly needed, for many of them are in notoriously unsanitary conditions,—the same may often be said of the pupils.

6. Medical examination of professors, teachers, students and pupils, that no tuberculous person be allowed to teach in any of our educational institutions. That all persons applying for license to teach be required to present a clean bill of health, and that tuberculous pupils be prohibited from attending public schools.

Boards of Health and School Boards should have the power and means for enforcing sanitary and other conditions of our schools, so as to get rid of this nidus of infection. Provide healthy sanitary places in which to live and work, pure air, pure water, pure unadulterated food, and non-contact with tuberculous persons and the work of prevention is largely accomplished.

The sanitarium as a preventive institution is of limited use as it will remove but a limited amount of infection from general circulation, besides there is a danger of it becoming thoroughly saturated with the disease and a centre of infection. While the infection is allowed to be universally distributed unchecked we may go on building sanitarium without limit for the accommodation of the material prepared for them. A better preventive and more humane institution is the consumptive home for the poor and incurables.

Sanitation has done much in lessening the mortality from this and other diseases, but much still remains to be done that demands our attention. In every university and college in our country there should be a chair of public health similar to that in McGill, and the University of Edinburgh, which would be of more real practical benefit to the country than classical education of our young men and women, which we so highly prize.

The methods of prevention above outlined in dealing with our consumptive fellow-citizens may appear somewhat harsh, and as interfering with the liberty of the citizen. On careful consideration of the matter these and other objections disappear. One of the first principles governing civilized society, is that no one shall use his liberty to the injury of his neighbor. The moral and civil law says, "thou shalt not kill." The man that knowingly and deliberately does that which endangers the well-being, health and lives of his neighbors is guilty, and a greater menace to society than the assassin who kills his victim outright and is done with it, while the victims of the other are doomed to slow, lingering suffering and death.

The consumptive must be educated how to avoid giving the disease to others; this is his part in the work of prevention.

The well must be instructed how to avoid contracting the disease. Upon the medical profession as conservators of the public health to a large extent devolves this educational work. The lay press has been used to a limited extent, and may be used beneficially. Pamphlets and leaflets have been used pretty freely, but results are not encouraging. The people for whom this literature has been used to a large extent do not read, and when they do read they fail to heed. I think our own profession needs a little educating in this matter. We want to educate our journalists, our professional politicians, our legislators. Then we want to ask for legislation, demand it, and keep on knocking at the doors of our legislative halls until we get what we are working for. Then our most efficient schoolmaster, law, with persistent persuasion will do the work. Registration or notification is of doubtful utility, as it will deter many from seeking medical relief in the earlier stages of the disease, for much as the consumptive dreads the disease the dread of being branded a consumptive is greater. Booklets, plainly, simply written, giving instructions to the consumptive how he should act for his own benefit, and how to avoid giving the disease to others, should be put into the hands of every consumptive. The booklets should contain the rules to be observed by the healthy, how they may avoid contracting the disease.

Treatment.—The most essential part in the treatment of tuberculosis, the method that has given the best results, and now generally adopted is the "outdoor" treatment, which means pure air and plenty of it. The difference of opinion in reference to this treatment is chiefly as to how and where it is to be carried out. Treatment in sanatoria has given good results. Yet the sanitarium has its drawbacks. The patients being surrounded by so many suffering from the same disease, the monotony of the routine life, and absence of home influence, have a depressing effect upon sensitive, nervous patients, the moral effects of which are not good. Then the sanitarium may, like health resorts, after a time become centres of infection. "Home out-of-door" treatment has also given good results. For those in ordinary good circumstances it seems to be the ideal method. The patient must have a large, well-lighted, well-ventilated room, southern exposure if possible, so as to get all the sunlight and pure air possible. Windows open day and night so that the room may always be filled with pure air. The patient should spend most of the day outdoors. It is not necessary to sit, or recline all day, but may go out walking or driving, the latter preferable. Driving both in summer and winter is not only a pleasant, but profitable way of spending the time, and to most people cheerful and exhilarating. Care must always be taken to avoid fatigue and to keep the person perfectly comfortable. In the country, in summer, part of the day may be spent in walking about the grounds. Some light

employment where muscle and mind are engaged has a good effect. The whole life should be so arranged as to make the patient not only comfortable but happy. Must avoid close and crowded rooms, must not frequent places where people congregate, lecture halls, churches, theatres, and railway coaches, in which pure air is never found. Must not swallow his spittle, and for the safety of others must follow carefully those directions for the disposal and disinfection of all discharges from mouth, nose, lungs and bowels. Strictly observing the directions given by the physician, the patient need not be isolated all the time from his family.

Food.—All physicians are agreed that the most nourishing food be given in quantities as much as the stomach will appropriate. Artificial aids to digestion are often useful. Forced feeding, so strongly advised by many, must be carefully watched; the stomach must not be overtaxed. Of the chief articles of diet, meat, milk, cream, and butter—which are almost indispensable—great care must be exercised that these are from animals free from disease, especially from tuberculosis. Eggs should be taken raw if possible, in quantities as many as the stomach will tolerate. Fresh fish, oysters, plain or Graham bread, fresh vegetables, and good, clean, ripe fruit. This is a pretty good bill of fare and available for most people. The most nutritious foods should always have the preference. Tea and coffee may be taken in moderation, also chocolate and cocoa. Alcoholics are not to be taken, except when there is wasting of the tissues. The laboring man who has to work in order to provide for himself and family, who cannot afford to “lay up” or go to a sanitarium, if such a place were available, may continue at his work, providing it is outdoor work. He must keep his feet dry and warm and have clothing sufficient to keep his person dry and comfortable, he must also avoid exposure in wet and stormy weather; must rest in his home at night, and abstain from everything that would lower the resisting powers, and make use of all means possible for raising and strengthening his recuperative powers. His food must be the best available. Among the farming population good nutritious food is generally available. The sleeping room must be well open to fresh air all the time. He must keep himself under the observation of his physician and must observe as strictly as possible regulations for his care and treatment. These patients generally do very well and many recover even after cavities have formed in the lung. Those working in factories and shops must change their business and engage in outdoor work. There are, however, many among the poorer people who cannot or will not be induced to take care of themselves, follow the physician's instructions, or use the means available for their treatment. For these the only hope is the consumptives' home. Consumptive

homes should be provided and maintained by municipal or provincial governments.

Medicinal Treatment.—Though not the most important in the treatment of tuberculosis must not be neglected. In connection with hygienic and outdoor treatment it is important and necessary. Drugs to aid digestion are useful, also tonics, as strychnine, iron, and hypophosphites, arsenical preparations, and creosote are beneficial. Carbonate of creosote and terebene are useful. For cough heroin is probably the best drug we have. Cod liver oil, an old and popular remedy, that consumptive patients think they ought to take, is probably more popular than useful. It is of doubtful benefit, except to patients in advanced stages of the disease, as a food. Many other drugs are used and recommended, some of which may be beneficial. Hydrotherapy is an important adjunct in treatment. Gymnastics for development of lung and chest is also useful.

Climatic Treatment.—In many cases it is said to have a beneficial effect. But everything considered, I think it is of doubtful utility. Banished from home, friends, and cheerful home surroundings, the moral effects of which are so essential to the welfare of the invalid, are lost and no adequate compensating influence to take their place. Even those with ample wealth to procure all the comforts of life, except the most important home comfort—are often brought home in a casket, or what is a little better, they get home in time to die among friends. Even in the changeable, humid climate of our Maritime Provinces, our patients who stay at home do better than those we send away. The practice of sending patients away, especially if the disease has gained considerable hold upon the lungs, is, to say the least, cruel.

At the present time I have a number of tuberculous patients, most of whom I expect to recover, the advanced cases to improve, to whom I would not advise banishment from home to a life among strangers. After over thirty years' experience in the treatment of tuberculosis, I believe home is the best place for the successful treatment of our consumptive patients. The best place for them to live; the best place for them to die. The methods of treatment here outlined are chiefly those I have practised, as near as possible, for many years.

REPORT OF A CASE OF FRACTURE THROUGH THE SITE OF AN EXCISION OF THE KNEE.*

BY H. P. H. GALLOWAY, M.D.,

Surgeon to the Toronto Orthopedic Hospital, Orthopedic Surgeon to Toronto Western Hospital,
Orthopedic Surgeon to Grace General Hospital, Member of the
American Orthopedic Association.

J. W., aged 40 years. Five years ago had an attack of gonorrhoea which was cured in a comparatively short time. Was again exposed in May, 1899, but declares positively that he contracted no disease. In June, 1899, he developed a swelling in the right groin which his physician called a "sympathetic bubo." This swelling was quite painful, and at the end of a week was lanced. Was laid up for three weeks and returned to his work as a lumberman late in July. Occupation required great exposure to wet. In October a swelling formed near head of right fibula. This was opened by his physician and discharged freely for several weeks. Again returned to work, but in a few days the whole leg and lower part of the thigh became greatly swollen, and he was forced to take to bed. From December, 1899, to May, 1900, various incisions were made in the leg and thigh in the neighborhood of the knee-joint, from which free discharges of pus issued. States that he had high temperature, and that blood poisoning was feared. The leg became greatly flexed, and in the latter part of the summer of 1900 an effort was made to forcibly straighten the knee under anesthesia.

When I first saw the patient the knee was flexed at an angle of about 135 degrees, subluxated and rotated outward. There was almost complete ankylosis in this deformed position. The limb was scarred by numerous recently-healed sinuses, and was quite tender when handled. General health considerably reduced.

He entered the Toronto Orthopedic Hospital on August 31st, 1900, and after spending a short time in efforts to improve his general health, I excised the joint on September 18th. In freshening the bones Fenwick's incision was used. The dressings were never disturbed for six weeks, and on removing them the wound was found healed. The patient wore a posterior splint for several weeks longer, and before the end of the year firm bony union had occurred. As he was found to be a handy and industrious man, he became an employee of the hospital, assisting in the care of male patients, and doing such chores as were required.

On the morning of June 13th, 1901, nine months after the excision, he was engaged in washing the verandah floor with the

*Read before the American Orthopedic Association at Philadelphia, June 7th, 1902.

hose. He stood upon the edge of the verandah, just at the landing of the steps leading up to it, and as the more distant part of the floor was finished he began to back down the steps so as to avoid playing the water on the floor at too close range. He intended to back down one step at a time, but by an unfortunate miscalculation of distance missed the first step, and the whole weight of the body came violently upon the stiff leg, as he found footing upon the second step. He felt the leg give way under the strain, and fell to the ground. He tried to rise, but found that there was movement at the site of the excision, and realized that the leg was broken. I saw him within five minutes of the time the accident occurred. He was pale, and suffering from shock, there was movement at the place where the excision had been made, and considerable swelling. The limb was bandaged upon a posterior splint, fairly firm pressure being made over the seat of the fracture by a thick covering of absorbent cotton beneath the bandage. When this dressing was removed a week later, the effusion of blood beneath the skin at the injured part was found to be so considerable that, in order to avert threatened sloughing of the skin from pressure, the blood was withdrawn by aspiration. After this had been done the line of fracture could be felt very plainly. Serrations as much as three-eighths of an inch in length extended upward into the femur and downward into the tibia, showing that the artificial union effected between these two bones by the excision had been exceedingly firm. The limb was encased in plaster of Paris. In three or four weeks the patient began to go about on crutches, and within two months was able to go to work wearing a posterior splint. I last saw him a few days ago. The limb was strong and useful, and he was working every day in a lumber factory. He said that he had not worn his splint or protected his limb in any way for several months past.

12 East Bloor Street, Toronto.

Selected Articles.

THE MISSION OF SOCIETIES FOR THE PREVENTION OF CONSUMPTION IN THE ANTITUBERCULOSIS CRUSADE.*

BY S. A. KNOFF, M.D., NEW YORK.

Mr. President, Your Excellency, My Lords, Sirs, Members of the Canadian Association for the Prevention of Tuberculosis, Ladies and Gentlemen:

The honor which you have conferred upon me by the invitation to address you to-night, while personally appreciated to the fullest extent, I must above all consider a compliment to the United States and to the medical profession of the country to which I have the honor to belong.

Between your country and the United States, between the Canadian and American medical professions, the most cordial relations have existed for years. This act of courtesy extended to an American physician, the privilege to speak at so distinguished a gathering as this, presided over by your highest official in the person of His Excellency the Governor-General, the Earl of Minto, will bring still closer together the medical professions of these two great nations, which speak one language and have the same aspirations, viz., the progress of humanity, the combat of disease, and the increase of human happiness.

We have gathered here to-night in the interest of a work which is now attracting the attention of the whole civilized world. Throughout Europe a most active antituberculosis movement is going on. Societies for the prevention of tuberculosis, or for the erection of sanatoria, exist now in nearly all European countries, and these societies are sanctioned, helped, and patronized by governments, kings, and princes. England has its National Association for the Prevention of Consumption and Other Forms of Tuberculosis, with His Majesty King Edward VII., as patron, and His Royal Highness the Prince of Wales, as president. There are thirty-four vice-presidents, among whom we find the names of the

* An address delivered by invitation before the Canadian Association for the Prevention of Tuberculosis, at its annual meeting, April 1st, 1902, at Ottawa, at which His Excellency the Governor-General, the Earl of Minto, presided.

Duke of Bedford, the Marquess of Londonderry, the Marquess of Ripon, the Marquess of Salisbury, the Marquess of Zetland, the Earl of Derby, the Earl of Spencer, Lord Listér, the presidents of the Royal Colleges of Physicians and Surgeons of England, Ireland, London, and Edinburgh; the directors-general of the Medical Service of the Army and Navy; the presidents of the Royal Agriculture and Veterinary Societies; Sir Herman Weber, and many other equally illustrious names. The members of the council are presided over by Sir William Broadbent and the Right Hon. Sir Herbert Maxwell. Alfred de Rothschild and Malcolm Morris are the treasurers, and Alfred Hillier is secretary. This British National Association for the Prevention of Consumption, counted already at the end of last year thirteen branches, namely, the Bournemouth branch, the Bradford branch, the Cumberland branch, the Devon and Cornwall branch, the Dublin branch, the Society for the Prevention and Cure of Consumption in the County of Durham, the Glasgow and District branch, the Gloucestershire, Somerset, and Wilts branch, the Leicester and Leicestershire branch, the Liverpool and District branch, the Newcastle-upon-Tyne and Northumberland branch, the Northampton Town and County branch, the Nottinghamshire Association for the Prevention of Consumption and other Forms of Tuberculosis, the Southampton branch, the South Wales and Monmouthshire branch, the Ulster branch, the Winchester and District branch, the Wrexham and District branch, and the York branch.

I: Germany the work of societies for the prevention of tuberculosis and sanatorium associations started under the patronage of Her Majesty the Empress Augusta Victoria, who likewise became patroness of the congress held in Berlin in 1899, under that appropriate name "Kongress zur Becampfung der Tuberkulose als Volkskrankheit" (Congress for the Combat of Tuberculosis as a Disease of the Masses). The General Central Committee for the Erection of Sanatoria for Consumptives, which has done such good work during the past few years, remains under the patronage of Her Majesty the Empress, and has for its honorary president His Highness the Prince Hohenlohe-Schillingsfurst, and for its president Dr. Count von Posadowsky-Wehner, Secretary of the Interior, and among its vice-presidents such men as Count Lerchenfeld, von dem Knesebeck, von Ballhausen, Professors Frankel, Gerhardt, and von Leyden. The council is likewise composed of forty-eight men belonging to the best class of society, the aristocracy of science, birth, and finance. Dr. Goothold Panwitz, chief staff surgeon of the army, is the able secretary of this committee, with offices in one of the government buildings on the Wilhelmplatz, in Berlin.

Nearly every German city of importance has its sanatorium association. They in common with the "invalidity insurance companies," have accomplished a vast amount of good in procuring

sanatorium facilities for thousands of consumptive poor of the German Empire.

In France, where the government has taken a most active part in the antituberculosis work, private enterprise has created a journal called *La Lutte antituberculeuse*. As patrons of this periodical figure the names of Brouardel, Letulle, Arloing, Landouzy, Monot, Calomet, and others of equal prominence. This journal is the official organ of twenty-five distinct antituberculosis movements, under a variety of names, such as Popular Sanatorium Work, French League against Tuberculosis, Agricultural Colony for Poor Convalescent Consumptives, Maritime Sanatorium Association, Maritime Sanatorium for Scrofulous Children, Society for the Prevention of Tuberculosis, and the Gratuitous Lodgement of Poor Consumptives in Sanatoria, Work for Tuberculous Children, etc. Five of these Associations are located in Paris, two in Bordeaux, and two in Lille, the rest throughout the departments of France.

The very latest news which came to us from France this week speaks of a federation of seventy-six various antituberculosis institutions in that country, which sent delegates to an assembly convoked at Paris, March 16th, for the purpose of uniting them all into a national federation. The success of that plan surpassed all expectations, and the result of the deliberations was the formation of a central bureau and council for mutual aid. It was furthermore proposed to establish a permanent exposition for everything needful for the campaign against tuberculosis.

Japan, Russia, Austria, Italy, Portugal, Spain, Holland, Denmark, Sweden, and Norway have done similar work, though not on such an extensive scale. In some of the Latin American Republics, too, there has been an awakening, and to judge from the *Revista de la Tuberculosis, Organo de la Liga Argentina contra la Tuberculosis*, they are doing excellent work in the Argentine Republic, Chile, Brazil, Uruguay, Paraguay, Bolivia, Ecuador, Peru, Mexico, etc. In January, 1901, in Santiago de Chile, there was formed a permanent national commission for the prevention of tuberculosis in Latin America (Commission Internacional en la Permanente por la Profilaxia de la Tuberculosis en la America Latina).

In Cuba antituberculosis work is most active. It is carried on partly by the United States military Society of Cuba, under the presidency of Dr. Emilio Martinez.

The latest international development in the combat of tuberculosis has been the formation of an International Central Bureau for the prevention of Tuberculosis, with its seat in Berlin. Its objects are: (1) To collect all news relating to the combat of tuberculosis in various countries; (2) to collect the literature on the subject; (3) to reply to questions relating to the antituberculosis movement; (4) to petition the proper authorities to further the

cause; (5) to receive and make suggestions relative to the international combat of tuberculosis, especially as regards investigations, the publication of popular essays, and arranging lectures and meetings; (6) to publish a periodical to be sent free of charge to all members, containing the reports of the work done by the International Central Commission, and discussing other subjects of interest to the cause.

Every country is represented by at least two members, and countries with more than two million inhabitants are entitled to one more representative for every five million people; but the total number of members for a single country must not exceed five.

Here in North America we have perhaps not done quite as good work as our brethren in Europe. In Canada, however, though your country has a smaller population than the United States, greater strides in the antituberculosis work have been made than in the latter country. You have already a Canadian Association for the Prevention of Tuberculosis, while we have but a few small local societies striving to do the same work you are doing. They are the Pennsylvania, the Colorado, the Ohio, the Maine, the Minnesota, and the Illinois Societies for the Prevention of Tuberculosis. Besides these State associations, there exist in Baltimore a Laennec Society for the Study and Prevention of Tuberculosis, a similar one in St. Louis composed of the alumni of the City Hospital, a Cleveland City, a Buffalo City, and Erie County (N.Y.), and in New Hampshire the Suncook Association for the Prevention of Tuberculosis. There exists as yet no American, or United States, society for the prevention of tuberculosis. It grieves me to make this statement, and I do it not without a sense of humiliation. But I am full of hope, and I trust that the example which you, our good neighbors, are setting us to-day will not be without fruits. I devoutly hope that some day in the near future we may even enjoy a union meeting of the present Canadian and the future United States societies for the prevention of tuberculosis. I look forward to the time when by a combined effort we may be able to combat tuberculosis as a disease of the masses throughout this continent.

In this thought let us find our inspiration to discuss now as intelligently as we may be able to do the subject we have chosen. With your permission, I desire to speak on *The Mission of Societies for the Prevention of Consumption in the Antituberculosis Crusade.*

At no epoch in phtisiology, or for that matter in the history of medicine in general, has this singular disease, called consumption, or pulmonary tuberculosis, been so much written and talked about as at the present time. I have endeavored to give you a bird's-eye view of the various antituberculosis movements in foreign countries, and of those of our own continent. You know of,

and have yourselves experienced, the widespread interest which is now taken by medical men and laymen all over the civilized world in this tuberculosis problem. If I should, however, be asked what is the cause of this strong awakening to the importance of a disease, the contagiousness of which was known to Isocrates, a contemporary of Hippocrates (460-377 B.C.), and the curability of which was demonstrated and described by the Arabian physicians as early as the tenth and eleventh centuries, I should be at a loss to answer in one sentence. There have been mighty forces in operation to bring about this awakening, which came almost simultaneously with the increase of our knowledge concerning the etiology of tuberculosis. Our greatest gratitude for the increase of knowledge in this respect we doubtless owe to that trinity of master minds, Pasteur, Koch, and Lister, those three stars in the firmament of bacteriological science who represent at the same time the three foremost nations of the world. The first, the immortal Pasteur, has taught us that an infectious disease cannot arise without the presence of an infectious germ, Koch has shown us the infectious germ of the disease in which we are particularly interested, and Lister has demonstrated to us the value of cleanliness and antiseptics in the combat of infectious diseases.

It would take me too far to enumerate here the many illustrious pupils and co-workers of these three men. Wherever medicine is taught you find the pupils of these men as teachers. They have helped you and me to understand the true nature of tuberculosis.

For the modern methods of curing tuberculosis through outdoor life, proper hygiene, and good food we are primarily indebted to the English people. It may not be generally known that even the earliest efforts in sanatorium treatment were inaugurated by an Englishman, in the person of Dr. George Bodington, of Sutton Goldfield, Warwickshire, England; and as a veritable pioneer in aerotherapy we must not forget that princess among nurses, who helped to cure the English physician, Bennett, of consumption, the great and good Florence Nightingale. Brehmer and Dettweiler, of Germany, were the pioneers of the sanatorium treatment of consumption as it is now almost universally practised, and as American pioneers of modern phthisiotherapy we must not fail to mention our distinguished colleagues, Dr. E. L. Trudeau, of the Adirondack Cottage Sanatorium, and Dr. Vincent Y. Bowditch, of Boston.

To summarize our present knowledge, and to state the basis on which our societies for the prevention of tuberculosis should work, we might say we now know that tuberculosis, especially in its pulmonary form, is an infectious, communicable, preventable, and in many instances absolutely curable disease; furthermore, that it can be cured in nearly all climates where the extremes of temperature are not too pronounced, and where the air is relatively pure and

fresh. In other words, it is not always necessary for a consumptive patient to travel long distances and seek special climatic conditions, but in most instances he has a chance of getting well even in his home climate.

Before I proceed, may I be allowed to digress just for one moment to make it clear why I call tuberculosis, and especially pulmonary tuberculosis, a communicable, and not a contagious, disease—still less a dangerous contagious disease? There is enough difference in the meaning of the words to justify an explanation. It is my firm conviction, based on the experiences and the experiments of our greatest European and American scientists, such as Koch, Straus, Grancher, Prudden, Biggs, and others, and on a somewhat extensive experience of my own, that tuberculosis is not a dangerous contagious disease, but only a communicable one. To be in contact with a tuberculous individual who takes care of his expectoration or other secretions which may contain the bacilli, is not dangerous. In sanatoria for consumptives, where the precautions concerning the sputum are most strictly adhered to, one is perhaps safer from contracting tuberculosis than anywhere else. The great danger from infection lies in the indiscriminate deposit of sputum containing the bacilli, which, when dry and pulverized, may be inhaled by susceptible individuals and then cause the disease to be developed. The communication of the germ of the disease is, however, less obscure to us in its process, and far more easily guarded against than the contagion arising from such maladies as diphtheria, scarlet fever, or smallpox. What has just been said concerning the absolute security from infection in a well-kept sanatorium cannot very well be said of a smallpox hospital, no matter how well directed the hygienic precautions. Against the danger from contracting smallpox we have thus far no other means than preventive vaccination, and in case of an outbreak of the disease the most rigid isolation. It is entirely different with tuberculosis. The simple contact of a smallpox patient may suffice to convey the disease. This is never possible with a consumptive, with whom, even should he be careless or unclean, a prolonged contact is necessary to transmit the disease. Herein lies the difference between communicable and contagious.

It seems to me essential that those of us who labor not only with tuberculous patients, but also with their friends and relatives, and a large portion of the community, whose sympathy we desire to enlist in our cause, should know the true status of a consumptive. Whether we work under the name of a society for the prevention of tuberculosis, or sanatorium association, or an antituberculosis movement of any kind, we must never, never be considered as an anticonsumptives' society. The consumptive must know that every member of an antituberculosis society is his friend, that we labor

for him and not against him; that we try to lessen his burdens, and that we are the last to make him feel as if he were an outcast from society. To do the work in this spirit will be the first and most essential duty in the mission which a society for the prevention of tuberculosis should fulfil.

Infused, then, with this spirit, of deepest sympathy for our fellow creature who may be afflicted with consumption, what can we do for him to protect him from reinfection? What can we do for him that he may not transmit the disease to others? What can we do for the community at large to protect it against the invasion of the tubercle bacillus and the subsequent inroads of the "great white plague"? What can we do to better the condition of the consumptive poor and those of moderate means?

The first question, What can such societies as yours do to protect the consumptive from re-infecting himself or infecting others? must be answered by a single word, "education." The Pennsylvania Society for the Prevention of Tuberculosis, of which I have had the honor to be vice-president for a number of years, has issued a series of very interesting and instructive pamphlets with this end in view. Permit me to give here the titles of a few of them: *How Persons Suffering from Tuberculosis Can Avoid Giving the Disease to Others. How to Avoid Contracting Consumption. How Hotelkeepers Can Aid in Preventing the Spread of Tuberculosis. Predisposing Causes of Tuberculosis; How to Avoid or Overcome them.* To complete the education of the public, this series of pamphlets might be increased, and I would suggest the following themes: How can children be protected from scrofula and other forms of tuberculous disease? What can the farmer and dairyman do to diminish the frequency of tuberculosis among animals, and thus indirectly stop the propagation of the disease among men?

I do not intend to suggest to you any means of combating tuberculosis in cattle, or measures to prevent the sale of tuberculous products, such as milk and meat. This is the province of the boards of health, with whose duties we should not interfere. Societies for the prevention of tuberculosis should, on the contrary, work in greatest harmony with the officials of the health departments. By the combined workings of these two bodies a great deal of good can be accomplished. You should not only seek to give your pamphlets the largest possible circulation, particularly in the densely crowded tenement districts, but they should be gratuitously placed in the hands of all health officers, so that they may distribute them to families wherever they think they are most needed. You should also place these pamphlets gratuitously at the disposal of physicians.

But the educational work of societies for the prevention of tuberculosis should not be limited to the mere distribution of pamphlets. There should be frequent popular lectures and re-

unions where verbal lessons are taught and discussed. These lectures and practical talks should be reported to the daily press. I do not believe there is a single newspaper in your country or in mine, or for that matter in any part of the civilized world, which would not always be glad to print the report of a meeting of an antituberculosis society. The daily press has already done much good in spreading the knowledge which consumptives and those living with them should possess. Unfortunately, the public press serves also at times for the advertising of many "absolutely sure consumption cures," which are from time to time put on the market by unscrupulous quacks. I am, nevertheless, sanguine enough to hope that in time the better class of newspapers will, in the interest of the community at large, no longer extend the hospitality of their columns to such dangerous advertising matter, especially when it is protested against by such societies as yours. How many a poor consumptive has lost his last little reserve fund by giving everything he had for a dozen bottles of that "sure and quick cure," only those who come much in contact with them know. How unscrupulous some of these charlatans are in their method of procuring certificates of cure is something which can hardly be believed. Let me tell you only of one instance: A poor woman in the last stages of consumption came to me seeking advice. When asked for the name of her former medical attendant, she confessed that she had been treated for a number of weeks by a quack concern, and now, her means being exhausted, she was made to understand that they would not continue to treat her unless she would give them a certified testimonial that she had been thoroughly cured of her disease, which had been pronounced by prominent physicians an advanced case of consumption. This poor sufferer had not derived any benefit whatsoever from the treatment, and as a result her conscience would not permit her to become a partner to such a fraudulent procedure.

To break the nefarious trade of the man who deals in sure and infallible consumption remedies, to stop the practice of the men and women who profess to be able to diagnosticate and treat consumption by letter, the Christian Scientists and Faith-curists, who ridicule preventive measures and the laws of cleanliness and hygiene, which are the laws of God, but who, as a token of faith, demand their fees in advance, we have but one weapon, and that again is education. I would suggest that every pamphlet which may be issued by a society for the prevention of tuberculosis, every lecture which may be printed for the cause, every newspaper report which is sent forth, should include a declaration which should read about as follows:

Consumption is a preventable and curable disease. The sooner the patient puts himself under the care of a competent physician

the greater are his chances of recovery. The well-trained physician is the most competent person to guide the patient in the means to prevent reinfection of himself or the infection of his fellowmen. Consumption, or pulmonary tuberculosis, is not cured, and never has been cured, by quacks, patent medicines, or any other secret remedies. The most modern and most successful methods of treating consumption consist solely and exclusively in the scientific and judicious use of fresh air, sunshine, water, abundant and good food, and the help of certain medicinal substances when the just-mentioned hygienic and dietetic means do not suffice in themselves to combat the disease.

The thorough and constant supervision of the pulmonary invalid, the immediate intervention when new symptoms manifest themselves, or old ones become aggravated or do not disappear rapidly enough, the prescription of proper food and drink, can only be had at the hands of the thoroughly trained physician.

With educating our consumptive friend, those living with him, and the public at large as to the methods of prevention and means of cure, the mission of a society for the prevention of tuberculosis by no means ceases. Our work has only commenced. We must now solve the question which I have asked above: What can we do to better the condition of the consumptive poor and those of moderate means?

The well-to-do patient can easily be advised to better his unhygienic environments; with the poor it will be far more difficult. When our work brings us into the presence of a consumptive wage-earner, living in a tenement house in a few badly ventilated and badly lighted rooms, with the earnings of better days gone, with scanty food and scanty raiment, we wish we could do, not one thing, but many things. First of all, we should wish we could take this poor sufferer to a sanatorium where he would have the best chance of cure, and where the possibility of his reinfecting himself and infecting his wife and children would be removed. We should then wish to examine all the members of the family, to find out if there were any who had already contracted the disease, and, if so, take them, too, in the earliest possible stage to a sanatorium for complete recovery? The next thing we should wish to do would be to advise a thorough disinfection of the rooms, bedding, and garments of all the members of the family. Lastly, we should wish to be able to provide for the family in want, deprived of their wage-earner, good food and, if possible, a more healthful apartment, so that all the predisposing factors of tuberculosis, which are bad ventilation, poverty, want, and malnutrition, as well as the existing foci of infection, should be eliminated for once and all.

What a vast amount of work there is to do! What a grand

mission a society for the prevention of consumption has to fulfil! Where shall we find shelter for the consumptive poor, who not infrequently, owing to an unjustified and cruel phthisiophobia (exaggerated fear of the presence of consumptives), are little welcome anywhere? The sanatorium must be to the poor consumptive not only a place of cure, but also a haven of rest. There are not enough sanatorium and hospital facilities for the consumptive poor, either in your country or in mine. Thousands of consumptives are allowed to die annually, not because their disease could not be cured, but for the simple reason that there is no place in which to cure them. One of the greatest missions of a society for the prevention of tuberculosis is, therefore, the propaganda for the erection of sanatoria for the consumptive poor, and not only for the absolutely poor, but also for those of moderate means; not only for consumptive adults, but also for tuberculous and scrofulous children. If any community would have the courage, conviction, and means to erect a number of sanatoria and special hospitals for all the tuberculous invalids who, owing to want of means, cannot be properly treated at home, there would not only be a great sanitary, a great moral, but even a great financial gain at the end of a very few years. Those of my hearers who have visited any of the European, American, or one of your beautiful Canadian, sanatoria, will bear me out when I say that there is no better school of hygiene than the well-conducted sanatorium for consumptives.

The inmate of such an institution, after a few weeks' sojourn, has been trained in hygiene and cleanliness and regularity of life. The beneficent influence of sanatorium education is so true that it has been even demonstrated that in the villages of Goerbersdorf and Falkenstein, where five of the most important and flourishing German sanatoria are situated, the mortality from tuberculosis among the villagers has actually been decreased by one-third from what it was before the establishment of these institutions. The villagers voluntarily followed the hygienic regulations, which are obligatory for sanatorium inmates. This shows how wrong our phthisiophobic friends are when they object to the establishment of a well-conducted sanatorium for fear of contagion to the neighborhood.

If a community will erect a sanatorium for its indigent consumptives, this institution will prove to be a hygienic educator to all the inhabitants. The patient returning home, whether cured or only improved, will have become a practising expert in the prevention of tuberculosis. Should he have been fond of intoxicating liquors, the enforced abstinence in the sanatorium, the good food, the regular life, and other ennobling influences which the sanatorium offers, will most probably have made a better man of him, morally as well as physically.

Let me, lastly, demonstrate to you that the communities which

you will seek to interest in the establishment of sanatoria will gain financially by placing their consumptive poor in time in such an institution. I have advanced this argument before. I am not very familiar with the condition of your own large cities in this respect, so if you will permit me I will take as an example my own State, New York, which has the largest population of any in the United States, and quote in part what I have said on this subject in my article on Tuberculosis in the *Twentieth Century Practice of Medicine*, Vol. xx., 1900. It is estimated that there are in New York State about 50,000 tuberculous invalids. Of these, probably one-fifth belong to that class of patients which sooner or later become a burden to the community. These 10,000 consumptives, absolutely poor, will sooner or later have to be taken care of by the public general hospitals. While they may not stay in one hospital for twelve months continually, they will certainly occupy a bed in one of the public institutions for that length of time before they die. According to the last annual announcement of the public charity hospitals of New York, the average cost per patient per day in the general hospitals was \$1.16. Thus the cost to the commonwealth will be \$4,234,000 per year for caring for the 10,000 consumptives.

What would be the expense if they were taken care of in a sanatorium? Experience in this country and abroad has demonstrated that the maintenance of incipient cases in well-conducted sanatoria can well be carried out for one dollar per day. If these 10,000 were to be sent to a sanatorium in time, at least 6,000 of them would be lastingly cured after a maximum sojourn of 250 days, at an average expense of \$250 per capita. Thus, for \$1,500,000, 6,000 individuals would be made again bread-winners and useful citizens. If the remaining 4,000 individuals were kept in the sanatorium one year before they died, it would cost \$1,460,000. Thus, taking away from the tenement districts 10,000 consumptives, curing more than half of them and caring for the other half, and destroying 10,000 foci of infection, will cost \$2,960,000. If we do not take care of them in the earlier stages of their disease, they will probably all die, since this 10,000 represents the absolutely poor who now live under the most unhygienic conditions; but before dying they will have cost the community \$4,234,000.

Another important factor in the combat of tuberculosis, particularly among the poor of a large city, it seems to me, is the establishment of special tuberculosis dispensaries. All pulmonary invalids who for one reason or another cannot find sanatorium accommodation, former sanatorium patients who are convalescent, but still need medical guidance, or all people afflicted but slightly with tuberculosis, and able or obliged to pursue light out-door occupations, could find in such a tuberculosis dispensary an admirable temporary substitute for the sanatorium. In France and Germany

such special dispensaries, aided by diet kitchens, which are essential in order to carry on the dietetic treatment with the unfortunate consumptive poor, have done already a vast amount of good. In most of the cities there are as yet, and will be for some time to come, insufficient sanatorium facilities, and therefore such special dispensaries seem to be an urgent necessity.

In our care for the consumptive adult, however, let us not forget the tuberculous child. He will be the man of to-morrow, and the more healthy and strong men and women we can make of these little sufferers, the fewer consumptive adults we shall have to take care of. The results which are obtained in seaside sanatoria for the treatment of tuberculous and scrofulous children in some of the European countries are simply marvellous. If tuberculosis is curable in the adult, it is still more so in the child. Some French institutions report as many as 75 per cent. of absolute cures of these little ones. It is strange to say that we on this continent have so few institutions of this kind. France alone has, according to *La tuberculose infantile* of December, 1901, along its sea coasts no fewer than twenty-four sanatoria for tuberculous and scrofulous children, offering accommodation to 3,923 patients. All these sanatoria are provided with educational facilities, so that the children's intellectual development does not suffer. To make propaganda for such school sanatoria for tuberculous and scrofulous children is another of the duties of a society for the prevention of tuberculosis.

Before concluding, let me beseech you not to rest here with your labors. After you have removed multiple centres of infection from tuberculosis, after having erected sanatoria for tuberculous adults and children, there will still remain, if not the most important, at least equally important, factors of predisposition to tuberculosis which we shall find in the badly-housed, in the badly clothed, in the underfed, and in the overworked individual. A society for the prevention of consumption must make it one of its duties to work for the better housing of the poor. Let it be known to employer and employee, to every landlord and tenant, to rich and poor, but particularly let it be known to the dwellers in the crowded tenement districts, that it is as dangerous to breathe foul, vitiated air, as it is to drink foul and infected water. Sweatshop work and unsanitary factories should not be tolerated in this enlightened century. The eight-hour law and the prohibition of child labor should be enforced everywhere if the underlying factors of the propagation of tuberculosis are to be removed.

All children at school should have more out-door instruction and more physical culture than they have now. It is wrong, nay, it is even a crime, to push the intellectual culture of children to the detriment of their physical growth and development. Children in our public schools should be taught the value of sensible dress,

and be equipped with the knowledge of elementary hygiene. Housekeeping and good, plain cooking should be compulsory in the curriculum in all girls' schools. The young woman will then, whoever she may marry, know how to make even a small and modest home a happy and cheerful place, and the husband, returning from his day's labor, will not seek the club or the saloon. It is so often the dark, dreary, and untidy tenement and the poor food badly cooked by the wife who does not know how to do better, which drive the husband to the saloon. Give to the laboring man a clean, cheerful home, be it ever so modest, and an intelligent housewife, who can prepare good and appetizing meals, and the rum-shop will have less temptation for him.

Alcoholism is a strong predisposing factor to tuberculosis, and while the moderate use of feeble alcoholic drinks, such as light beers, may be considered as harmless to adults when taken with their meals, alcohol should never be given to children even in the smallest quantities. In families in which there is a fear of hereditary transmission of the desire for strong drink, even the mildest alcoholic drinks should be absolutely avoided. It would also be best if all people so predisposed, or who may have acquired only the occasional desire for drink, should never smoke, for experience has taught that attacks of dipsomania (periodical sprees) are often caused by an excessive use of tobacco. The young man starting out in life should take with him the moral training which will enable him to be a gentleman, and be considered a polite gentleman, though he absolutely refuses ever to enter a liquor saloon in order to treat or be treated to drink. It is this treating habit—alas! so prevalent in our American society—which has ruined many a young man and made him a moral and physical wreck. The creation of tea and coffee houses, where warm, non-alcoholic drinks, including bouillon, are sold in winter, and cool ones in summer, is to be encouraged. It would be of additional advantage if some of these houses could also offer healthful amusements for old and young.

All such knowledge you should disseminate whenever and wherever you can. Yet, important as this dissemination of knowledge and the propaganda of sanatoria are, there still remains some work which you are called upon to do if you want to fulfil the whole mission of a society for the prevention of consumption in the anti-tuberculosis crusade. You will have to appeal to the great philanthropists of your country for material help. Without their aid, the municipalities and the health boards will be handicapped in your fight against this common foe, for no community has public funds enough to cope alone with the tuberculosis problem. Plead with those noble souls who have given and are giving so much for educational institutions to examine the work you are doing. We all are profoundly grateful for what has been done in recent years by philanthropists in the line of creating and endowing educational

institutions. Yet it seems to me that there is now at least in this northern part of America a plethora of colleges, universities, and libraries, and I know that there is in nearly all of our large American cities a penury of good model tenement houses, where the average wage-earner could enjoy a cheery, pleasant home without paying an exorbitant rent. There is a penury of public baths which, for a moderate price, should be at the disposal of the people every day, winter and summer, and for some hours in the evening. There is a penury of decently kept places of amusement, open all the year, where the laborer and his family may spend a pleasant Sunday afternoon and partake of non-alcoholic drinks. There is a penury of children's playgrounds and small parks. There is a penury of hospital and sanatoria facilities for thousands of poor consumptives who could be cured if only taken care of in time. Call the attention of your statesmen and philanthropists to this condition of affairs, and I am sure they will gladly co-operate with you in your endeavor to solve this tuberculosis problem, the most interesting, important medical and social problem of our times.

The help of your statesmen and philanthropists is needed also in another direction. You will recall that I spoke a few moments ago of the many things we should like to do for the family in the tenement home, of which several members were afflicted with tuberculosis. There is one more thing we should wish to do, of which I have not yet spoken, and that is to induce that family to leave the crowded city and move to a smaller town or village, if it is at all possible for them to do so. There they could find larger and more commodious quarters for less money. Urge them to take up agricultural pursuits or to seek at least such occupation as will demand outdoor life. I know all this will not be easy, but I see in connection with this problem a large field for true statesmanship and practical philanthropy. By making farming more profitable the statesman will stop the ever-growing tendency of emigration from village to city. By erecting and endowing institutions for healthful amusements in country districts, and thus making life more attractive, the philanthropist will confer a lasting benefit upon old and young, and indirectly increase the wealth, health, and happiness of a large portion of the population.

Every member of a society for the prevention of consumption must consider himself a worker and a missionary in a field as important as ever lay before any one who went out to preach the Gospel to the heathen. The field of work which lies open individually as well as collectively to members of societies for the prevention of tuberculosis is large. It is important, I may say it is inspiring; for there is no work more gratifying than to help in the prevention of a disease which is preventable, to help to cure a disease which is curable, and to add indirectly through such work to the prosperity, health, and happiness of our fellow-citizens, and increase the well-being of humanity at large.

OBSERVATIONS ON ANESTHESIA OF THE DRUM MEMBRANE.*

BY GEO. B. MCAULIFFE, A.B., M.D.

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THE majority of clinicians do not believe in trying to obtain local anesthesia of the membrana tympani. Their deductions have been drawn in the main from the futility of using cocaine for this purpose in the external auditory meatus. It is but rational to believe that Nature protects the tympanic cavity from the effects of fluids dropped by chance or design into the external canal. This protection is given by the dermal layer of the drum membrane—a skin without glandular action or hair, acting only as a shield for the layers beneath.

Jacques, by utilizing the selective action of methylene blue, mapped out the nerve plexus in the middle layer of the drum membrane. The nerves spread out in radical meshes from the periphery—mostly from above. In the deeper portion of the dermal layer detached bundles run in different directions and end in apparently sensory end tips.

The mucous membrane of the Eustachian tube and of the tympanic cavity get their main nervous supply from the same source—the glosso-pharyngeal.

From a consideration of these facts we see that the external dermal layer has very little to do with the sensitivity of the drum membrane and that most of the medicines dropped into the ear or applied to the drum membrane have little effect until they nullify the shield-like action of the skin covering.

The fact that refrigeration does not extend deeply enough to desensitize the membrane demonstrates the truth of the former of the above-mentioned conclusions. Furthermore, it cannot be localized to the track of the intended incision. The refrigerating sprays need a space of a few inches to secure evaporation. This would bring under its action the whole membrane and canal. I tried to get a tip devised for spraying ethyl chloride on the region of the membrane selected for operation, but was not successful. The application of the spray to the sensitive canal and the subsequent thawing are very painful. I have thought that if liquid air could be applied, as it is claimed, by a cotton applicator it would be the ideal refrigerant knife for the membrana tympani.

*Read before American Otological Society at New London, Conn., July 7, 1902.

Unfortunately, too, refrigerants interfere with healing and may cause sloughing.

Various preparations like Bonain's—menthol, carbolic acid and cocaine—depending for their action principally on the carbolic acid have been used. More or less success has been reported. I do not believe that the anesthesia obtained by this class of cauterants is ever complete for reasons given above.

Fluids which disturb the osmotic equilibrium of the drum membrane and produce minute solutions of continuity in the dermal layer, thereby allowing cocaine or its succedanea to reach the nerve filaments are the best we have at present for use in the external canal.

The conditions favoring this application of cocaine are: (1) The removal of foreign substances and loose scales from the drum membrane and canal. (2) Dehydration of the outer layers of the membrane—a desiccation which causes molecular contraction and interstices through which the anesthetic can reach the deeper parts and nerve terminations. (3) The induction of endosmosis. The first condition is met by the use of hydrozone, which is stronger and better than any other kind of H_2O_2 preparation in softening and boiling out the debris of the canal and in lessening the resistance of the dermal layer. The hydrozone is subsequently mopped out by cotton applicators or syringed from the canal. The second and third conditions are met by the use of alcohol and aniline oil. The latter is absorbed more slowly and its effects last longer than the former. The solutions used are 5 to 20 per cent. of cocaine in equal parts of absolute alcohol and aniline oil. Anesthesia is gained in 10-15 minutes. The disadvantage of the solution is that the aniline oil is toxic and obscures the field. The external canal is generally filled to ensure osmotic instability and certainty of penetration. The toxicity can, in a great measure, be prevented by not filling the canal, but by applying to the drum membrane a small wad saturated with the solution and by making only one application. The obscuration of the field by the dark oil will then be less and the solution can be more easily mopped away.

For the last six years I have experimented desultorily with tubal injections of cocaine to desensitize the drum membrane. I have tried fractional experiments, applying the anesthetic to the pharyngeal orifice to the cartilaginous portion and to the deeper surface of the tube and to the drum cavity by means of a Weber-Liol catheter or a virgin silver modification. I have come to the conclusion that the Eustachian tube is the only channel through which local anesthesia can be best obtained.

In the embryo seven-eighths of an inch long, the drum membrane is represented by connective tissue, bounded below by the

external canal, which forms its skin covering, and bounded above by the Eustachian tube, which forms its mucous covering.

From this embryological formation and from the identity of nerve supply, we find the reason for the fact that anesthesia of the deeper portions of the tube will produce anesthesia of the drum cavity and membrane. It may seem like begging the question to state this, but my trials have forced this home to my mind. I do not believe that the 5 or 6 minims I blow into the tube are sprayed by the Politzer bag into the tympanic cavity. I think that absorption of the cocaine by the tubal mucous membrane affects the drum and membrane intermediately and by reason of continuity of structure. The fact that cocaine anesthesia has a field of action of about an inch from the spot to which it is applied would likewise bring the tympanic membrane within the area of tubal anesthetization.

Unfortunately the lymphatic system of the ear is not well known. If I may be allowed to digress I think that the production of acute otitis media might be explained more by the theory of absorption from a tubal focus or of continuity of structure than by the mechanical one (sometimes urged) of septic matter blown through the tube into the tympanic cavity.

After having forced the cocaine solution into the tube, I have found that in a short time—a time varying in length according to the amount of vascularity present probing the different areas of the dermal surface of the membrane would occasion little or no distress.

My observations with this method of comparative sensibility do not coincide with those of Dr. Blake, who finds that the areas of the membrane from below upwards, and from the umbo backwards increase in movement vascularity and pain. I have sometimes found a trifle of sensibility at the lower margin of the membrane and at the region of the stapes entire absence of any but tactile sensation.

These facts and observations on atrophic drums have shown me that the dermal layer need not be considered in local anesthesia of the membrane and does not play so great a part in sensation as the mucous layer since palpation of the skin surface does not elicit pain, although it reaches only the mucous membrane. 2nd. That the pain in palpation does not result from the local impact, but from the excitation of the whole sensory apparatus of the tympanic cavity, induced no doubt by the sudden abnormal inward movement of the drug contents. 3rd. That the pain of incision depends on the pressure made on the drum membrane by the knife as much as on the outing. 4th. That the incision should consequently be made with the minimum of inward pressure and with as sharp and as thin a knife as practicable. This explains

why incision in the membrane is made so much easier by the use of the Græfe knife than by the poor knives made especially for the work—knives whose smallness of blade precludes sharpness of edge. 5th. That in order to produce the best results in this method of anesthesia isotonic or iso-osmotic solutions of cocaine should be used in order to avoid œdematization of the tube and subsequent transient otitis media.—*New England Medical Monthly*, November issue.

FRENCH LICK SPRINGS, INDIANA—ITS ORIGIN AND ADVANTAGES.

IN 1816, shortly before the admission of Indiana as a State of the Union, Congress, by special act, ceded to the then Territory of Indiana the lands in and about French Lick Springs, with the provision that they should be for the sole use of the people for the purpose of making salt. Acting under the provisions of an act of the General Assembly of the State of Indiana, Thomas C. Chapman, in 1826, proceeded to bore for salt water near the springs, but his attempts were unsuccessful, and in 1829 the State was empowered to sell the lands in fee simple. Dr. William A. Bowles became the purchaser. Dr. Bowles is described by those who knew him as a man of polite manner and rare attainment, and a good physician. Bowles Spring is named after this first owner of the property.

In 1850 the first hotel on the site of the present new hotel was completed and leased by Dr. Bowles to Dr. John A. Lane, of New York. The guests during the period here referred to were principally from the Southern States, and in the year 1858 there occurred an incident having a bearing on the great struggle of 1861 in a much greater degree than is generally known. The wife of Dr. Bowles was a French lady, the owner of a number of slaves, and on a return from a visit to her Southern home brought seven of them with her. Her husband was promptly indicted by the grand jury of the county, and the trial resulted in his conviction. An appeal to the Supreme Court was taken, and in due time the case was decided against him, causing much criticism in the South and frequent commendation in the North. Coming at about the time of the John Brown insurrection and the fight at Harper's Ferry, as well as the Dred Scott decision, the Bowles case naturally attained prominence, and was the occasion for one of the scorching editorials of Horace Greeley, scoring Bowles for his attempt to establish slavery in Indiana.

In 1864 the Springs was rented by Dr. Bowles to Dr. Ryan for a period of fifteen years. Dr. Bowles dying about the time of

the expiration of Dr. Ryan's lease, the springs were managed by the administrators of his estate for a year or so, when they were leased to Dr. Ryan, James M. Andrew and Hiram E. Wells. These gentlemen were succeeded by the French Lick Springs Company, organized by Louisville people, who in July, 1901, sold the property to the French Lick Springs Hotel Company, the present owners.

French Lick is surrounded with 325 acres of forest and hills and shaded lawns. There are three springs, with three grades of water, all of wonderful curative power, peculiarly adapted to disorders so prevalent in business and social circles. The waters are clear and sparkling, and burst forth at a uniform temperature of 55 degrees Fahr., winter and summer. The air is rich with oxygen the entire year, while the nights are delightfully cool in summer. The sulphuretted hydrogen with which the atmosphere is highly charged precludes all possibility of malaria.

The present year the management has completed a large brick addition to the hotel, which places it in every way among the modern structures and affords accommodation for seven hundred guests, with conveniences and comforts of every sort. People seeking rest and recuperation rarely find it where crude comforts, poor food and miserable service exists. Congenial surroundings and peace of mind must also be had in order to accomplish the best of results. This the management has ever had in mind.

The park surrounding the hotel is interwoven with several miles of beautiful, shady walks, where wild flowers grow in profusion, and nature, on either side, lies undisturbed, in primeval splendor. Good hunting and fishing. Bass and perch abound in the tributaries of White and Lost rivers, in the immediate neighborhood. Quail, wild turkeys, pheasants, squirrels, etc., are plentiful.

There is probably no exercise more enjoyable or more beneficial for man and woman than horseback riding. Automobiling may have its pleasures, but it is not exercise. And the "wheel" is a back number. The equestrian revives the old Centaur of the Greeks—half horse, half man—an animal instinct with life and power in every vein and limb. And French Lick rejoices in the possession of a breed of horses owing their origin to the blue-grass pastures of Kentucky, the best saddle horses in the world, gentle, strong and swift, like their progenitors, the Arabs. To ride these horses daily about the picturesque hills and dales of Orange county, in pleasant companionship, is a charming way to strengthen long unused muscles and to fill the lungs with good, red blood.

The tennis, croquet, and baseball grounds are kept in first-class condition. Fine one-half mile bicycle track on the grounds. Target and trap shooting.

For other indoor exercise the Casino contains the largest regulation bowling alleys, with all the modern improvements, new billiard and pool tables and gymnasium. The dancing pavilion, enclosed in glass and surrounded by galleries, is one of the largest in the country. The orchestra is excellent and especially selected.

The noble and excellent game of golf is a special feature, owing to this character of exercise being recommended while taking the waters, and the course consists of fine, natural, nine-hole grounds, covered with blue grass, and kept in excellent condition. A physical director has charge of the athletic course, comprising a thorough system of out-door training and gymnasium work.

THE CARE OF THE INSANE IN PRIVATE PRACTICE

BY DR. HENRY W. COE, PORTLAND, ORE.

Dr. H. W. Coe says: "There is no more prolific source of insanity than auto-infection, and to meet this condition, Bouehard calls attention to the necessity of a carefully selected diet, and the free operation of all the emunctories. Salines he especially recommends, and I can testify as to their value. Intestinal antisepsis should be a feature in nearly every case, and the agent employed for this purpose should be such as shall not interfere with normal digestion and yet be powerful enough to destroy the micro-organisms which are doing the mischief, and to neutralize the ptomaines already present in the tract. My own experience accords with that of Dr. John Aulde and Dr. G. M. Blech, the peroxide of hydrogen is a most satisfactory agent for intestinal disinfection. Dr. Aulde uses a 3 per cent. and Dr. Blech a 2 per cent. solution of hydrozone in water, from two to eight ounces of this mixture being taken a half-hour before meals. I have made use of this method with pleasant results, and in cases where there has been much gastric fermentation I have employed an additional ozonized solution, glycozone, a teaspoonful immediately following meals. The glycerine, which is the menstruum in this latter solution, acts as a mild stimulant to the intestinal glands, thereby accelerating the excretory functions of the tract. I have wondered if a little of the good effects from the use of a powerful static machine, which I have noticed in several cases of mental trouble, was not due to the general effect from the inhalation of liberal quantities of ozone from the atmosphere in which the patient has been enveloped during the use of the breeze. Dr. Riggs and many other writers are enthusiastic over the use of the static current in the treatment of insanity. Dr. Gray believes that the ozone from the static breeze accounts for much of its benefits in hysteria, and why not also in insanity?"—*The Journal of the American Medical Association.*

Public Health and Hygiene.

... IN CHARGE OF ...

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

FOURTH QUARTERLY MEETING OF THE PROVINCIAL BOARD OF HEALTH OF ONTARIO.

THE fourth quarterly meeting of the Provincial Board of Health of Ontario was held in Dr. Bryce's office, Parliament Buildings, November 26th and 27th, 1902, the following members being present: Drs. Vaux (Chairman), Bryce (Secretary), Cassidy, Kitchen, Oldright and Douglas. The minutes of the third quarterly meeting, held at Berlin, were read and confirmed. The reading of correspondence elicited a few notable facts. For instance, the Township Council of Derby had passed a resolution, thanking the Provincial Board of Health for their efforts to put down smallpox in Derby.

An interpretation of Section 93 of the Ontario Health Act, which will be of interest to Ontario practitioners, was given by Dr. Bryce. It appears that Dr. Bissonette, a local practitioner of Sterling, Ont., had attended five persons who lay ill of typhoid fever in the same house. He sent his bill for services in these cases to the local board of health of Sterling, in which village the five typhoid patients resided. This local board of health refused to pay the doctor's bill, contending that they had not instructed Dr. Bissonette to attend the cases of typhoid fever. On the other hand, Dr. Bissonette claimed that he had received verbal instructions from the chairman and another member of the local board of health to attend to these cases. Referring to the law, Dr. Bryce quoted Section 93 of the Ontario Health Act, which provides for the isolation of persons infected, or who have been exposed to infection, and also for providing nurses and other assistance and necessaries for him, at his own cost and charge, or the cost of his parents or other person or persons liable for his support, if able to pay the same, otherwise at the cost and charge of the municipality. Dr. Bryce interpreted this section, quoad the liability of a local board of health for payment of a physician's bill in this manner. If a physician, practising in a municipality in Ontario, reports a case of infectious disease to the local board of health of the municipality and is instructed, *even*

informally, by two members of that board to attend the case, he can collect his bill for attendance from the said local board.

The failure of the vaccination law passed in 1863 was referred to by the Secretary, Dr. H. P. Bryce, in his quarterly report. The provision for the appointment of public vaccinators by municipalities or local boards of health was in a great majority of instances wholly neglected. The result was that there was growing up a population largely unvaccinated, which condition would be very serious should smallpox break out in the cities, towns, and villages, where 45 per cent. of the population of Ontario resided. Such a condition had existed in American cities, when, in 1901, 500,000 people were compulsorily vaccinated in Boston, and nearly 1,000,000 in Philadelphia. Dr. Bryce suggested new and simpler legislation, which would provide for a specially appointed public vaccinator; for instance, the Medical Health Officer, to whom the clerk would send a list monthly of the births of all children registered, and the officer would then visit them at their homes and offer free vaccination. The cost to an ordinary township of 3,000 people would not exceed \$100 a year. Where free vaccination was refused, the provision would be made that the child would not be admitted to public or private schools without producing a certificate of vaccination. The bill would, probably, include the present provisions covering the circumstances of an outbreak of smallpox.

In the other portion of his report, Dr. Bryce made some stringent criticisms of the neglect of many local health boards and a large portion of the public with regard to the dangers of filth. The situation called for some radical action. Reports of rather extensive outbreaks of enteric fever at Burk's Falls and Sault Ste. Marie, due to bad sanitation, were also submitted by Dr. Bryce. Smallpox had not been prevalent, but its existence in the neighboring States threatened another epidemic this winter, and there were now fifty cases in the Province. The report was adopted.

A report of the Committee on Epidemics, submitted by Dr. J. J. Cassidy, expressed great satisfaction at the recent action of the Hamilton City Council in being the first in Ontario to pass a by-law requiring all practising physicians to notify the Medical Health Officer of the existence of all cases of pulmonary consumption which they are attending. This step had been urged by the committee in June, 1900.

A lengthy report was presented by Dr. Amyot, of the Bacteriological Bureau of the Board, showing the work he and his assistant, Mr. Nasmith, had done at the Berlin (Ont.) sewage farm in estimating the capacity of a system of sewage disposal by septic tanks and contact beds which have been in operation there during the summer of 1902. This report, which details the

original observations and the actual work done by the reporters will be of value to Canadian hygienists as showing the capacities and limitations of the septic tank system of sewage disposal. Dr. Amyot's report was received and the Chairman, Dr. Vaux, stated that he would appoint a day when it could be more fully discussed, as the members had not had sufficient time to master the minutes of this report.

Regulations for the guidance of barbers, to ensure greater cleanliness and to prevent the spread of skin, scalp and other diseases, were adopted by the Provincial Board of Health on recommendation of the Committee on Epidemics, Drs. Cassidy, Bryce and Oldright. A deputation from the Barbers' Protective Association of Toronto, consisting of Messrs. H. Joy (Chairman), H. Thompson (Secretary), and Messrs. Beamish, Bryan and Clark, were present, and after a long discussion approved the general principles, and promised to bring them before their organization. The regulations, which were prepared in the hope that they may be adopted by the various barbers in the Association, or individually, throughout the Province, are as follows:

HYGIENIC REGULATIONS FOR BARBERS, RECOMMENDED BY THE
PROVINCIAL BOARD OF HEALTH OF ONTARIO.

1. A barber should be clean and neat in his person and dress, should use the bath regularly, and be particular in maintaining a healthful condition of the mouth and hands.

2. No person suffering from any disease of the skin, scalp or hair should act as a barber, nor should anyone suffering from consumption, or any disease commonly known as contagious, serve in this capacity.

3. If diphtheria, scarlet fever, smallpox, measles, or any other contagious disease should occur in the family of a barber, or among his friends or acquaintances, he should not nurse or visit the patients, nor in any way come in contact with them, and if any such disease should appear in his own dwelling or boarding-house, he should temporarily change his residence.

4. Persons suffering from any disease of the skin, scalp or hair, or from consumption, or persons who have recently recovered from diphtheria, smallpox, scarlet fever, or other contagious disease, should not visit any barber shop or parlor, but should be attended by the barber or hair-dresser at their own homes. All instruments used on such patients should be carefully disinfected after such use.

5. The floor of a barber shop should be made of hard wood, or if not so made, should be covered with sound oilcloth or other impermeable floor covering. The floor of the shop should be

frequently washed with hot water and soap. As a matter of ordinary routine it should be mopped every morning with a damp woollen cloth. Sweeping is not recommended. If the floor is to be swept, it should first be sprinkled with dampened sawdust or wet tea leaves and then swept, in order that as little dust as possible may be raised.

6. The shop or parlor should be well aired before the day's work is begun, and it should also be ventilated during the day. The shop must never be used as a dormitory. Every barber shop should be provided, if possible, with running hot and cold water.

7. The shop should be kept very clean, as should also all of the chairs, razors, clippers, brushes, towels, and all other articles or instruments used in the business. Towels should be carefully washed and then rinsed to remove the odor of soap.

8. Customers should be encouraged to use, or have used on them, their own instruments (razors, soaps, brushes, etc.), and in the cases of persons suffering from diseases of the skin, scalp or hair, this practice should be compulsory. For operations on the dead body a barber should have instruments used only for that purpose.

Disinfection of Instruments.

9. Razors and clippers may be disinfected by boiling for five or ten minutes in soapy water, or in water containing a little carbonate of potassium. For this purpose the instruments should be laid in an enamelled or galvanized metal dish, and be completely covered by the water. After boiling they should be cooled in cold water and carefully dried. Steel instruments boiled in the carbonate of potash solution are not liable to rust.

10. Hair-brushes, combs and strops may be disinfected by placing them in a small closet or case, which closes hermetically (is air-tight), in which is kept a saucer constantly filled with the 40 per cent. solution of formalin, about one ounce of formalin to each cubic foot of space. It is recommended that all instruments be laid on racks or trays in this closet after using. If this is done, every customer can have a thoroughly disinfected instrument for use in his case.

11. Brushes and combs will need cleaning with bran or clay and hot water at intervals.

12. Shaving brushes may be entirely dispensed with, and a puff of cotton used instead, which can be destroyed after one using. A shaving brush may be disinfected by being placed in boiling water for five minutes before using.

13. Before passing from one customer to another, the barber, or hair-dresser should thoroughly wash his hands. He should use warm water and carbolic soap, or one containing mercuric chloride.

14. The powder puff should be replaced by the powder blower,

or by a ball of wadding. The wadding should be thrown away after one using.

15. A stick of alum should never be used to stop the flow of blood. A small piece of alum, after being used on a customer, should be thrown away. Some prefer burnt alum, applied on cotton, which can be thrown away after one using.

16. Sponges should not be used in a barber's work, because they cannot be cleaned as a towel may be. In place of sponges, towels or balls of absorbent cotton should be used.

17. Toilet wax should not be used indiscriminately; each person should have his own toilet wax.

18. The hair-dresser should remove vaseline from the vessel containing it with a spatula or spoon, and not by inserting his possibly contaminated fingers into the vessel.

19. Only strictly clean linen, towels, wrappers, etc., should be used for each customer. If a freshly laundered wrapper cannot be supplied for each customer, a clean towel should be used in place of the wrapper.

Respectfully submitted,

J. J. CASSIDY.

P. H. BRYCE.

WM. OLDRIGHT.

Dr. Oldright reported, as a delegate at the recent American Tuberculosis Conference at New York. A permanent organization for fighting the white plague has been formed under the caption of the "American Association," and a world's conference will be held at St. Louis in 1904. The Committee on Epidemics was authorized to co-operate with other societies to further the success of this conference.

The quarterly meeting then closed.

Bleeds, but Saves the Blood.—An exceedingly attractive little folder, more like a Xmas card than anything else, is being mailed to all of the profession in Canada by The Denver Chemical Manufacturing Co., of New York City. It tells of the therapeutic value of Antiphlogistine, which "bleeds, but saves the blood."

Won Rare Honor—Dr. Charles B. Shuttleworth, son of Prof. Shuttleworth, city bacteriologist, who has been for some time in Europe, has secured the English qualifications of L.R.C.P. and M.R.C.S., and has just succeeded in passing the examination granting him the Fellowship of the Royal College of Surgeons of London, an honor accorded to very few in Canada. Dr. Shuttleworth will return to Toronto at once.

The Canadian Journal of Medicine and Surgery

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

Advertisements to insure insertion in the issue of any month, should be sent not later than the tenth of the preceding month.

VOL. XIII.

TORONTO, JANUARY, 1903.

NO. 1.

Editorials.

OVER THE HOOKAH.

AGAIN comes to us the privilege and very great pleasure of expressing to our readers, subscribers, and business friends hearty thanks for their kind appreciation of our united efforts in trying to make our journal of interest to all, and for the many complimentary adjectives they have added to our banner word—"Success."

We are, indeed, grateful for the untiring support that has sustained and encouraged our publication until the present, and now,

as we enter our thirteenth volume, we feel we can cast fear to the winds and say with the poet :

“ Hope beckons from the future, where countless joys expand,
And life seems to our vision, like an enchanted land.”

As the JOURNAL has reached the years of early manhood and unbounded conceit, it has, of course, outgrown its swaddling clothes, and although just the same little Cuss that its worst enemy has patted on the head and said, “ growing as fast as a weed,” it has simply grinned, looked in the mirror to see if its angel wings were sprouting, but not finding them visible as yet, just perked up its dress a bit with a garland of maple leaves and laid bare its heart to the public like a trusting swain, by making known its contents. Big with the weight of a good name, we feel that the cover chosen is one of the most fitting, if not the handsomest, worn by any Canadian medical journal. Long may it close over all that is newest, brainiest and best in medical lore, and uphold its high calling and the dignity of our noble profession.

As the old year is dying in the night—to all who have been with us and contributed so graciously by their good fellowship, their pens, and their gold, through every step of the long road over the twelve mile stones, we say from our hearts—thank you—and as 1903 peeps in at the window we wish to all the joy that comes with the morning.

W. A. Y.

UNIFICATION OF THE PHARMACOPŒIAS.

It appears that a measure of unification between the pharmacopœias of different countries will be brought about in the near future. A conference was held at Brussels, capital of Belgium, last October, between delegates representing the United States and the principal countries of Europe, in order to provide for the uniform composition of medicaments, which are generally used in all countries.

It was at Paris in 1867, at the Second International Congress of Pharmacy, that the principle of the unification of the formulas of medicaments in the different pharmacopœias was laid down. Later on, in 1889, at the initiative of the Royal Academy of Medicine of Belgium, the government of the latter country held conferences with the different authorities interested, and laid down

the basis of an agreement on this subject. The Governments of the United States of America and the following European countries were represented at the Brussels conference: England, Austria-Hungary, Germany, France, Russia, Bulgaria, Denmark, Spain, Italy, Greece, Holland, Portugal, Switzerland, Servia, Norway-Sweden, Turkey, Grand Duchy of Luxemburg. The different questions to be discussed had been carefully considered in advance by committees. The delegates, therefore, found but little difficulty in agreeing on the formulas and dosage of the preparation which it was necessary to unify. The preparations which were discussed numbered exactly seventy-two.

The variations in the percentage of digitalis leaves to rectified spirit in the preparation of Tincture of Digitalis, according to different pharmacopœias, is quite remarkable. Thus, according to the Russian pharmacopœia, the proportion of digitalis leaves to spirit is eight per cent.; in the British pharmacopœias it is twelve and a half per cent. In that of the United States it is fifteen per cent. In the pharmacopœias of France, Spain, Portugal and Belgium it is sixteen per cent.

Similar variations are observed in preparations of aconite, belladonna, colchicum, ipecac, hyoseyamus, nux vomica, opium, etc. The tincture of nux vomica of the French pharmacopœia is twice as active as preparations made according to other formulas. The syrup of ipecac of the French pharmacopœia is five times stronger than the preparation of the same name made according to the German and Italian formulas. One can easily understand that danger may often arise from the administration of preparations in the formulas of which such marked differences are allowed to exist. In order to prevent confusion in the use of tincture of opium it was resolved by the International Conference of Brussels, that in future tincture of opium would contain exactly one per cent. of morphine, so that this preparation would exercise exactly the same action when administered medicinally in every country.

It was also decided to unify the droppers of the different countries the graduated pipette used in the French pharmacopœia being adopted by all the delegates. This is an important reform, for, owing to variation in the measures employed, errors of dosage result, which render a prescription twice or three times more active than that which has been ordered by the physician.

Who Said Doctors Weren't Sports?



It was with my sturdy SAVAGE rifle,
Please, don't you wink, or I might trolle.
Of course you're guessin' who's the man!
Yes, sure enough, you'll need a fan,
Once he was wrapped in a tiny towel
And then was christened

N. ALBERT POWELL.

*(700 pound moose, killed in the Township of Longford, Ont., at 1:15 p.m., on Monday,
November 17th, 1902.)* W. A. V.

We are indebted to the *Gazette de Paris* for the information contained in this article. It is rather strange that so important an event as the meeting of this International Conference of Pharmacy at Brussels has not received more prominence from the contemporary medical press. We suppose that this omission has arisen from the fact that the delegates, professors, physicians, and pharmacists, did their work quietly at Brussels. A royal funeral unfortunately prevented them from celebrating by a banquet the happy understanding arrived at. All the same, the unification of the more commonly used preparations in the different pharmacopœias is a matter of considerable importance to physicians and pharmacists the world over.

J. J. C.

THE PREVENTION OF CONSUMPTION IN PRISONS.

In our last issue we commented favorably upon the fact that Hamilton is the first municipality in this Province to pass a by-law requiring physicians to report cases of tuberculosis to the Medical Health Officer. We think it will not be at all surprising to learn that other municipalities will follow so excellent an example—one which is alike in keeping with common sense and the teachings of an advanced medical opinion. Another aspect of the question of suppressing the growth and diffusion of consumption has recently been noticed in the secular press, and may fairly be considered an outcome of medical opinion reacting on the Provincial Secretary, who has control of Provincial public institutions.

It has long been known that the prison-life of a convict is eminently conducive to the growth and development of consumption. The restricted diet, close confinement, and the state of mental depression arising from imprisonment, all tend to reduce the natural measure of resistance to tuberculosis, possessed by the convict. There are also many consumptives among the convicts. If precautions are not taken to destroy their expectorations and also to disinfect their cells during life and especially after death, the seeds of tuberculosis are spread among other inmates of the same prison, who, owing to the lowered state of natural resistance already mentioned, are particularly susceptible to its

attack. Then, again, some convicts leaving prison after a short term may bring to their homes the seeds of consumption, which they have acquired during their incarceration, and die at home of consumption, after a lingering illness. If this were all, their taking-off might not be an unmixed evil; but, in as much as through the gross neglect of local boards of health, the dying consumptive is allowed to leave behind him a plenteous legacy of death in the undisinfected rooms he once occupied, it is high time that public opinion were directed to this aspect of the case and that local boards of health, who neglect to do their duty by not procuring the disinfection of rooms occupied by consumptives should be requested to follow the example of Hamilton.

Recently a convict, who was serving a six months' term for larceny, died of consumption in the Central Prison, Toronto. It appears that shortly after incarceration his disease developed rapidly and an effort was made by his friends to have him released or placed in an isolation hospital until the end of his term. They did not succeed, and he had to remain in prison until death. An inquest was held and the jury stated in their verdict that the authorities in charge of the prison had seen that this prisoner was properly cared for while in the Central Prison. The jury also found that it would be a most profitable move if a separate prison was established for consumptive convicts, so that the latter might be confined in an isolation hospital or criminal sanitarium, thereby removing a formidable source of contagion from the convicts ordinarily confined in penal institutions.

We learn on good authority that the removal of the Boys' Reformatory from Penetanguishene and the erection of new buildings for this institution afford an opportunity for the erection in connection with it of such an isolation hospital or criminal sanitarium, which might also be used for the confinement of convicts suffering from "the white plague." The Ontario Government deserve great credit for undertaking such a work and for their benevolent and very intelligent appreciation of the great principles and the practice involved in the suppression of tuberculosis.

J. J. C.

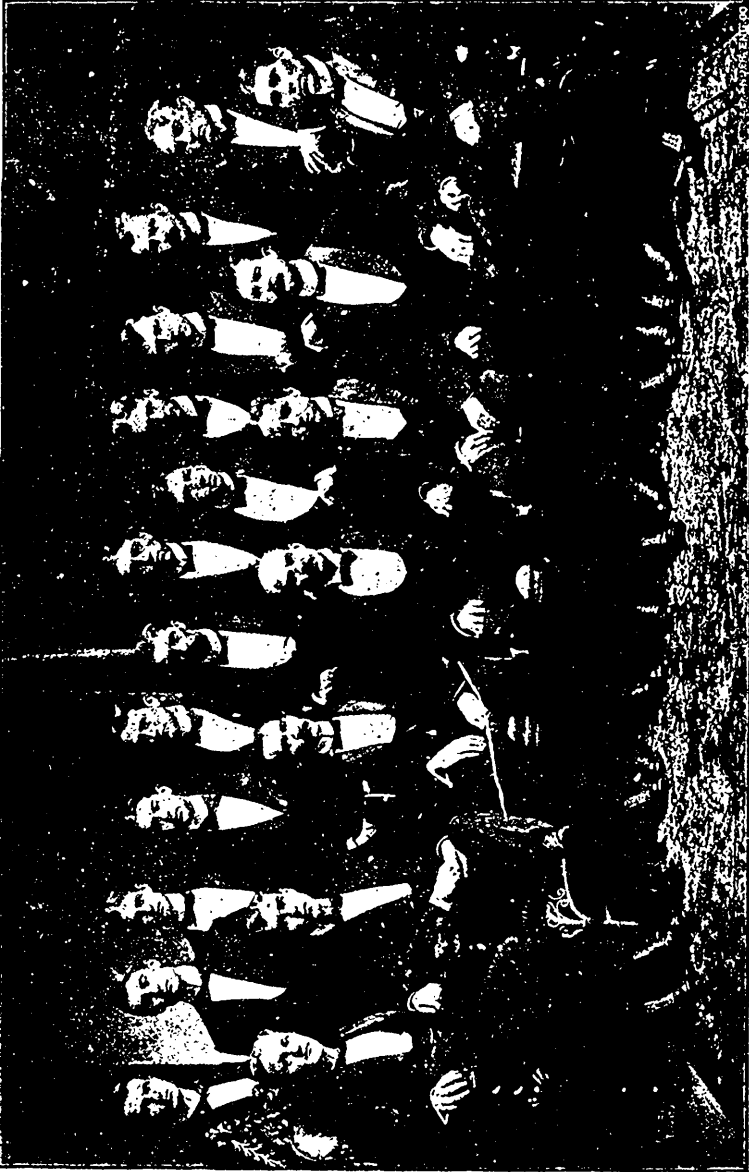
TORONTO MEDICAL FACULTY ANNUAL DINNER.

THAT recent experiences in connection with dinners at the Students' Union have not in any way dampened the enthusiasm of the students of the University of Toronto Medical Faculty was demonstrated on December 3rd, when the sixteenth annual banquet was attended by the largest number ever present at a similar gathering in Toronto. The spacious building was beautifully decorated with banners and bunting, the tables were richly adorned with flowers and foliage, and a choice menu was well served by Webb. The exuberant enthusiasm of the students found vent in college yells and rollicking choruses, which broke out at moments both opportune and inopportune. That the medical department is prospering is indicated by the fact that this year will go forth from the halls the largest graduating class in its history.

The chair was occupied by Mr. R. F. Foster, President of the Dinner Committee, and among those present were: Vice-Chancellor Moss, President Loudon; Dr. Peters, Honorary President; Hon. Geo. E. Foster; Prof. Barker, Vice-President Chicago University; Rev. Prof. Clark, Hon. Senator Landerkin, Prof. Ramsay Wright, Rev. Dr. Sheraton, Mr. J. S. Willison, Mr. A. E. Ames, Dr. Beemer, Mr. B. E. Walker, Dean Willmott, Mayor Howland, Prof. McG. Young, Prof. Pelham Edgar, Hon. Dr. Montague, Dr. Wm. Britton, Principal Hutton, Registrar Brebner, Dr. Daniel Clark, Dr. Chas. O'Reilly, Dr. Galloway, Dr. Allen, Dr. Kenrick, Prof. Chant, Prof. McLennans, Mr. Frank Darling, architect, and Messrs. Illsley & Horne, contractors for the new building. The faculty were present in full force, among them being: Profs. R. A. Reeve, G. H. Burnham, W. H. Ellis, C. F. Heebner, A. B. MacCallum, G. R. McDonagh, H. T. Machell, J. J. Mackenzie, W. B. Thistle, A. H. Wright, W. P. Caven, J. M. MacCallum, W. Oldright and F. N. G. Starr.

The toast of "The King" having been duly honored, Dr. G. A. Peters proposed the toast of "Our Country" in an address which brimmed over with sturdy patriotism, and awoke a hearty response from his audience.

Hon. Geo. E. Foster responded in an eloquent address. He spoke of the widespread influence wielded by the medical pro-



UNIVERSITY OF TORONTO MEDICAL FACULTY DINNER COMMITTEE, 1932.

BACK ROW, STANDING.—W. Merritt, F. W. Ormou, R. J. A. McComb, R. Vansickle, R. G. Edwards, J. Ferguson, A. H. McFadden, D. Kappelle, F. J. Walker, H. McLean, J. J. Matheson, C. E. Spence.

FRONT ROW, SITTING.—G. A. Winters, B.A., Honorary Secretary; M. E. Gowland, B.A., Second Vice-President; R. F. Foster, President; Prof. G. A. Peters, Honorary President; R. J. Ferguson, First Vice-President; A. McInnis, Honorary Treasurer; G. E. Wilson.

fession in the community in which they performed their life work. Mr. Foster drew a graphic and inspiring picture of Canada's resources and the glorious possibilities which lie before the Canadian nation. He dwelt upon the need of honest work in building up the nation, and, speaking of the unfavorable reports of shipments of Canadian produce to South Africa, said that the men who sent produce tagged Canadian, one-third of which was bad, were worse than blunderers; they were not only hurting themselves, but hurting the name of Canada, and were hindering the progress on industrial lines of this Canada of ours.

"The University of Toronto and its Faculty of Medicine" was proposed by Mr. B. E. Walker, trustee of the University, who said that the one natural resource of Canada of greater importance than the minerals and the forests was her young men, and he pointed out the importance of providing them with the facilities for obtaining a liberal education in order that the resources of the country might be developed. The present system of raising revenue for the province was, Mr. Walker said, unscientific, and he expressed the opinion that it would be in the true interest of the province and of the University of Toronto that at the earliest possible date the people should have the common sense to say to the Legislature, "Please tax us by direct taxation and do the things in this province which ought to be done in order to make the development of Ontario what it ought to be."

Vice-Chancellor Moss, who, at fifteen minutes' notice, in the unavoidable absence of the Chancellor, Sir Wm. R. Meredith, undertook the pleasant duty of responding to the toast, made an able and appropriate reply. Every year, he said, some tie came to bind the faculty of medicine and the university together; this year it was the noble and imposing building which is now rising in the park, and which, when finished, would be the most complete of its kind to be found anywhere. He expressed appreciation of the action of the Government in relieving the needs of the university, and expressed the conviction that still further assistance by the Government would meet with popular approval.

Dr. Reeve, the popular Dean, responded on behalf of the faculty, and, commenting upon the presence of Prof. Barker (of the class of 1890), now of Chicago University, whose success was due to the splendid laboratory system of the Toronto University,

said that additional laboratory buildings are required, and suggested that endowments for several chairs are needed.

Prof. Barker, '90, Toronto, of the University of Chicago, on rising to propose the toast of "The Professions," was given an enthusiastic welcome. He made a pleasant reference to his former experiences in the Toronto Medical Faculty, and in graceful terms acknowledged his indebtedness to the faculty for his professional success. In the course of an able review of the situation, professionally, in the United States, Prof. Barker said that the tendency was to shorten the B.A. course, and that the American college was being ground between the high school on the one hand and the professional school on the other. One set of men argued that a man is old enough when leaving the high school to enter professional work, and another set contending that he should have the B.A. course before entering upon his medical work. A compromise has been made in several States, by allowing a man who is going into law, theology or medicine to have the first year or two years of his professional course count as the last year or last two years of his college course. It looked, however, as though things would go further, as President Butler, of Columbia University, has seriously urged that the degree of B.A. be given at the end of two years' work, and, after consideration, the proposition did not appear to be as shocking as it at first seemed to be.

Another tendency noticeable in the study of medicine on the other side is the emphasis laid upon research and original investigation, which is greater, perhaps, than at any other time in history. Prof. Barker spoke of the great change which had taken place in the methods adopted within the twelve years he had been in the United States. When he first went to Chicago there was scarcely any professor in a medical school who gave his whole time and energy to the work of the school. Now there is not a first-class school that does not have all its chairs in the first two years endowed and filled by professors who give their whole time to the work, and who, besides teaching, do a great deal of research work, and who have assistants doing the same. There are also eminent men engaged exclusively in the practice of medicine, surgery and obstetrics in the hospitals for the universities only.

The third important feature of the situation on the other side, as explained by Prof. Barker, is the activity manifested by the

State universities, a very large proportion of which have medical faculties. Although it was supposed at first the States would oppose any large expenditure of funds for medical and professional education, it was found the people are willing to support these institutions. Prof. Barker enumerated the liberal provisions made by Minnesota, California and other States for medical education, and pointed to the generous endowment furnished by private citizens of chairs in the State universities as an evidence of the earnestness with which the question of higher education has been taken up by the people. In conclusion, he paid a glowing tribute to the magnificent work done by Toronto University as shown by the high appreciation in which its graduates are held and the prominent positions they attain in the United States, instancing the splendid attainments of Dr. Bensley, and the fact that more fellowships in the Chicago University were taken by students of the Toronto University than by those from any State university.

Rev. Prof. Clark responded for the Church, Mayor Howland for the Law, and Hon. Senator Landerkin for Medicine.

TRINITY MEDICAL DINNER.

TRINITY medicals at their twenty-fifth annual banquet on December 3rd made merry, according to the best traditions of a quarter century. It is safe to say that on no preceding similar occasion were there more good cheer and assurances for the continued success of Trinity Medical College. It was referred to as the bright gem in Canada's intellectual centre, Toronto. The President, Mr. J. H. Kidd, was in charge, and at his right sat the Dean of the faculty, Dr. Geikie.

Those at the head table were as follows: From other educational institutions—Trinity University, Rev. Provost Macklem; Queen's University, W. W. McKinley; McGill Medical College, Thos. McPherson, B.A.; Knox College, W. W. McLaren, B.A.; Trinity College, A. R. Kelley; Osgoode Hall, R. D. Schooley; Dental College, M. P. Corrigan; Toronto Medical College, C. H. Gilmour; Bishop's College, Montreal, D. W. Morrison; Collingwood Collegiate Institute, H. A. Treadgold; Western Medical College, London, J. R. Armstrong; McMaster College, P. H.

Norman; Victoria College, J. H. Wallace; Toronto General Hospital, Dr. R. N. Kyle. Drs. G. Sterling, Ryerson, Charles Sheard, E. Herbert Greene, J. Algernon Temple, J. C. Mitchell, W. T. Stuart, N. A. Powell, H. Wilberforce Aikins, W. H. Pepler, Andrew Eadie, George Elliott, J. H. McConnell, J. F. Uren, T. B. Richardson, B. F. Milner, Chas. Trow, J. T. Fotheringham, Allen Baines, Geo. A. Bingham, J. Henderson, Thos. W. Harrison, L. Teskey F. Fenton, H. Parsons, H. B. Anderson, Macfarlane, Copp, G. Gordon, McMaster, S. Johnston, R. Waters, W. Lowry and Prof. Shuttleworth.

The following toasts were honored: "The King," proposed by the President; "Canada and the Empire," proposed by Mr. E. F. Glendenning, and responded to by Dr. Bingham; "Trinity Medical College and Graduates," proposed by Mr. C. A. Perkins, and responded to by Dean Geikie, Dr. Powell and Dr. Pepler; "Undergraduates," proposed by Dr. T. B. Richardson, and responded to by Messrs. Beer, Consillor, Manion, Fraleigh, Orok, Kendall, Staples and Kaufman; "Educational and Sister Institutions," proposed by Mr. Chas. Stone, of Trinity, and responded to by Dr. Harrison, of Selkirk, a practitioner 75 years of age, and also by the representatives from other institutions; "The Ladies," proposed by Mr. W. Lawrence, and responded to by Mr. H. Dobbie.

Mr. Glendenning referred to Trinity as the shining intellectual gem in the most brilliant star in the greatest empire the world had ever known.

Dr. Bingham told two good stories at the expense of Montreal and London. A Montrealer applied to use the long-distance telephone in Toronto, and was told that it would cost 50 cents to talk not a very great distance. He replied that in Montreal he could talk to Hades for 50 cents. "Yes," said the telephone girl, "but that is within the city limits." Another girl, asked how many brothers she had, had said three. "Are they all living?" "Well, two of them are, but the other is in London."

Mr. Perkins elicited loud applause when he dissected the college faculty, showing that the head possessed a voice that could discourse most brilliantly upon absorbing subjects, and that all the other parts performed their functions with admirable harmony and skill.

Dean Geikie was received with the singing of "God Save Our Dean." He responded in a most felicitous manner. He said that he had sometimes been accused of speaking too favorably of Trinity Medical College, but he couldn't help it. It was in his blood, in his flesh, in his bones, in his soul. And while he lived he hoped never to see a moment when he should not be ready to speak for the college, which was very dear to him, and which had been his hobby during almost his whole life.

Dr. Powell and Dr. Pepler were both happy in their allusions to Trinity Medical College. They recognized that "nothing is equal to wisdom and nothing so eloquent as silence," and therefore were brief. Dr. Pepler, however, looked into the future, and saw a closer connection between Trinity Medical College and the University.

Dr. Harrison made a most humorous comparison of the practice of medicine fifty years ago with what it is to-day. Fifty years ago whiskey was the staple medicine, and most doctors had unswervingly prescribed whiskey. In the profession of medicine great progress had been made, and Dr. Harrison congratulated the students before him on their good fortune in being able to study in an age that offered so much enlightenment. He was greatly in favor of the Dominion Registration Act, and advised the students to stand by the Medical Council, for through it the practitioners of the Province had been able to raise the standard of medicine and surgery and subdue quackery and imposition. When the venerable doctor resumed his seat the whole company rose, and, waving their napkins, cheered again and again.

Dr. McKinley, representing Queen's, reviewed the history of that institution, paying a high tribute to the memory of Principal Grant, who, he said, had been looked upon as their king.

Mr. McPherson, representing McGill, made a plea for unity between the colleges, and expressed the hope that among them there would be no jealousies, and that the success of one would be the success of all. He championed the proposed Registration Act, and hoped that the medical men of the different Provinces would work for its enforcement.

The other speeches were all expressive of good-will towards Trinity. The affair ended with the National Anthem.

The committee in charge were J. H. Kidd, Wm. Love, E. J.

Hogan, R. Stobie, J. Felles, W. B. Kendall, B. E. Tughan, V. E. Bryan, B. Davey, J. A. Anderson, A. G. Thompson, H. A. S. Treadgold and A. Hicks.

EDITORIAL NOTES.

Perineal Prostatectomy.—This interesting operation was discussed at a recent meeting of the Surgical Society of Paris (October 15th, 1902) by Drs. Legueu and Albaran. The former favored the opening of the urethra. He removes the whole capsule of the gland, without morcelllement, the latter procedure being, in his opinion, useless, as the entire gland, even when very large, can be removed easily through the incision—and defective, because the operator is obliged to grope about in the dark, and ends by losing his way. He resects what appears to him to be an excess of the urethra, and reunites the severed ends of the remaining portions on a catheter, leaving the wound open, as well as the perineal wound. The operation is quite simple. There is a venous hemorrhage, which does not bother the surgeon; a wound of the rectum, is exceptional, and besides does not inconvenience. He had done twelve prostatectomies. In one case the patient, a man of 72 years of age, who suffered from advanced vesical and renal lesions, died. In the eleven other cases the immediate results were very good. He thought that in the enlarged prostate, prostatectomy was the operation of election, but divided the cases into groups: (1) Progressive dysuria: Prostatectomy would be excessive, all the more as it may destroy the genital functions. If accompanied with retention this operation is indicated. (2) Complete chronic retention: Prostatectomy is indicated unless there should be a primitive sclerosis concealed behind a small prostate. (3) Incomplete chronic retention: The surgeon must be prudent and understand that the contractile power of the bladder is sometimes regained with difficulty, and that the patient is more infirm after than before the operation. (4) Vesical calculus: Frequently this operation, by causing the disappearance of the calculus, which results from the enlarged gland, is better than repeated lithiories. The contra indications are: Cardiac and pulmonary affections, renal and vesical infection, and old age; in persons over 72 years of age the operation should not

be done. Dr. Albaran, who had operated in forty-two cases with one death, favored morcellment of the prostate, a manoeuvre which enables the operator to avoid needless destruction of the urethra.

Beneficial Effects of Mercury in Little's Disease.—Drs. Gallois and Springer (Paris) report an interesting case of Little's Disease in which the patient, a girl of four, was notably benefited by mercury. Her mother had given birth to this child at the seventh month of pregnancy, after a fright. The child had received treatment from several physicians and at the time she came under the observation of the reporters (May, 1902), was just turned four years old. She was unable to walk and could not stand up without assistance. Her knees turned in and a slight contraction was noticeable in her legs. She could not even remain seated on the floor, and fell over when she was not held. The other signs observed were strabismus, an idiotic air and a very backward intellectual condition. Though the reporters found no certain sign of syphilis in the parents of the child they gave her 20 drops of Van Swieten's solution per diem, increasing the doses progressively. Eleven days afterwards the child walked alone, exhibiting still the spasmodic gait. Since that time her motor difficulties continue to disappear, although more slowly than at first. Her mental condition has also undergone a notable amelioration. The reporters state that they consider the case one of Little's Disease (Marie type), with arrested development of the pyramidal tract, as the child was born prematurely. Her mental condition, however, appears to them too markedly diseased to enable them to eliminate altogether a brain lesion. They ask: Shall we conclude from the effects of treatment, that this child's disease is of a syphilitic or parasymphilitic nature? Should we think that mercury can prove curative in cases which are not of a syphilitic origin? They think that a mercurial treatment should be used in a case of Little's Disease even when a history of syphilis is not obtainable.

Rhythmic Traction of the Tongue vs. Inhalation of Oxygen in Carbon-Monoxide Poisoning.—Shortly after Zola's death the contention was raised in the French press, that an error had been committed in resorting to rhythmic tractions of the tongue in his case,

and that the inhalation of oxygen should have been resorted to immediately. Dr. Laborde, in discussing the matter at the French Academy of Medicine (October 15th, 1902) contended that rhythmic tractions of the tongue and Sylvester's method of artificial respiration had been employed by the attending physician, Dr. Bermann, assisted by Mr. Luc, a pharmacist, and that inhalation of oxygen and injections of ether had also been employed for three consecutive hours. The treatment failed, because toxic and asphyctic death had completed its work, owing to an intense and irremediable absorption of the gaseous poison. Death having taken place, neither the inhalation of oxygen, nor the rhythmic traction of the tongue could restore the vital spark. In the case of Mde. Zola the circumstances were not quite the same. Neither pulse nor respiration were perceptible in her at first, a rosy color of the face being the sole indication of life. After rhythmic tractions of the tongue had been practised on her for from twenty to twenty-five minutes by Dr. Bermann, artificial respiration being employed simultaneously by the pharmacist, her breathing was restored. Dr. Laborde made this statement to controvert the opinion held by some observers that rhythmic tractions of the tongue were futile in carbon-monoxide poisoning, and that the only treatment should consist in giving inhalations of oxygen.

Ontario Health Act.—We invite the attention of physicians practising in Ontario to the interpretation put upon Section 93 of the Ontario Health Act. (*Vide* report of Fourth Quarterly Meeting of the Provincial Board of Health of Ontario. Page 38.) If a physician reports a case of typhoid fever (an infectious disease under the Act), and is instructed, even informally, by two members of the local board of health to attend the patient, who is unable to provide medical attendance at his own cost, then the physician can collect his bill for attendance from the local board of health. Local boards of health may possibly not be charmed with this interpretation of Section 93 of the Health Act. A good many of the worthies who shine on local boards of health like to pat the doctor on the back, in a patronizing sort of way, and encourage him to expose himself and his dear ones to contagion, while they stand in safety on the sidewalk. But when the doctor has the nerve to ask the local board to pay his bill for services to paupers suffering from infectious disease they refuse to pay and

charge him with extortion. In such cases it would be well for the physician to secure himself against chicanery, by having evidence that instructions were given him by two members of the local board of health. "Always be sure of your evidence."

Regarding the Etiology of Appendicitis.—Regarding the origin of appendicitis Dr. Jullien, Paris, recently expressed an opinion, which is novel and may contain a grain of truth. He attributes this disease to the modern methods of administering medicines in the form of powders and granulated preparations. The ease with which drugs may be administered in capsules and the convenient forms furnished by our new means of sugar-coating and granulating medicated substances, exercise, in his opinion, an influence in producing intestinal calculi. At no time have the phosphates, the soluble or insoluble salts, been more abundantly employed in morbid conditions, and he asks physicians if these substances are normally eliminated, or if, on the contrary, they do not leave in the intestines a nucleus to produce these concretions, which may contribute to the development of the modern scourge, appendicitis.

Financial Side of Medical Practice in France.—There are 2,600 doctors in Paris; forty of them make from \$40,000 to \$60,000 per annum; fifty make \$20,000; fifty make from \$10,000 to \$20,000; two hundred make from \$6,000 to \$10,000; two hundred make from \$4,000 to \$6,000; seventeen hundred make an average income of \$725. In all France there are 16,000 doctors, who make an average income of \$550. This is not the net gain, but the gross amount. Evidently France does not believe in pouring a golden stream of napoleons into the hands of her physicians. Dr. Brouardel, probably the most renowned physician in France, had, according to Dr. Chaillyset, a very poor return in income for the amount spent on his education by his family. When Brouardel was twenty-eight years old his family had spent \$10,000 on his education. In the first year of his practice he made \$130, and in the seventh \$1,020.

J. J. C.

In the Sweet by and by.—In the sweet by and by we shall meet in solemn conclave, and pass resolutions, providing for an elevation of the standard of matriculation of the Ontario College of Physicians and Surgeons. It may be in 1904, it may be

still later in the twentieth century; but we are resolved to pass the resolutions anyway. We did pass resolutions of an elevating character in June, 1902; but since then we have discovered the error of our ways and have decided to climb down, as that operation is easier than climbing up. Some fellows have the prehensile faculty better developed than others, and can go high or low on the tree as the humor takes them. Just now, it seems that a position on the dead level, near Mother Earth, would be more conducive of longevity than gyrations on the top branches; but in the sweet by and by we may do better.

Novel Cause of Epilepsy.—There is said to be a very curious and interesting class of cases noticed among the invalided soldiers who have returned from South Africa. It is stated that the number of cases of epilepsy observed in South Africa was astounding, over 2,000, according to the report. The epileptic attacks were not caused by wounds, but by the harsh, screaming detonations of modern firearms, particularly repeating cannons, and by the explosions of lyddite shells. It is feared that these epileptic attacks will be incurable.

PERSONALS.

DR. A. ALLISON, of Caledon East, was married to Miss Nellie O'Connor, of Toronto, in St. Joseph's Church, Buffalo, on November 29th, 1902.

DR. DAME, late of Spadina Avenue, and who has been practising at Thornhill for a year or two, has again settled in Toronto at 19 Howland Avenue.

LETTERS patent have been issued incorporating H. P. R. Temple, H. W. Brick, R. H. Temple and P. H. Temple, of Toronto, and G. A. Pattison, of Montreal, under the title of the Temple-Pattison Company, to purchase and deal in surgical, chemical, physical, and other goods. Capital, \$100,000.

Items of Interest.

Two More Coroners.—Dr. E. T. Snider, of Cayuga, is appointed Associate Coroner for Haldimand, and Dr. D. P. Bogart, of Whitby, Associate Coroner for the County of Ontario.

Yell of Syracuse Medical Students.—"Well man, sick man, dead man—stiff; Dig 'em up, cut 'em up, what's the dif? Humerus, tumerus, blood and gore, Syracuse, medicos, nineteen four.

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.

Dr. S. S. Cornel's Decease.—Dr. S. S. Cornel, of Athens, one of the brightest physicians of eastern Ontario, passed away on December 2nd, aged 37 years. He contracted la grippe at New York a few weeks ago and never recovered. He leaves a widow, daughter of Mr. Amos Robinson, of the St. Lawrence Hotel, Brockville, and three children.

Dr. A. Y. Massey's Marriage.—News was received recently by cablegram of the marriage on December 7th, at Benguella, West Africa, of Alfred Yale Massey, M.D., M.A., to Ella Margaret, youngest daughter of the late Daniel Telfer Arnoldi (formerly an officer of H. M. 76th Regiment) and Mrs. Arnoldi, of 109 College Street, in this city. Dr. Massey, who is a son of Mr. Levi Massey, of Wallbridge, Ont., graduated in Toronto at the Trinity Medical College, and has been in West Africa about three years.

Death of Dr. Dennis Nunan.—Dr. Dennis Nunan, a highly-esteemed resident of Guelph, died on the 12th ultimo in his 64th year. He was born in County Kerry, Ireland, and came to Canada when a child. After a few years as Principal of the Separate Schools of Guelph he graduated at Ann Arbor, Mich., in 1867, and from the Toronto Medical School in 1869, since when he has practised his profession in Guelph. He was one of the founders of the St. Patrick's Society of Guelph, and was a devoted adherent of the Roman Catholic Church.

Toronto Man Elected.—The American Public Health Association concluded its annual convention at New Orleans, La., on December 12th, by electing officers, headed by Surgeon-General Wyman for President. The new Executive Committee includes Dr. John A. Amyot, of Toronto. Washington, D.C., was chosen

as the next place of meeting. Resolutions were adopted urging that illuminating gas be placed under municipal control and asking for legislation that will require railroad and steamship companies and hotels to furnish pure drinking water.

Notice Regarding Matriculation in the Medical College.—Dr. R. A. Pyne, Registrar of the Medical Council, wrote three weeks ago to the Minister of Education, announcing the decision of the Executive Committee in regard to matriculation with the College of Physicians and Surgeons of Ontario. To remove any doubt as to the interpretation to be given to Regulation 1 of Section 1 of the regulations of the Medical Council for 1902-3, it is now decided that the standard for admission for 1903 shall be the same as for 1902, and for 1904 and subsequently the standard of admission shall be either: 1. Junior matriculation in arts, including physics and chemistry, with honor standing in any one subject of the course; or, 2. Senior matriculation in arts as now provided by Regulation 2, Section 1. As the changes now announced will not come into operation until 1904, there will be ample opportunity for their discussion and amendment, if necessary, before the next meeting of the Medical Council next June. It is believed that the increase in the standard of matriculation is a reasonable one, and will be found acceptable to those who maintained that the standard as at first proposed was practically prohibitive.

Canadians' Gift of \$80,000 a Year to King Edward's Hospital Fund.—Just prior to the Coronation of King Edward the news came from London that Lord Strathcona and Lord Mount Stephen had made munificent donations to King Edward's hospital fund for London, but no amounts were stated, and it was merely a matter of conjecture as to the sum given. Now, however, the veil has been lifted, and the honorary secretaries of King Edward's hospital fund acknowledge the receipt at the Bank of England of the sum of £4,094 2s. 4d., "being the first quarterly dividend arising from the securities so generously given to the fund by Lord Mount Stephen and Lord Strathcona." This announcement shows that the two Canadian peers have devoted securities to this object which, for all time (at the prevailing rate of interest), will give an annual income of £16,376 13s. 4d., equal to \$79,699.83. The munificence of the two famous Canadians was fittingly referred to by the Prince of Wales in a speech which he made at the general council of King Edward's hospital fund, held at York House, London, on November 24th, when his Royal Highness said: "Mrs. Lewis' gift was followed by the splendid endowments from Lord Strathcona and Lord Mount Stephen, who have thus extended to King Edward's fund that open-handed generosity by which they have in Canada created and endowed so many great works of charity."

Ontario Medical Council Elections.—As a result of the recent elections the following now compose the Council of the College of Physicians and Surgeons of Ontario. *Territorial Representatives:* No. 1, J. L. Bray, M.D., Chatham, Ont.; No. 2, J. Mearns, M.D., Woodstock, Ont.; No. 3, J. Macarthur, M.D., London, Ont.; No. 4, J. A. Robertson, M.D., Stratford, Ont.; No. 5, L. Brock, M.D., Guelph, Ont.; No. 6, J. Henry, M.D., Orangeville, Ont.; No. 7, P. Stuart, M.D., Milton, Ont.; No. 8, S. H. Glasgow, M.D., Welland, Ont.; No. 9, R. J. Gibson, M.D., Sault Ste. Marie, Ont.; No. 10, E. E. King, M.D., Toronto, Ont.; No. 11, A. A. Macdonald, M.D., Toronto, Ont.; No. 12, J. H. Sangster, M.D., Port Perry, Ont.; No. 13, S. Hillier, M.D., Bowmanville, Ont.; No. 14, T. H. Thornton, M.D., Consecon, Ont.; No. 15, W. Spankie, M.D., Wolf Island, Ont.; No. 16, J. Lane, M.D., Mallorytown, Ont.; No. 17, M. Klotz, M.D., Ottawa, Ont. *Collegiate Representatives:* W. Britton, M. D., Toronto, Ont., University of Toronto; H. S. Griffin, M.D., Hamilton, Ont., Victoria College (not yet elected); V. H. Moore, M.D., Brockville, Ont., Queen's College; A. J. Johnson, M.D., Toronto, Ont., Trinity College; J. Thorburn, M.D., Toronto, Ont., Toronto School of Medicine; M. Sullivan, M.D., Kingston, Ont., Royal College of Physicians and Surgeons, Kingston; J. A. Temple, sen., M.D., Toronto, Ont., Trinity Medical College; W. H. Moorhouse, M.D., London, Ont., Western University, London, (not yet elected). *Homeopathic Representatives:* E. A. P. Hardy, M.D., Toronto, Ont.; Cl. T. Campbell, M.D., London, Ont.; G. Henderson, M.D., Strathroy, Ont.; L. Lutton, M.D., St. Thomas, Ont.; E. T. Adams, M.D., Toronto, Ont.

The St. Catharines Well.—Rheumatism, both the acute and chronic forms, is a disease, as every general practitioner knows, very hard to eradicate from the system. When once the uric acid condition is thoroughly established, drugs seem powerless in combating it or else the effect the drugs have on the digestive system is such that the end is worse than the beginning. Anything that will increase the elimination of the poisons from the system without any injurious effect to the stomach should be eagerly sought after by those dealing with such cases. By increasing the excretion of urea through the skin, bowels and kidneys, and by stopping the ingestion of those foods that increase urea in the body, we have the only means by which the quantity of uric acid may be reduced in the system. The free action of the sudorific glands has more to do with keeping the body in a healthy condition than is generally conceded. The waters of the "St. Catharines' Well" are known throughout this continent as one of the most efficacious of all the muriated saline waters of North America. The chlorides play an important part in the animal economy by furthering the processes of absorption and excretion. Externally chlorinated waters in baths increase the functions of the skin in consequence of their action on the peripheral nerves, thus increasing the ex-

cretion of urea. Internally, their action is most beneficial in stimulating the action of the liver, kidneys, and intestines. Thus we have in the waters of the St. Catharines Well the essential elements for the proper treatment of rheumatism. At the "Welland" in St. Catharines, the diet is carefully regulated, massage and electricity used in connection with the baths in suitable cases, so that altogether there is to be found in this famous health resort everything for the rheumatic patient.

King's Honor to Canadian.—Fiset and McMillan, D.S.O.—It was a source of great pleasure to the profession in Canada to learn not long ago that Lieut.-Col. Fiset and Captain McMillan, of the Canadian Corps, had been the recipients at the hand of the King of the decoration of Companion of the Distinguished Service Order. Lieut.-Col. Fiset is known to Toronto officers, particularly those who served with him in South Africa, as the "game little doctor," and there appears to be a number of reasons why he should be made a companion of the Distinguished Service Order. Everyone seems to know of Col. Fiset, and all voice the eulogy which Colonel Buchan bestowed upon him when chatting with a reporter. "Fiset was with us," said Col. Buchan, "and he was a good doctor, a fine fellow and a tip-top chap all round. He came out with us (the first contingent) as assistant surgeon, and he particularly distinguished himself during the first couple of days at Paardeberg, in fact, for ten days he was continuously in evidence. He was always on the firing-line with ready aid for the wounded, and all knew Fiset. He also distinguished himself in a similar manner at Hout Nek and Zand River. After the action at the latter place the regiment marched to Heilbron, where Dr. Fiset took sick and was put in the hospital. He was pretty badly used up. While he was there he was taken prisoner by Dewet, who occupied Heilbron after Gen. Ian Hamilton's column (which included the Canadians) had vacated it. He was subsequently released by the Boer general, and he rejoined the regiment at Springs, where everyone was glad to see him resume duty. He was put on the line of communication between Johannesburg and Vereeniging, and he did such excellent work that he was highly commended by the principal medical officer in charge of the line of communication." Lieut.-Col. Fiset went to Africa with the rank of captain and while out there was promoted to the rank of major. Since his return to Canada he was made a lieutenant-colonel. He is on the army medical staff at Ottawa as assistant to Col. Neilson, director-general of the medical service. The fact that his work in South Africa has been recognized by the powers that be is a source of sincere satisfaction to the officers and men who served with him during the campaign. A brother of Col. Fiset, D.S.O., was an officer of the R.C.R.I. at Toronto four or five years ago.

Correspondence.

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

TYPHOID FEVER IN RELATION TO MILK SUPPLY.

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

DEAR SIRS,—Realizing, as we do, that some of the typhoid fever cases in the city may be due to the milk supply, we have been making special efforts to ascertain if the sources from which we obtain our milk are free from the disease. As far as our investigations have gone, we are pleased to state that there is extremely little typhoid fever in the districts from which Toronto's milk is drawn, and none whatever on the farms from which we obtain our supply. Both our veterinary and dairy inspectors have made a thorough inspection of all the farms and report no sickness. We have also inquired of the leading doctors in these districts, who state that cases of typhoid are extremely rare this autumn and that they have no cases among our patrons.

Notwithstanding these encouraging reports, we are having a most complete and rigid bacteriological examination made of all the milk received at this dairy, and if any milk is found to be tainted it will at once be shut off. We are following this up systematically, taking the milk from twenty-five farms per day, so that in the course of a week or ten days we will have our investigations completed. Yours very truly,

CITY DAIRY CO., LIMITED.

Ten days later we heard again from the company to the following effect:

Dear Sirs,—We have now completed our investigations and beg to report as follows:

1. That no typhoid fever exists on any of the farms supplying us with milk, and so far as we can ascertain, there have been no cases for over a year.
2. The sanitary conditions of the farms, while open to im-

provement in some cases, are still as good as can be expected, the water supply, with one exception (as is explained below), being free from contamination with bacteria known to cause disease.

3. A complete and exhaustive bacteriological examination of the samples of the milk received from the different farms has proved that, with one exception, the milk was free from contamination.

4. This one exception was found to be contaminated with bacillus coli and possibly typhoid bacillus (as is well known, it is exceedingly difficult to distinguish between them). This discovery was made by our bacteriologist on the 14th inst. The milk received that morning was at once heated to 212 and dumped down the sewer, and the cans subjected to a very severe sterilization. Word was then sent to this farm, the milk stopped, and the case reported to the Health Department. A subsequent test of the water on the farm found the well water to be contaminated with this class of bacilli. While we thoroughly wash and steam our cans before returning them to the farm, it is presumed that the pails were washed and rinsed in the well water and the milk contaminated in this way. We have since ascertained that the owner of this farm had typhoid fever himself about eighteen months ago.

These facts are of interest to the profession as showing that the City Dairy Co. are using every effort to supply a bacteriologically pure milk to its patrons.

“A VICIOUS RELIGIOUS MONOMANIA.”

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

DEAR SIR,—In your November number appears an article in which the writer refers to Christian Science as a “vicious religious monomania,” “a menace to the health of the community,” and “absurd cult,” and other names equally as uncomplimentary. I am sure the writer of the article has never studied Christian Science, or he would not make such statements, for which he offers no word of proof. Would he condemn the teachings and practice of Jesus the Christ as a “vicious religious monomania”? Yet that is practically what he does in condemning Christian Science, which

is based wholly on the Master's teachings. Possibly some of the doctrines of Christian Science may seem ridiculous to him, as they did to almost everyone who has accepted Christian Science, when they first heard of it, but a close, unprejudiced study of the subject will show that it is not only reasonable and logical, but absolutely demonstrable.

As is well known, the Christian Science churches are made up largely of persons who have been sick and despondent, many of them having been given up as hopeless by medical men. Yet Christian Science has brought up the standard of these people to such a point that the clerk of the First Church of Christ, Scientist, in Boston, with a membership of over 22,000, was able to report that the mortality rate of that church for the year was only 2.32 per thousand, being 17.38 per thousand less than the rate for the city of Boston during the same period. Other Christian Science churches all over the United States and Canada would present much the same record. Is a system which will produce such results "a menace to the health and well-being of the community"?

In regard to the lectures of the minister referred to, against Christian Science, it is only necessary to say that he has never studied the first principles of Christian Science sufficiently to heal a single case of sickness by its means, and is therefore entirely unqualified to explain its philosophy and practice intelligently. Until he does so understand it, his arguments cannot possibly have any weight with thinking persons.

Thanking you for your courtesy, I am,

Yours respectfully,

C. R. MUNRO.

Toronto, 20th November, 1902.

The Physician's Library.

BOOK REVIEWS.

Manual of Antenatal Pathology and Hygiene. The Foetus. By J. W. BALLANTYNE, M.D., F.R.C.P., F.R.S. Edin. Edinburgh: William Green & Sons. 1902.

A new work by such a voluminous writer on foetal pathology as Dr. Ballantyne may well be examined with interest, and requires perhaps more than the ordinary space of a review article to do justice to it. The present work is devoted to antenatal pathology and hygiene, the author reserving for a future volume the subjects of Morbid Heredity and Teratology. The author divides his book into two sections, the first being taken up with a discussion of the relations of antenatal to neonatal and postnatal pathology, the second being devoted to the pathology and hygiene of the foetus proper. The opening chapters of the first section are given to such general topics as the relations of foetal pathology to other branches of medicine, and one cannot help feeling that here, at least, the book is somewhat padded with reflections and diagrams which are hardly necessary in a scientific work. Succeeding chapters of this section consider types of neonatal disease, illustrating the intrusion of the antenatal factor, such as traumatism, intra and neonatal infections and disturbances resulting from neonatal readjustments such as icterus neonatorum. The first few chapters of the second section are devoted to the subject of the normal anatomy and physiology of the foetus, then follow chapters upon type of transmitted disease, in which we find, as would be expected, that those upon foetal tuberculosis and syphillis are perhaps the best in the book. The concluding pages are given to questions of therapeutics and hygiene.

To the work which he has given us, Dr. Ballantyne has brought not only the fruits of his own extensive investigation, but also the results of his no less extensive reading, and the pathologist who reads the book will find in it a very full reference to all of the most important literature upon the subject, which he may look for in vain in other works. In this, perhaps, lies the greatest value of the book, because a perusal of it leaves one with the feeling that the subject of foetal pathology is still in such a hazy condition that much more careful investigation must be devoted to it before a satisfactory manual can be written.

It is a surprising fact, that notwithstanding the ease with which material is obtainable for the study of the pathology of the

foetus, so little accurate knowledge exists upon the minute pathological anatomy, its relations to normal histogenesis and their bearing upon antenatal and neonatal physiology. We believe that this is the fault of the pathologist rather than of the obstetrician, in that he has neglected this most interesting and important branch of his subject. The obstetrician naturally approaches the subject from the practical side, and has neither the time or the training necessary to take up questions of morbid histology. Dr. Ballantyne's book is certainly written more from the standpoint of the obstetrician, and will consequently be read by the latter with more interest than by the pathologist, but the pathologist will, nevertheless, find in it a mine of interesting information, and he cannot fail to be impressed with the unsatisfactory state of the subject, and the need for more purely pathological investigations into antenatal conditions.

The book is well illustrated, and the publishers are to be complimented upon its general make-up.

J. J. M'K.

A Reference Hand-Book of the Medical Sciences, embracing the entire range of scientific and practical medicine and allied science. By various writers. A new edition, completely revised and re-written. Edited by ALBERT H. BUCK, M.D., New York City. Volume V. Illustrated by chromo-lithographs and 576 half-tone and wood engravings. New York: Wm. Wood & Co. 1902. Canadian Agents: Chandler Massey Limited, Toronto and Montreal.

Volume five has a very large list of contributors, amongst them being very prominent members of the profession in almost every country. We find, for instance, such names as Drs. Herbert S. Birkett and A. D. Blackader, of Montreal; Dr. J. Price Brown of Toronto; Dr. Jos. D. Bryant, of New York City; Dr. M. T. Crockett, of Buffalo, N.Y.; Dr. C. G. Coakley, of New York City; Dr. H. J. Berkley, of Johns Hopkins University, Baltimore, Md.; Dr. F. J. Finley, of Montreal; Dr. W. F. Hamilton, also of Montreal; Dr. T. C. Janeway, New York City; the late Dr. Wyatt Johnston, of Montreal; Dr. A. B. Judson, of New York City; Dr. E. B. Lane, of Boston, Mass.; Dr. Roswell Park, of Buffalo, N.Y.; Dr. A. G. Nicholls, of Montreal; Dr. F. J. Shepherd, of Montreal; Dr. B. Small, of Ottawa, and Dr. N. J. Ponce de Leon, of Havana, Cuba. It will readily be seen, therefore, that with such talent to draw upon, it is little wonder that the Reference Hand-Book is so replete with the most recent information upon almost as many separate and distinct subjects as a medical dictionary contains. Volume V. embraces almost every subject from the letters *Inf* to *Mos*, and is fully up to the standard of the first four volumes. The space devoted to the subject of leprosy may be considered as a short, boiled-down, and yet up-to-date chapter, the

illustrations of tubercular and anesthetic leprosy, as also the microphotographs of a leprous nodule in the skin, section of nerve showing lepra bacilli, and section of leprous spleen, adding much to the value of the article. Another chapter which interested us very much is that by Dr. Ellicott J. Brackett, of the Children's Hospital, Boston, on Scoliosis. It is one of the most readable sections in Volume V. and shows that the author has the faculty of writing clearly and concisely even on a subject otherwise somewhat dry and uninteresting. Dr. Brackett's half-tone illustrations are capital. The large plates in this volume are particularly fine, and it is safe to say that, if the editor keeps up the standard of the remaining volumes of Reference Hand-Book to that of the first five, he will have succeeded in getting out a series that will redound to his credit and that of his contributors. W. A. Y.

A Text-Book of Pathology and Pathological Anatomy. By DR. HANS SCHMANS, Extraordinary Professor and First Assistant in the Pathological Institute, Munich. Translated from the Sixth German Edition. By A. E. THAYER, M.D., Instructor in Pathology in the Cornell University Medical College, New York. Edited with additions by JAMES EWING, M.D., Professor of Pathology in the Cornell University Medical College, New York. Illustrated with 351 engravings, including 35 colored inset plates. Philadelphia and New York: Lea Brothers & Co. 1902.

To those students and practitioners who are not fortunate enough to be conversant with the German language the translation of this work into clear English will prove to be a boon, and we feel a deep debt of gratitude to Dr. A. E. Thayer for his plain rendering of the text; also to Dr. James Ewing for editing the same. We find it to be a compact and comprehensive book, replete with condensed statements of present knowledge, amplified with many well-chosen instances and references, at the same time not admitting lengthy discussions or quotations of other authors. The contents are arranged systematically, enabling the student to follow the different changes of the organism. The many illustrations, 35 being richly colored inset plates, are carefully selected and beautifully executed. Throughout the volume may be seen in a striking fashion the pre-eminent faculty of the German training, viz., thoroughness. The work is well bound, the print delightfully plain, and in every way a credit to the publishers.

W. H. P.

Dr. Geo. M. Gould's "Biographic Clinics, the Origin of the Ill-Health of DeQuincey." (Publishers' advance notice)

It is a peculiar fact that the letters and other writings of DeQuincey, Carlyle, Darwin, Huxley and Browning, liberal as

they are with references to the continued ill-health of those great writers, have not before this suggested to the medical profession an opportunity for research into the causal factors of those physical conditions. That the opportunity has not until now been recognized in its proper light is evidenced by the hitherto total absence of any work dealing with this subject. Dr. George M. Gould's *Biographic Clinics*, (P. Blakiston's Son & Co., Philadelphia) which is devoted to this neglected subject should, therefore, prove a most unique and valuable contribution to biographical and medical literature. The work is announced for publication in December.

Dr. Gould has gathered from the biographies, writings and letters of the five named men every reference to their ill-health. Each endured, as is well known, a life of suffering which made almost every day a torment, and by which their work and worth as an asset of the nation and civilization was conditioned and often rendered morbid. The cause of their affliction was an utter mystery to their physicians. No explanation explained, and no cure cured. Dr. Gould has gone into the "why" of this very thoroughly, and the conclusion reached by him, from logic and from a careful summary of the clinical symptoms, is that each of the writers suffered from eye-strain, and that scientific correction of their ametropia would have transformed their lives of misery into lives of happiness. A history of the discovery of astigmatism and eye-strain, with a discussion of its indications and responsibilities, completes the work. It is interestingly written, and will undoubtedly meet with a ready sale among medical men and those interested in the works and lives of the quintette of great writers.

Cancer of the Uterus. A Clinical Monograph on its Diagnosis and Treatment, with the after results in seventy-three cases treated by radical operation. By ARTHUR H. N. LUVERS, M.D. Lond, F.R.C.P. Lond., Obstetric Physician to the London Hospital, etc. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. London: H. K. Lewis. Canadian Agents: Chandler Massey Limited, Toronto and Montreal. 1902.

This extensive monograph of 320 pages treats this important subject largely from a clinical and surgical point of view, and gives in a picturesque and vivid style the results of the author's large experience in the diagnosis and treatment of this always formidable, and so often hopeless and fatal disease. In the first place, the author emphasizes the fact that if cancer of the uterus, whether of the cervix or of the body, be met with and diagnosed in a fairly early stage, there is encouraging prospects that the complete removal of the diseased structures, by radical operative measures, permanent relief and benefit will be derived in a considerable

number of cases, and the author supports his contention by the clearest evidence and proof from his own practice. He gives the fullest details of seventy-three cases treated by radical operations. Early diagnosis and the complete removal of the diseased tissues by operation, is the trend of this highly practical and valuable work. As regards an early diagnosis, he asserts that the desired result will follow only when women themselves are made familiar with the early symptoms of cancer of the uterus. If it was generally known that the occurrence of bleeding in between the menstrual periods, or after the menopause was a suspicious symptom, a number of them would seek the advice of their usual medical attendant at once, and in this way a large proportion of cases would come under early observation. As regards operative procedures, in spite of fairly good results with the supra-vaginal amputation, he has almost abandoned it in favor of complete removal of the uterus, following in this respect the almost unanimous practices of American gynecologists.

The whole of the book is excellent, its principles and practice scientific and sound, and can be warmly recommended. The illustrations are numerous, original, clear and well drawn, and elucidate the text admirably. The book is beautifully printed, with large type and on good paper.

G. T. M'K.

The American Text-Book of Obstetrics. In two volumes. Edited by RICHARD C. NORRIS, M.D.; Art Editor, Robert L. Dickinson, M.D. Second edition, thoroughly revised and enlarged. Two handsome imperial octavo volumes of about 600 pages each; nearly 600 text-illustrations, and 49 colored and half-tone plates. Per 1 vol.: Cloth, \$3.50 net; sheep or half Morocco, \$4.00 net. Philadelphia: W. B. Saunders & Co. Canadian Agents: The J. A. Carveth Co., Toronto. 1902.

We are pleased to find that in the second edition of the American Text-Book of Obstetrics, the book has been presented in two volumes. The reader has therefore a great deal more ease in handling and has not to be burdened with a book that is to some extent unwieldy and cumbersome. We think that this two volume idea is one which other publishers might adopt with advantage, if Mr. Saunders will excuse us for making so bold a suggestion. There is not a study wherein new problems are presenting themselves more or less all the time, or as frequently, as in obstetrics. Practitioners are running up against new obstacles daily, so that but a very short time serves to render a text-book on the subject more or less old and stale. The editors of the American Text-Book of Obstetrics realized this, and have to a large extent re-written their work, so as to bring it up to date and in the broadest sense abreast of the times. The part of the second edition which appealed to us perhaps more than any other, is that devoted to

obstetric emergencies, which is full to the hilt of material which might prove of value to any obstetrician at any moment. Another point we would like to allude to is the eminently practical character of the illustrations all through both volumes.

Practical Diagnosis: The use of Symptoms and Physical Signs in the Diagnosis of Disease. Fifth edition, revised and enlarged. By HOBART AMORY HARE, M.D., B.Sc., Professor of Therapeutics in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; one time Clinical Professor of Diseases of Children in the University of Pennsylvania; Laureate of the Medical Society of London, of the Royal Academy of Medicine in Belgium; Author of a Text-Book of Practical Therapeutics. Illustrated with 236 engravings and 25 plates. Philadelphia and New York: Lea Brothers & Co. 1902.

It is a little over six years since Dr. Hare published the first edition of his work on Physical Diagnosis, and now, after a lapse of but that short time, it is necessary that he almost rewrite his book for the fifth time. That fact alone "speaks volumes" for his ability to present an otherwise difficult subject in a succinct clear, and scientific manner, in a manner that appeals to the busy practitioner of medicine. Dr. Hare is too well known to science to need any introduction, so, when we state that his fifth edition is in every detail complete, it may be taken for granted that no mistake can be made in the necessary expenditure for the purchase of the book.

W. A. Y.

Letters from a Self-Made Merchant to His Son. By GEORGE HORACE LORIMER. Toronto: William Briggs. Cloth.

The most amusing, convincing, logical and can't-quit-till-you-finish-it book of the year. Not a story, but a series of letters from a millionaire pork-packer father to his only hopeful and heir-Pierrepoint. In every letter there are enough reminiscences just "mentioned in a general way" to keep a man laughing for a month. The letters cover several years of young Graham's college and business life, and many and to the point are the remarks contained therein. Just a "sentiment" or two to whet your appetite for the "hull" volume!

"Its pretty safe to bet that if a fellow needs a six or seven-syllabled word to describe his profession, he's a corn doctor when you come to look him up in the dictionary. And then you'll generally find him in the back part of the book, where they tuck away the doubtful words."

"Elder Hoover was a Methodist off the tip of the sirloin. There weren't any evasions or generalities or metaphors in his religion, the lower layers of the hereafter weren't Hades or Gehenna with

him, but just plain Hell, and mighty hot, too, you bet. He kept the fire going under the boiler night and day, and he was so blamed busy starting it that he didn't have much time to make out the golden streets. When he blew off it was superheated steam, and you could see the sinners who were in range fairly sizzle and parboil and shrivel up. There was no give in Doe; no compromises with creditors; no fire sales." W. A. Y.

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 I.: General Medicine, edited by FRANK BILLINGS, M.S., M.D., head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. SALISBURY, M.D., Professor of Medicine, Chicago Clinical School. Chicago: The Year-Book Publishers, 40 Dearborn Street. October, 1902. Price of this volume, \$1.50.

Volume I., as last year, is devoted to General Medicine. The paper, print, and general appearance of the book is an improvement on last year's issue. The first 190 pages treats of tuberculosis, pneumonia, diseases of the heart, pericardium and blood-vessels. 121 pages are devoted to diseases of the blood and blood-forming glands, general infectious diseases, such as bubonic plague, influenza, variola, varicella, vaccinia, septicemia, and artinomycosis. Rheumatism, acute and chronic, gout, and diabetes, receive a full share of notice. Diseases of the ductless glands, kidneys, and ostertis deformans, complete the 350 pages. We are very much pleased with this new volume, and predict for the new series an increased success. W. J. W.

Spectacles and Eye-Glasses—Their Forms, Mounting, and Proper Adjustment. By R. J. PHILLIPS, M.D., late Adjutant Professor of Diseases of the Eye, Philadelphia Polyclinic. P. Blakiston's Son & Co., Philadelphia. Canadian Agents, Chandler & Massey Limited, Toronto and Montreal. 1902. \$1.00.

The question of the proper adjustment of spectacles and eye-glasses is one that should be of more interest to the general practitioner than it is. How the general practitioner came to allow the prescribing of lenses for defective eyesight to fall into the hands of ignorant and careless jewellers and opticians has always been past understanding. But that, in this day, when the intimate relationship of the general health with the refraction of the eye is so generally recognized, the same practical indifference should exist is still less comprehensible. If the practitioner do

nothing else he may help his patients very considerably by a knowledge of how a spectacle or eye-glass should fit, and of the various ill-effects which may result from their improper adjustment. Such a knowledge may be obtained from this little book.

J. M.

Belshazzar, a Tale of the Fall of Babylon. By WILLIAM STEARNS DAVIS. Eight half-tone illustrations by De Woodward Tigler. Copp, Clark Company, Limited, Toronto.

The setting of the story is unique, being the ancient city of Babylon at the time when the Jews were held there in captivity. The Biblical characters of Daniel and Isaiah the prophets are introduced and woven into the story; the hero of which is Darius, the great Persian, and through him Cyrus, King of Persia, is led to destroy Babylon and set the Jews free. The interest is absorbing and is well kept up to the finish. Throughout the reader feels as though transported back through the centuries to the time when the history of the world was being made. In the flood of modern literature it is well to know when a really good thing is with us, and the book-lover will do well to possess himself of a copy of this most delightfully interesting romance, told in such dramatic style by a very clever writer.

W. J. W.

Medical Ethics and Cognate Subjects. By JAMES S. SPRAGUE, M.D. Publishers: Chas. P. Sparling & Co.

If you want to while away a pleasant hour get Sprague's *Medical Ethics*. There is much in it that it is desirable for us to read. There are perhaps half a dozen men that we know to whom we'd like to send presentation copies suitably annotated with marginal notes. There is a feature that recently has crept into the profession to which we had hoped Sprague would refer—namely, the right or the wrong of the payment of commissions, by surgeons, specialists and others for cases sent, to the general practitioner. In our opinion this sort of thing may lead to all sorts of evils.

As a reference work for societies and for the profession in general we can heartily commend this little book.

F. N. G. S.

Typhoid Fever. By J. T. MOORE, M.D., M.C.P.S., Professor of Theory and Practice of Medicine, Medical Department of Hamline University, Minneapolis, Minn. Pp. 159. Price, \$1.00 net. Chicago: G. P. Engelhard & Co. 1902.

The author deserves credit for the way he has prepared this excellent monograph. He presents to us in a brief, practical volume an epitome of what is known regarding typhoid fever. No physician will read the book without being pleased with it.

A. E.

A Guide to the Practical Examination of Urine for the Use of Physicians and Students. By JAMES TYSON, M.D., Professor of Medicine in the University of Pennsylvania, and Physician to the Hospital of the University; Physician to the Philadelphia Hospital, Fellow of the College of Physicians of Philadelphia, etc. Tenth Edition. Revised and corrected. With a colored plate and wood engravings. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Canadian Agents, Chandler & Massey Limited, Toronto and Montreal. 1902.

Twenty-five thousand copies of this practical little hand-book have been published since it first saw light, a justly proud boast and certainly a good advance agent for this, the tenth, edition, which comes to us carefully revised, added to, and corrected, thus rendering it thoroughly modern. W. H. P.

Barbara Ladd. By CHARLES G. D. ROBERTS (author of "The Heart of the Ancient Wood," "A Sister to Evangeline," etc.). Tastefully illustrated by Frank Ver Beck. Toronto: The Copp, Clark Company, Limited. Cloth.

A charming story, full of beauty of description, warmth of color, fragrant with the perfume of trees and flowers, queenly with the dignity of sweet old-fashioned womanhood, and dancing like a sunbeam with joyous inconsequent girlhood, conquering and convincing by the bravery and devotion in love and war of its heroes. Get this story of yesterday, send it to the dearest girl you know, it is worthy of a reading even on the purposeful New Year's Day. W. A. Y.

The Annals of Surgery.

We are glad to welcome among our exchanges the Annals of Surgery, now about to enter upon its nineteenth birthday. In the November and December numbers the question of Enlarged Prostate is dealt with in all its aspects by a series of original contributions. In the index to Surgical Progress, too, an abstract of a paper by Waldvogel appears. Others papers dealing with certain branches of abdominal surgery also are published in the December number. F. N. G. S.

Stillman Gott. By EDWIN DAY SIBLEY. Toronto: William Briggs.

A charming tale of a quiet fishing and farming settlement on the Coast of Maine, so true to life there and the humor so quaint that the little story is quite worth reading to any who have spent an evening watching old James Herne, of beloved memory, leading in his favorite plays of "Sag Harbor," or "Shore Acres," or have spent a summer idly browsing around the interesting New England State. W. A. Y.