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The Canadian Practitioner and Review.

Vol. XXXIV. TORONTO, MAY, 1909. No. 5

Original Communications.

THE UNIVERSITY IN RELATION TO THE STUDY OF MEDICINE.*

By G. Sims Woodhead, M.A., (Cantab), M.D. (Edin.), LL.D., (Toronto).

Whilst casting about for a subject on which to found my address, I spoke to one of your alumni, Dr. W. H. Harvey, who by his work in our pharmacological laboratories has been bringing credit, not only to your school but to ours, and I learned from him of your decision to add an additional year of medical study to the course qualifying for the M.B. degree of your university. All questions of modification of curriculum are of vital interest to me at present. We in our Medical School in Cambridge are in the throes of development, and, naturally, we are anxious to work along lines that will lead us to the most satisfactory results. I thought then that I should like to discuss this matter with you. In order to obtain data for this discussion I have made a careful analysis of your curriculum and of those of Edinburgh and Cambridge Universities, with which two latter, as the result of careful study and comparison, I am specially familiar.

You have the advantage of a "clean slate" and I am going to ask you to look for a moment at your advantages as seen through the eyes of one who has followed the working of an older system, that of Edinburgh, and of a more recent system, that of Cambridge. The former may be taken as a type of the Scottish schools, an old medical school in which some pre-

* Portion of address delivered in Convocation Hall, University of Toronto, October 4th, 1908.

liminary education is required, and in which at one time what is called university education and culture were looked upon as not only desirable, but essential. In the olden days every student in medicine was supposed to have completed a three or four years' curriculum in Arts and to have passed an examination in "Philosophy," "Mathematics," and "the Humanities," such as would entitle him to the degree of Master of Arts. With the new Medical Act of 1855, I think it was, this requirement was relaxed, and after various intermediate arrangements, the student before commencing his medical studies must, in lieu of the Master of Arts examination, pass a preliminary examination in English, Latin, Elementary Mathematics, and Greek, or French, or German, unless the native language of the candidate be not English, in which case the native language of the candidate may be substituted for one in either French or German, and an examination in any other classical language for one in Latin or Greek.

The course of medical and surgical study extends over five years. The course of lectures delivered during the winter session usually consists of at last one hundred lectures and the summer course of fifty lectures, though short courses in some subjects may be delivered during the winter session. Candidates for the degree of M.B., Ch.B., must have attended for at least three academic years the medical and surgical practice of a general hospital which accommodates not fewer than 80 patients, and possesses a distinct staff of physicians and surgeons. They must have attended a course or courses in clinical surgery extending over not less than nine months, consisting of regular instruction at the bedside along with clinical lectures. A similar course of training in clinical medicine is required. Evidence of instruction in, and knowledge of special branches of medicine and surgery are also required in the final examination. With respect to the places and institutions at which the studies of the candidates may be prosecuted, the university though liberal is exceedingly cautious. Two of the five years of medical study must be spent in the University of Edinburgh. The other three may be spent in any university of the United Kingdom, or in any colonial or foreign university recognized for the purpose by the University Court, or in such medical schools, or under such teachers as may be recognized for the purpose by the University Court. Of the subjects of study, 16 in number, namely, Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Materia Medica, Physiology, Practical Physiology, Practice of Medicine, Surgery, Midwifery and Diseases of Women, Pathology, Practical Pathology, Physics,

Botany, Zoology, Medical Jurisprudence and Public Health, not fewer than eight must be taken in the University of Edinburgh or in some other university of the United Kingdom, or in some foreign or colonial university entitled to confer the degree of Doctor of Medicine recognized for the purpose by the University Court, or in a college, incorporated with or affiliated to a university entitled to confer the degree of Doctor of Medicine recognized for the purpose by the University Court.

Women are admitted to graduation in medicine under practically the same conditions as men, the medical college for women taking the place of the university as a place of instruction, there being no provision for teaching women in the University Medical School. The examinations are conducted in writing, and orally, and where the subject admits, clinically.

Now, let us see how these subjects are treated in the course.

The first examination in which the knowledge of the candidate is tested as far as possible through specimens placed before him may be taken at any period after the student has attended the qualifying courses of lectures, demonstrations, and practical classes in chemistry, zoology, botany and physics.

Candidates may pass any or all of these subjects at any university of the United Kingdom or at any university approved by the senate for this purpose, when such subjects qualify for a degree in arts or science. Candidates who have satisfied the examiners in the subjects of the first examination may present themselves for a test in physiology as soon as they wish after attending the qualifying courses, and in anatomy any time after the first half of the third winter session. In the third division the student may present himself for examination at any time after the third summer session in the case of students who begin their work in October and at the end of the fourth summer session in the case of students who begin their curriculum in May. Materia Medica may be taken at the end of the fourth winter session, and practical pharmacy and the physical, chemical and botanical characters of medical substances at any time after the student has completed the necessary course of study.

In the fourth division a student, after taking the prescribed course of study, may be examined in forensic medicine and public health, at any time; in midwifery at any time after the end of the first half of the fifth winter session, and in practice of medicine and surgery at any time after the end of the fifth winter session, and in clinical medicine, including the diseases peculiar to women, and clinical surgery, at the end of the fifth year of study.

There is much that is good in this arrangement, and it may

give excellent results if properly worked, but a little later, I shall criticize it in one or two somewhat important details. It is, no doubt, the outcome of long experience, not only of the work done in Edinburgh, but of that done in the other Scottish universities; for since the last report of the Royal Commissioner on the Universities, the governing bodies of these institutions have been brought into much closer touch than was formerly the case, and their curricula have been brought much more into line. Before leaving the description of the curriculum of this school, it may be mentioned that Bachelors of Medicine and Bachelors of Surgery may proceed to the degrees of Doctor of Medicine and Master of Surgery, after they have spent one year in the medical or surgical wards respectively of an hospital in the military or the naval medical service, or in scientific work bearing directly on their profession, or two years in "practice." In each case an examination must be passed, and a thesis submitted for the approval of the faculty.

The Cambridge Medical School represents the newer schools, for though it has for long sent most distinguished men into the profession, it only came to occupy an important position as a centre for medical teaching and research some 35 or 36 years ago. Here a student must "keep" or reside nine terms (three years) after passing the previous (or matriculation) examination for the university) examinations or some corresponding examination in classics, mathematics, English, etc. This examination must be taken by every student of the university either before he enters, or at as early a date as possible afterwards. He may commence the study of medicine at once, though this is the exception. Most men proceed to a degree in arts, many continuing to study classics and mathematics before they proceed to their medical studies; the majority, however, take an honors "tripos" in the natural sciences. Where time is an element of importance, this latter course is invariably adopted, as much of the work done for this tripos examination is useful for the first and second examinations for the M.B. degree. The regulations as to period of study are much the same as in other universities. Of the five years' study required after registration, the first three or four are usually spent in Cambridge, during which period the student passes the examination for the natural science tripos (1st part); sometimes he will also take a "2nd part tripos," specializing for a year in some subject such as advanced physiology, anatomy, chemistry, botany, or geology, and the first M.B. examination, including chemistry and other branches of physics and elementary biology. (These may be taken together or separately), and

the second M.B. examination in human anatomy and physiology, both of which subjects must be passed at the same time. These two examinations should be cleared out of the way by the end of the ninth term. Many men leave Cambridge at this period, but an increasing number stay for two additional terms, until they have passed the first part of the third M.B. examination in pharmacology and general pathology. They are then transferred, most of them at any rate, to the large London, Provincial, and Scottish or Irish schools, where clinical material is more abundant and facilities for clinical study are greater than can possibly be provided in such a small town as Cambridge. Two or two and a-half years later the student returns, takes the second part of the third M.B. examination, at which he has to profess the principles and practice of general and special branches of surgery, midwifery and diseases peculiar to women, principles and practice of physics, including mental diseases, medical jurisprudence, hygiene, and public health, etc.

One of the features of this part of the examination peculiar to Cambridge, and a most admirable one, is the "keeping of the act in the public schools" in which a candidate reads and defends a dissertation composed by himself on some subject previously approved by the Regius Professor of Physic.

The degree of Doctor of Medicine may be taken three years after that of M.B. Moreover, if the student does not wish to take his M.B. at all, he may proceed to the degree of M.D. four years after passing his M.B. examination, taking his M.A. degree. In each case the procedure is the same. A thesis containing original work has to be sustained in the public school. At this act any member of the university may submit the candidate to a *viva voce* examination on any work contained in the thesis. This duty is usually, of course, undertaken by the Regius Professor of Physic and a Doctor of Medicine of the university, who is appointed to act as his assistant. The candidate has also to write an extempore essay on some subject relating to physiology, pathology, the practice of medicine or state medicine.

Now, ladies and gentlemen, I am sure none of you will accuse me of disloyalty either to my Alma Mater, which has a very deep and abiding place in my affections, or to the mother that has so graciously adopted me, if I criticize in certain details the medical curricula as pursued in Edinburgh and Cambridge Universities respectively.

The long courses of systematic lectures given in Edinburgh, and necessary for the degree, are in themselves admirable, but

that they are desirable or necessary I am far from satisfied. It is the Scottish system to treat every main subject in the curriculum in either fifty or one hundred lectures, no fewer, no more. Is it reasonable to suppose that all the subjects can be treated in the same way, and that all teachers shall have just this amount to say of each of them? Lectures are of supreme value in bringing the mind of the student into close touch with that of his teacher, but for the mere setting forth of facts they are worse than useless.

Edinburgh has great traditions, and the work done by her alumni affords ample justification of the method in the past; but in common with many others I cannot help feeling that much of the professional lecturing might, with very great advantage, be curtailed; that the remaining lectures might be expository and illustrative, and that some of the time thus set free might be devoted to practical work, to explanation and criticism of good text-books by the professor or his assistant demonstrators, or to actual reading.

The professor would thus come to be the friend and companion and leader, not the fingerpost or pointer. In the newer schools where tradition does not demand these lectures, there may be a tendency to go too far in the opposite direction, and I know many teachers who, because lectures on one subject or by one teacher are of no value, will not allow that they should ever form part of a medical curriculum. I believe in laboratory and practical work, and believe in them most thoroughly, but I think that the lecture has still an important place in the training of the medical student if only that it brings the developing mind of the student into contact with that of the man who is supposed to be his master and educator. Moreover, it is a good thing for the teacher himself, if he will not be content with stereotyped and text-book lectures. He must have things clearly defined and well arranged in his own mind before he can hope to explain them to others. If his teaching is to be up-to-date, his own reading and observation must not be allowed to lag behind, and the student profits.

PODOPHYLLIN THE HEPATIC AND FEVER MAGIC.

By Robert Gray, M.D., Pichucalco, Chiapas, Mexico.

When I was a small boy decoction of may-apple was the purge on the slave plantations of my father and neighbors, and I adopted the extract at first and the podophyllin later into my practice, absolutely, as a substitute for calomel and its sequent, castor oil, with unvarying success.

For many years I employed it in strict conformity with text-book rules, till once in Central America I left twenty half-grain pills with a ranchman who had double pneumonia, whom I could not possibly see again in less than a week, with instructions to take two every night, feeling confident that he would be dead in less than twenty-four hours, as the fever was high and the lung involvement alarming.

Sunday was the day I could return. Saturday afternoon I went to the office of vital statistics and was astounded not to find his death reported.

But when I reached his house I was far more surprised to find him weeding his garden.

He came in smiling, and told me that as soon as I was out of hearing the previous Sunday he told his wife I had no expectation of ever seeing him again, and that if those little pills would benefit him in the least in nightly doses of two, all taken at once should be more effective or end his agony promptly. She protested, but he swallowed them all, and inside of two or three hours he began to vomit copiously, and to purge in a stream, till the next day, when there remained nothing more in him but a ravenous hunger, the fever and the cough being entirely at an end.

This was a startling revelation to me, and that poor mountaineer, who would have reposed in the silent churchyard, obedient to my academic attainments, sat there in front of me, with a sarcastic twinkle in his big black eye, as humiliating to my professional dignity as

> "And his eyes have all the seeming
> Of a demon's that is dreaming,"

in Poe's "Raven," and he never had a fee bill of mine presented for payment, not even for subsequent useful service.

I began experimenting on the line of the accidental knowledge then mine, gradually increasing my dosage, till at length

I found that eight half grain pills, four grains of podophyllin resin, was ample for maximum adult dose, preferable administration one pill every half-hour, when urgent emergency does not require all to be taken at once.

I have since had three accidents, of eighteen twice and twenty once, erroneously given, with nothing seriously eventful; and several owners of plantations, clients of mine, persist, contrary to my advice, in giving their peons ten half-grains at night at inception of fever, that seldom fails to abate before day, when broken doses of quinine speedily return the men to duty.

I have same experience in my private practice, with my maximum dose with incipient fevers, even such as pneumonia and typhoid. I now use the following compressed tablet:

Podoph.	grain	½
Extract Nux Vomica	"	1/12
Extract Hyoscyamus	"	⅛

Hance Brothers & White, Philadelphia, make this for me, almost by bushels.

Hundreds and hundreds of other doctors in the tropics and United States are using the same dosage with equally propitious results.

The combination is a medical magic. Podolph. alone is anthelmintic in such high degree that some American tapeworm specialists are employing it successfully where male-fern and pomegranate fail. I have been unable to secure any formula. The maximum fever dose often expels the common intestinal worm almost as effectually as santonin given for such purpose.

Maximum dose equals in every respect the action of calomel and castor oil in heroic dosage, with no sequent physical detriment, inseparable from the mercurial derivative. And the small or fractional dose is the best hepatic remedy we have and unapproached in anemic and other morbid derangements.

When there is obstinate constipation and a stomach full of bile there may be copious emesis before the purge begins to act, always affording relief of material value. I always give one or two tablets, according to patient and necessity, every night subsequent to heroic purge, while thus indicated as needful.

In some of these fearful tropical fevers that produce an excrement as sticky as plaster, I am obliged to follow action of heroic purge with castor oil and employ enemas with an ounce of epsom salts to a quart of water, frequently repeated, while the necessity exists.

The hyoscyamus was employed at first to counteract the griping action of the podolph., but it has been demonstrated since that it exercises other precious influence in the combine.

I have become possessed one way and another of other valuable departures from the beaten ethical track, yet more clinically important than that of podolph., of which the PRACTITIONER AND REVIEW has the option of indicating to its readers, as I cannot in this narrow contribution space.

I am now forty-three years in this fearful tropical practice, in the sickliest belt of the continent, without one day of vacation.

AN ADDRESS TO EX-STAFF TORONTO GENERAL HOSPITAL.

By Alexander Taylor, M.D., Goderich.

Gentlemen,—At the last meeting of this association I thoughtlessly promised to read a paper on the treatment that was usually followed when I was on the house staff of the Toronto General Hospital. The house staff at that time consisted of Dr. Hampton, the medical superintendent, four nurses and myself. I am not so sure about the number of day nurses, but there was only one night nurse, poor old Eliza, a faithful old nurse who tried to do her best with the training she had received previous to her entrance into the hospital. The nurses were all young women, many of them from the country, without any special training, and probably never saw a hospital before they entered it. At that time if a patient had pneumonia, pleurisy, bronchitis, or even typhoid fever, if the bowels were very much distended, he was poulticed with linseed meal as hot as our hand could bear. It made no difference how high the temperature was; in fact, the higher the temperature the hotter the poultice should be if it were possible to do so. At that time the professional qualifications of a nurse depended greatly on her ability to make and apply a poultice. Many of the physicians would not allow us to put any cheesecloth on it, thinking that the poultice, when applied to the skin, would "draw out the disease." I have seen patients with pneumonia, when the respirations were 45, and with a temperature of 104 or 105, raised up in a sitting posture to enable the nurse to properly apply the poultice, and, what was still worse, the weaker the patient got the oftener the poultice had to be applied. If the patient survived this treatment for five or six days, the next thing we had to do was to sponge the patient with soap and water, and then apply a fly blister. After the blister was on from six to eight hours it was removed. A poultice was again applied. As soon as the part healed another blister was applied. On the other hand, if the patient lingered on for a long time, and did not respond to this treatment, I would have to introduce a seton and have to turn it around daily, to the great discomfort of the patient, for weeks. The physicians

* Read at Annual Meeting of the Toronto General Hospital ex-House Staff Association, April, 1909.

of that time were just as honest, just as sincere, and believed as much as we do to-day that they were doing the best that could be done for their patients. Many of them would argue that they could prevent the extension of pneumonia from one lobe to the other by poulticing if they saw the patient early enough.

In reference to infectious diseases, we were not so particular about isolating the patients except in cases of erysipelas and smallpox. Speaking of erysipelas, I have known the surgeons to put off an operation for weeks if it were possible to let the erysipelas get well. We did not take any extra precautions to disinfect the room or take any other precautions further than to remove the bedding. Fifty per cent. after surgical operations died of sepsis, which was due to the unsanitary condition of the hospital. I can remember very well the first smallpox patients I ever saw. There were six of them. They were large, well developed foreigners, with large faces, but when they had smallpox they seemed to me so huge that I was terrified. In the party was a very feeble old lady, and so ill that she could scarcely walk (I need not remind you that we had no elevators in those days). I had to take her up to the third storey, which we really kept for smallpox patients only. Well, I plucked up courage and assisted the poor old lady up the stairs, and when I reached the second flight of stairs my fear of smallpox vanished, and from that day to this, as far as I am personally concerned, I much prefer attending this disease to either scarlet fever or diphtheria. Dr. Hampton, the medical superintendent, was away from home, and I had to act on my own judgment. I first started out with the intention of vaccinating every patient in the hospital, but I struck a snag. They would neither be vaccinated, nor could I compel them. I do not think that there was more than one in every ten that would submit to be vaccinated. It was far more difficult to vaccinate then than it is to-day. We had no glass tubes, or ivory points, as we have to-day, but had to content ourselves with the scab taken off the arm of what we thought was a healthy subject. We preferred taking the scab of a healthy young child if we could get it. I think that we usually kept the scab between plates of glass, covered with wax, to keep the air excluded from it. This was the only precaution that we took to prevent the spread of the disease. I went up into the smallpox ward and prescribed for the patients. The nurses left the other wards and attended them, and then we went down through the different wards and halls of the hospital without taking the slightest precautions. I do not think the nurses even washed their hands any oftener than they would under ordinary circumstances, but as far as

changing even their aprons, I do not think they did that. I would often meet a patient when going through the different wards in the morning with a few pocks on his face, and I would march him or her up to the smallpox ward and keep him there until he was convalescent, and then he was allowed to mix with the other patients downstairs without changing his clothing or even taking a bath. The friends of the patients were allowed to visit them. There was no rule or regulation of the hospital to prevent them from visiting the smallpox patients if they wished to do so. I have forgotten the number of patients we had in hospital, but I am sure there must have been about thirty, and, with the exception of the foreigners, there was only one who had the confluent variety. She was one of our nurses, and never was vaccinated, nor would she allow me to vaccinate her. She was very ill, and her whole body was one mass of sores. I think it would have been hard to put a pin point in healthy skin, and the odor of her room was intense. She was the only one that we lost, and the part that I want to tell you is that I carried her down from the third storey on the stretcher, through all the halls to the morgue, without taking the slightest precautions. I suppose you have all heard one definition of a disinfectant—something with an odor so bad that you have to open the windows to let it out. Well, that is about what happened in this case; we not only opened the windows, but gave the room a thorough washing with carbolic acid and water, but we burnt sulphur as well.

In reference to the treatment of enteric fever, we gave large doses of quinine. I have seen as high as 30-grain doses given, and if the temperature did not come down in four hours, I have seen that dose repeated. To sponge with cold water would be an unpardonable crime, and I don't remember ever seeing a patient get a cleansing bath of soap and warm water until the patient was convalescing. We also gave large quantities of milk and milk and lime water to sustain the patient from the commencement of the disease. As a consequence we brought on one of the most difficult and painful complications, viz., indigestion, and distention of the bowels. Then we had to resort to hot poultices and turpentine. I really should know something about the treatment of typhoid fever in those days, as the hospital was filled with it, and every official but myself was ill with it. I had it, but did not know it. When I look back I am sure that I had a "walking" typhoid fever, and every medical man on the staff would prescribe some different brand of wine. I remember as well as if it were yesterday the expression: "Well, Taylor, you will be the next one." After

this comforting remark, he would immediately prescribe his favorite brand of wine.

There is another important part of the treatment of to-day that we could not carry out then, and that is keeping the patient quiet in bed. We had no bed pans, and the nearest approach to it was what we called a night stool. This was wheeled from one patient to another as it was required, but the patient had to get up out of bed at all stages of the disease. Some of the medical men would not even allow their patients to drink cold water. When I started to practise in the country there were very few medical men who would allow their patients with any fever to either drink cold water or allow a breath of fresh air or a bit of sunlight to get into the room.

I am not exaggerating at all when I tell you that if I gave a patient a drink of cold water after her confinement, and especially if I advised them to take the curtains down, and allow the fresh air to freely circulate through the house, and if from any cause the patient died, I might as well leave the place. Her friends and neighbors would certainly attribute her death to my advice, and would never employ me again.

I notice that at every meeting of this association the superintendent of the hospital points with pride (and I must admit justly) to his boys, such as Drs. Cullen, Barker, McCrea, and every person present but myself. I am the only black sheep in this flock.

I hope, however, that you will pardon me and not consider me egotistical if I do sound my own praises a little. There are two or three little things that I do claim some credit for. When I left this hospital in the year 1870 I was fully convinced that setons, fly blisters and poultices were useless, if not an injury, in pneumonia and in similar diseases.

There is one other subject that I would like to speak about, and that is "Antiseptic Surgery." I intended bringing down Lister's atomizer, but unfortunately forgot. I regret my forgetfulness very much, for I have no doubt that there are many present who never saw one. I might mention that when I was in the Edinburgh infirmary it was considered one of the most important instruments in the hospital by some of the surgeons, but finally it got into disrepute. I attended the Edinburgh Infirmary in the years of 1875 and 1876, when Dr. Grasett was Lord Lister's house surgeon, and on my return to Goderich I got all his antiseptic appliances, and I claim that the late Dr. Stewart, of Montreal, and I were among the first who practised antiseptic surgery in Western Ontario.

Before closing this paper, I do not wish any of you to go away with the idea that I underrate the ability or wish to speak disrespectfully of the members of the medical profession who practised about the years 1869 and 1870, the years that I spent in the Toronto General Hospital. On the contrary, gentlemen, I wish to speak in the highest terms of them. They were gentlemen in every respect both socially and professionally, and could not, or at least would not, stoop to commit an unprofessional act. I am sure you will agree with me when I pay tribute to the names of the late Drs. Widmer, Beaumont, Bovell, Hodder, Aikins, Bethune and Hampton, the superintendent of the hospital, as well as Richardson, Geikie and Ogden, who are with us still. In closing, may I speak of one of these in particular, whose name I shall always revere, and to whose early teaching part of Dr. Osler's success is no doubt due—my old professor of physiology, Dr. Bovell.

THE ORDER OF ST. JOHN OF JERUSALEM IN ENGLAND AND ITS WORK OF BENEFICENCE.

By Colonel G. Sterling Ryerson, M.R.O.
Knight of Grace of the Order; General Secretary of the St. John Ambulance Association in Canada.

The tendency of modern times is to scoff at Orders and decorations, and knightly and kingly trappings, and to declare that all such gew-gaws should be relegated to oblivion, or to museums of antiquities. Demos is king, and his courtiers, suppliant and subservient creatures, would make a mocking of all that is knightly and chivalrous. But chivalry is not quite dead in men's hearts, and there is at least one ancient order of knighthood which is known by its works. Although founded eight centuries ago, A.D. 1048, the Order of St. John is still carrying on in a large and imperial way the work of its founders. It is true that it no longer limits itself to the narrow confines of the Holy Land, but has spread over the four quarters of the globe, and is to be found busy in its work of mercy in every colony and dependency of the British Empire.

Founded by Peter Gerard as a religious fraternity at Jerusalem, at the time of the Crusades, for the relief of the sick and needy who should visit the Holy Sepulchre, the Order of St. John was known as the Hospitallers. The brethren were bound by vows of charity, poverty and indissoluble brotherhood, and healed the sick, fed the needy, and exercised an unostentatious hospitality toward all. Sympathetic and religious people subscribed liberally to their funds, and they thus became the almoners of Europe—as indeed their patron saint was St. John Eleemon.

They were finally driven from Jerusalem, and it was in consequence of this that, in self-defence, the fraternity developed into a band of soldier-monks and warring-physicians. Space will not permit me to trace the history of the Order in detail, but suffice it to say that, driven from one stronghold to another by the Turks, they at length reached the Island of Malta, which was presented to them by the Emperor Charles V., of Germany, where they grew and prospered and became one of the richest and most powerful brotherhoods in the world; but, having no warlike duties, they lapsed into idleness and luxury, although they still adhered to the original idea of the founder, of distributing charity and maintaining a great hospital at Valetta. The final disaster came when, through the treachery of Von

Homspech, Grand Master in 1798, the island was betrayed to Napoleon Bonaparte. It is gratifying to know that the price of the betrayal, $400,000, was never paid, and Von Homspech died in poverty and obscurity in 1805. The knights were banished, their property seized, and no more seen in Malta, where they had ruled for 268 years. The island was captured from the French by the English in 1800, and remains in their possession to this day.

The Order was divided into eight "langues," languages or national branches, of which the English was the sixth. This langue was suppressed in England at the time of the Reformation under Henry VIII. The knights were dispersed, but continued to hold communication with the chef lieu at Malta. Its chief seat in England was the priory of St. John at Clerkenwell, which was destroyed. It was rebuilt in part, and the ancient Gate House, which still stands, and is the seat of the Order, was completed in 1504.

The Order was revived in 1826 by Sir Robert Peet and other English gentlemen of position, and became increasingly active in works of mercy until in 1888 it received the Royal recognition and a Royal charter of incorporation. Her late Majesty Queen Victoria became the Sovereign Head; H.R.H the Prince of Wales, Great Prior; and his son, the late Duke of Clarence, sub-prior. On the death of Queen Victoria, King Edward VII. became the Head of the Order, and George, Prince of Wales, Great Prior. The grades of the Order are: Knight of justice, knight of grace, and esquire. The ladies are ladies of justice and of grace. There are also honorary associates and honorary serving sisters and brothers. The roll of the Order contains the names of the princes and princesses of the Royal House of England, and many foreign princes and noblemen, as well as those of men and women prominent in works of mercy and in society all over the empire. The badge of the Order is an eight-pointed star, which is worn suspended from a black watered silk ribbon.

The St. John Ambulance Association was founded in 1877 by the Order of St. John to continue the work of its founders as indicated by its motto: "Pro utilitate hominum," and is its ambulance department.

Its objects are:

(a) The instruction of persons in rendering First Aid in case of accidents or sudden illness, and in the transport of the sick and injured.

(b) The instruction of persons in the elementary principles

and practice of nursing, and also of ventilation and sanitation, especially of a sick room.

(c) The manufacture and distribution by sale or presentation of ambulance material, and the formation of ambulance depots in mines, factories, and other centres of industry and traffic.

(d) The organization of ambulance corps, invalid transport corps, and nursing corps.

(e) And generally the promotion of instruction, and carrying out works for the relief of suffering of the sick and injured in peace and war, independently of class, nationality and denomination.

It must be clearly understood that the object of the association is not to rival but to aid the medical man, and the subject matter of instruction given at the classes has been defined by the Medical Committee of the Ambulance Department, with the view of qualifying the pupil to adopt such measures as may be advantageous, pending the doctor's arrival, or during the interval between his visits.

The course of instruction consists of five or more lectures in First Aid to the injured, followed by an examination, for which certificates are issued to the successful pupils, and five or more lectures in Nursing and Home Hygiene, followed by another examination, for which certificates are also given. At the expiration of a year a re-examination is held, and after another year and second re-examination a medallion. The interest maintained by these re-examinations is witnessed by the issue of no less than 112,247 medallions. The number of certificates issued from St. John's Gate from 1877 to September 30, 1907, is 717,495, the classes being distributed over almost every colony and dependency of the Empire. It is hardly necessary to add that the records prove that thousands of lives have been saved and much needless suffering avoided by the elementary knowledge of medicine and surgery afforded by these courses of instruction.

The British Ophthalmic Hospital at Jerusalem.

This useful and important charity is maintained at Jerusalem, the birthplace of the Order, almost entirely by the subscriptions of the members. It was founded in 1881, and is doing admirable work under the administration of Mr. Cant, F.R.C.S., among all classes, Christians, Jews and Mohammedans. In 1907, 988 in-patients were admitted, 9,269 new cases seen, 38,369 consultations held (out-patients), 1,670 operations performed, and 919 anesthetics given.

The St. John Ambulance Brigade.

This is practically a second reserve for the Royal Army Medical Corps, and consists of companies of uniformed men trained in First Aid and hospital nursing and drilled in field ambulance exercises, and commanded by a chief commissioner. There were in 1907, 16,068 officers and men in many divisions scattered over Great Britain and the Colonies. In connection with the brigade is a large corps of female nurses, who are uniformed and trained in their respective duties. It may be stated as an evidence of the importance of the work of the brigade that during the Boer war 2,048 trained men were sent to South Africa to supplement the work of the Royal Army Medical Corps, or to man volunteer hospitals; 68 of the men lost their lives during the campaign. In connection with the brigade there is also maintained the Royal Sick Berth Reserve, who perform at sea similar duties to those of the brigade on land. Its strength is 669 officers and men.

The St. John Invalid Transport Corps.

There occur annually in the streets of London upward of 10,000 accidents, irrespective of the special occasions when great crowds gather. Until recently the usual mode of conveyance was a shutter, door, or the four-wheeled cab. None of the great hospitals were provided with ambulances; now, thanks to the Order of St. John, this has been changed. The Order maintains an Invalid Transport Corps, wheeled ambulances, wheeled stretchers, and ambulance posts, where men are on duty night and day. I think sufficient has been said to justify the statement that the Order is living up to its motto, "Pro utilitate hominum." To be a member of the Order is not only a great honor, but a great responsibility.

The Canadian Centre was established by Dr. G. Sterling Ryerson in 1894, Sir George Kirkpatrick becoming first president. On his death he was succeeded by Sir James Grant, and he again by Sir James Whitney, Premier of Ontario. Sub-centres have been authorized in the following places :— Ontario—Toronto, London, St. Thomas, Peterboro', Stratford Kingston, Oshawa, Owen Sound, Berlin, and Brantford. Quebec—Montreal, Westmount. Manitoba—Winnipeg, Brandon. Alberta—Calgary, Edmonton. British Columbia—Vancouver, Nelson, Victoria. New Brunswick—Fredericton. Nova Scotia—Halifax, Sydney Mines.

There is now in Canada one division of the St. John Ambulance Brigade—at London, Ontario. Upwards of 5,000 persons have taken the course of instruction in First Aid and home nursing, and many thousands of text books have been sold. The head office for Canada is at 66 College Street, Toronto.

PROFESSIONAL INTERESTS.

By James S. Sprague, M.D., Stirling, Ont.

The many villages and small towns of this province and of any state organized or settled by those who bear the relationship of grandsires to the living, have one characteristic and one equally enjoyable or possessed, one may state, in common, and one characteristic is that well termed as lethargy—although each citizen tells you he is busy and has not time for extra work. Yet, if closely studied, this same citizen and his fellows would be found not so much engaged as old Burton, as the author of "The Anatomy of Melancholy," said of himself, "busying himself with the playing of labor." Among such citizens may be classed the old and the young M.D.'s, who have fallen under, or will in time fall under, the spell of Rip Van Winkleism. To this fact, evidently, is ascribable the absence of contributions from those, the indifferents, and the intransigents in whom inappetence, only in an existence, has no higher motive. In brief, there are many of our profession who, unmindful of the fact, are simply adumbrations of themselves, either as citizens or as worthy men in our ranks, and such are those whose lives pass as a weaver's shuttle; who are defrauding themselves with the inane thought that they are busying themselves, and even when playing at so-called labor; and to this widespread indifference, this want of an active organization or want of unity, is justly attributable the non-fulfilment of some of the best and most pressing interests in medical establishment—of which Dominion Medical Registration may be named as the principal one—especially necessary in these our times, in these days, when our own western provinces are being settled, and our young M.D.'s are looking, and with truly patriotic hearts, to these new lands for homes, rightfully too, as those to which they are loyally entitled to possess. Every encouragement is afforded for entrance into studies relating to medical matriculation, and during the high school life of every scholar some one of the professions in due time becomes his ambition, and the well-to-do doctors, which most every village possesses, afford happy and promising efforts towards the acquiring of the M.D. Yes, the fact that two or more doctors can be referred to as the possessors of wealth or sufficient competence is, and has been, the allurement and the incentive, not only of the covetous, but of the best and most promising sons of very many of our best families, moral and wealthy. One fact, by way of explana-

tion, and considered worthy of mention, is this, that few students or their guardians consider the source or foundation of the wealth of the so-called wealthy doctors; for, if investigation were made, in most numerous instances the wealth would or could be named as that secured by inheritance, or some silently-made investments, or interests in which medicine was a totally *unrecognized factor.*

The song the sirens sang is yet in the air; yes, all day, and in their dreams at night, renewed delight and ambition are the possessions of those looking forward to Medicine; it is the *lux e tenebris,* and the doctor in the family is the hope of those who look after the filling of corn cribs and the dairy interests, and that of the spindle. The hope of every honest and ambitious father and mother, who look for greater respectability and honor to their name, is that one of their honest, equally honest, God-fearing and ambitious sons shall be a doctor. Equally so, if there is a strong religious tendency in the family record of church piety, is the silent and oft-repeated prayer that one of their sons shall preach Christ and become a "leader of faithful souls and guide for those who travel to the skies." In regard to Law, duly recognized as with Divinity or the Church and Medicine, as the trinity of the learned professions, was ever there a mother's prayer or a father's encouragement that their son pursue this profession? If so, it has not been told, nor is it on record.

The duly licensed divine can, without undergoing further examination or payment of fees, very easily transfer his labors to other and remote conferences, for souls to be saved are found that have the same call for redemption, not only in the sea-girt regions, but in the vast plains of our western provinces, and in the wilderness of forests, rocks, swamps and muskegs of their northern boundaries. And if of the "angelic conjunction," that is, half preacher and the other half doctor, restrictions are easily overcome. This junction under one name and under one hat can, and always does, play "sky pilot" and Esculapius without molestation. From many sources I learn that a barrister, with some few difficulties, can easily establish an habitation in any one province, near or remote from that in which his licensure was first obtained. In regard to certificates relating to the teaching of public schools, there exist easily-overcome difficulties, and the Prince Edward Island school teacher, or a teacher of any one province, does not hesitate to move when opportunities for a larger salary await in another province, for the three "R's" are equally taught in every province, and the standard required is of similar nature to our coinage. With these il-

lustrations we do not forget the trained nurse in her self-styled "profession," (whose existence and pomposity and struggles for incorporation—and, no doubt, degrees—our profession has silently nursed in its bosom to its own degradation, and its stings are experienced). Evidence is presented that when the "sky pilot," or "Mark," the lawyer, or the pedagogue, or the nurse (with her profession) wish fresh pasture, no head tax worthy of the mention is demanded. Dr. White (deceased), my old friend, a few years since, carefully reviewed in one of our journals the prolonged delays and excessive expenditure for licenses that our duly qualified M.D. and M.R.C.S. would incur in the procuring of each provincial license, his starting point being one or more of our Eastern Maritime Provinces. Several years and several hundreds of dollars, not including vexatious delays, were demanded before one could practice in a land whose population is not that of London. "Is Canada for Canadians?" or does it offer any special advantage to the M.D. of London, Edinburgh, or Dublin? No! Every state of the United States will offer him better terms for license than any one of our provinces. Does any one province offer you—an M.D. of Victoria, Trinity, McGill, Toronto, or Queen's, or London—its license on as favorable terms as any one state in America? No! An alarm arises, whose origin is purely political, and the Empire and its dependencies beyond the seas become inflated with aroused loyalty, and a "Dreadnought" as a present is the confirmation of said sudden outbursts of imperialism abroad in our midst. However, one mayor or reeve, and he alone, says there is no imminent danger, and evidently he was a well-versed reader of political news. Such is introduced as an illustration, to the effect that many who think they think do not think—if so, not as in the manner of men whose decisions are well weighed, and then given after careful study.

As regards our profession's interests, which in part afford the only incentive for this paper, it is, and has been most noticeable, that those who should work in the interest which refers solely to our profession's licensing systems in this and other provinces, are indeed ranked with the minorities, and the result is, and has been, that through this want of what should be the concern of every fellow M.D. who loves his profession and as a loyal subject should be heard, very many duly graduated M.D.'s have ignored the examinations of our College of Physicians and Surgeons—even the licensing bodies of our western or other provinces, and by voluntary self-expatriation become citizens of the neighboring republic. The registers of our universities reveal the sad fact that more than one-fourth of each year's

graduates in medicine leave Canada for homes in foreign lands, and it is needless to ask what becomes of, or where will be, the homes of those who are unsuccessful at our Council's examination, and from a careful study of the number rejected during a period of four years, or at eight examinations at which I presided, it can be stated, and very safely, too, that at least one hundred fail annually. Considering the Council's rejections and those who, yearly, do not try the examinations, one may safely state that, yearly, two hundred of our best young men, M.D.'s, leave our shores. The loss to this province is a serious reflection, more worthy of alarm than the scare so needlessly alarming the imperialists, for Great Britain and Ireland are safe, and with her colonies doubly safe. Men, not ships, we want, and we want to keep within our boundaries those (the offspring of noble sires and mothers, true Canadians,) who are learned men—physicians—each one of whom is worth now one hundred men, even as in the days of Homer. Either our encouragement, the fine educational system of our public and high schools, or our public estimation of the doctor is at fault, and to any one of those named may be due the over-supply, but the fact remains that, as stated, difficulties and excessive fees bar their entrance to practice in sister provinces, and hence the exodus. I recall the words of "The Canadian Highlander," by Charles McKay, LL.D. :

"Alas! the land denied me bread,
Land of my sires in bye-gone ages.
. . . . . .
It had no place for me and mine,
No elbow room to stand alive in—
Nor rood of kindly mother earth
For honest industry to thrive in."

Is this in any sense applicable to us as a people who, in very few instances, can point out the graves of grandsires in this new country? Yes, is my answer. When I recall the fact that from this village and its immediate neighborhood there have removed to the United States during the last thirty-three years more than five hundred native and fellow-Canadians, and in the list one will find the names of several M.D.'s who were honored at home and equally honored and revered abroad.

While conversing recently with a dentist, whose newspaper card announces that he is an "honor graduate of Toronto University," (and every country newspaper has similar notice for every dental parlor owner, and I blush, and have a feeling of angina pectoris when I address him as Doctor), he tells me (and he is well up in his self-styled profession) that he would prefer facing examinations of any state to those of any one of our provinces. Thus, with these illustrations, one can see that, not

only we, but others, have their troubles, and that removals to other provinces, however alluring the prospects appear, and with few uncertainties give us a call, yet barriers exist, and such barriers are established by those with whom personal and not professional interests are their only stock and their nurslings. That no one dare become the champion, the vexillary for Dominion registration in medicine, and have a numerous following, is due to the lethargic condition of our profession; but that if one come out from among us and advocate such interests, his greatest opponents would be the officials of the several medical councils, for their positions and salaries would lessen in value, and the solace to the duly licensed, that limitation was in order, would serve to stifle any attempts in the interests of national unity in registration, no matter however rational and decidedly essential such an interest, even to the numerous insouciants and intransigents, would appear. There are those who have carefully watched the movements of the times, and will say, "Equally true is it that our own Medical Council has assumed such a wealthy establishment, whose officers are the recipients of large salaries, and whose examiners are well paid, whose workings are decidedly cumbersome, and whose transactions in many instances were of those who knew but little of financial affairs." In order to be brief, it may be asked : Would any one member of our Medical Council, provided its work were considered that of his own and purely personal management, conduct the same as extravagantly in time and money? If in this manner, he would be placed in the list of "easy marks," a designation too often applied to us as a profession, and well, and too often truthfully, applied, and proofs are not lacking. However, the Medical Council of our C.P. & S. is as perfect as can be established.

"The qualities required whether of a decent public servant or a soldier are not remarkable. Of such men it is demanded merely that they possess commonplace qualities in a rather remarkable degree," says ex-President Roosevelt. We as M.D.'s are servants of the public, and for our preparation we have given more than has been or is given by any one of any profession, avocation or vocation, and recognized of great worth to any community, even among men as wise, and among the wise as a doctor; yet, through indifference, individually and collectively, we have not exercised these commonplace qualities of mind in the preservation of our rights and privileges or obligations.

Through this influence of inaction we have allowed the nurse an influence which is gradually sapping the very foundation of medical practice, and had not a few of our fellow-men opposed their over-zealous claims, they would have had incor-

poration and university degrees. The same few have fought osteopathy, chiropractics and other similar madnesses of the crowd.

Those who permanently are established as teachers in our medical colleges, and those who are passing as doctors, and are enriching themselves in interests foreign to practice, are our greatest enemies, for they are callous to those ethical considerations which the ordinary practitioner well recognizes as the bulwark of our honorable profession. Yes, the hope of Medicine is, and ever will be, he of the country practice; for he is not one "who practices merely as a means of getting on, for money, for fame, for selfishness and success," for he believes anyone so engaged "is a traitor to his profession." This thought is an extract from Dr. George M. Gould's address: "Vocation or Avocation?" and although he is with the majority in practice, it can be said of them, "They have one faith and one altar," *fides communis altare commune.* Yes, there are some noble souls among them and with us—*quales neque candidores terra tulit* —true to their duties and to themselves, yet indifferent to many considerations not always beneficial that are controlling the profession, and considers when he has paid his annual dues that he has done his full duty, and therefore does not disturb his leisure moments by the perusal of dry reports and transactions of provincial councils, although of the nine provinces three are favorable for the Dominion Medical Council or registration.

Brother, these "straight-flung words and few," not as a prize thesis, are presented with the most profound loyalty to my native land, and with equal loyalty and love to the profession, with which for forty years I have been connected as a country doctor, the hope of the profession, of whom as a class Gould most truthfully remarks, "The general or family physician is still in the majority, and he is the backbone of the profession, and the hope of curing our pitiful professional scoliosis rests with the true orthopedist," and if he who believes this, and is possessed of similar loyalty, disagrees with me, even if my zeal to him may appear as if my patron saint was of a mongrel breed —even Mulus—him have I unintentionally offended.

"United we stand, but divided we fall." If so, we must have one faith, and only one altar for the Dominion Medical Temple. And if we and our noble brothers and sons can be made to believe in "Canada for Canadians," we will "Dreadnaught."

"Write down the vision and make it plain, upon tables, that he may run who readeth it." "For the vision is yet for an appointed time, but it shall speak, and not lie; though it tarry, wait for it, because it shall surely come; it will not tarry."

REMARKS ON THE DUTIES OF THE MEDICAL EXAMINER IN LIFE INSURANCE.

By Dr. G. S. Glassco, Hamilton.

When honored by our president with an invitation to read a paper before this meeting of the Ontario Medical Association, it struck me that the subject par excellence of which so little is said, and to which such a meagre amount of attention is paid, is that of life insurance from the standpoint of a medical practitioner.

Probably the great majority of us here are examiners for some or other life insurance companies, and I will venture to state that a goodly percentage of us are far from realizing the importance of the work in which we are engaged ; we rather regard that the proper time to do life insurance work is when there is nothing else to do, but I am sure that, did we appreciate the fact that it is upon the medical department of a life insurance company that the selection of risks must devolve, we would undoubtedly lend our best efforts, our best minds, and our best consciences to the cause which we represent.

I shall divide the few remarks which I intend to make into three headings : First, the selection of the medical examiner by the home office ; second, his duties to the agent ; and, third, his duties to the home office.

The agent of the company has the right to expect that due care will be exercised in the selection of the examiner to be associated with him. He knows in his own business that not every intelligent man can win success as a solicitor for insurance. He knows equally well that not every educated physician makes a satisfactory medical examiner, and painstaking effort should be made on the part of the company to choose a man who possesses in a fair degree those qualifications which make for success in examining for life insurance. It has been said on occasions that the average medical practitioner is not a good business man; that his training unfits him for the great world of affairs; that he is a theorist; that he has a fondness for technicalities; that when he is brought into the life insurance field he comes, not with the broad conception of his appropriate function and the object to be attained, but with his conceits, his fads, his professional squint, his disposition to mag-

* Read at meeting of Ontario Medical Association.

nify trifles, so that he may become a very obstructionist, and even distinctly antagonistic in his tendencies. It is quite unnecessary to say that this view is a greatly distorted one. It is nothing more nor less than an unfair generalization from a very exceptional case. But, let me enumerate some of the necessary qualifications to be possessed by an ideal medical examiner.

First of all, he should be a man of good standing and character, highly regarded in the community as a capable physician and an honorable, temperate man. He must be accommodating and tactful. A friendly manner soon puts the applicant at his ease, and this will greatly aid the examiner in obtaining the information he desires. He must be young enough to be progressive, and old and experienced enough in dealing with men to know something of human nature to be able to estimate with some degree of accuracy the truthfulness of statements made to him; to decide that a man is well when he says he is sick; to bring to light evidences of disease if they exist in spite of efforts made to conceal them; to understand what are the real essentials of an insurance examination, and what data a company must have in order to reach a just decision. Keating has stated in a graphic way that he is the photographer who is to give a life-like picture of the applicant for a policy in his company, making the resemblance as life-like as possible, neither exaggerating the defects nor lessening their importance.

Now a word as to the duties of the medical examiner to the agent. After the physician has received his commission from the company and accepted it, the agent has the right to expect from him co-operation along the following lines : In case he is also examiner for other companies he will be broad enough, and fair enough, to treat them all impartially and avoid the appearance of lending greater influence and support to any one of them, or its representatives, than to another; that he will act with discretion in dealing with such matters as are brought to his knowledge, and will observe the requirements of business prudence in withholding from outsiders what should be regarded as agency secrets; that he will be ready at all reasonable times to help out the agent in making an examination, remembering that in no other business is the saying so true that you must "strike when the iron is hot." True, one may occasionally strike an unreasonable agent, who may ask you to leave an office full of people in order to complete an examination at once, but too often the doctor does not show his appreciation of the agent's hardships and disappointments by rigorously keeping his appointment.

Finally, the duties of the medical examiner to the home office. There are two factors which enter into the consideration of the medical examiner: First, to whom is he responsible? and second, what are his duties? The medical examiner is, or should be, a check to restrain the acceptance of bad risks. The agent, of course, is working to get all his risks accepted. He realizes that it is not well for the company to be loaded with bad risks, but he wants the loss from such risks to fall on some one else's shoulders. Therefore, the medical examiner should be under no obligation to anyone but the company itself. It is well that he should not be the family physician of the applicant. As you can understand, in a small town such a contingency can scarcely be avoided, but where a rejection by the home office is so often taken as a personal affront by the applicant, and even the agent, you can readily recognize the desirability of a business relation only to the applicant. Many an agreeable acquaintance, many a remunerative patron, many a good friend has had his eyes opened for the first time to a physician's villainy, or his professional imbecility, by an insurance rejection. It has always struck me that the very first duty of an examiner in the field is to assure himself that the party he is examining is the one applying for insurance. We find in no other financial transactions such a laxity in regard to personal identification as in life insurance. While I do not believe that frauds in this business accomplished by substitutes are remarkably frequent, we know that they do occur, and the examiner cannot be too careful in assuring himself that he is not an innocent party to a shady transaction.

The company does expect from its field examiner promptness of action. Competition for desirable insurance is so keen, and the applicants are so fickle and liable to change their minds, that it is of paramount importance to get a policy in the hands of the applicant, and the premium in the company's treasury just as soon after the application is secured as is compatible with safety. It is no uncommon experience with us to see what we know to be desirable business lost because some cog has slipped and delayed for two or three weeks the issuing of the policy. This statement makes it very evident that an examiner who awaits a convenient time to make an examination, who insists on the applicants always calling at his office, who delays attention to correspondence, and who will not use every possible effort to get an application promptly before the home office in satisfactory shape for action, no matter how competent he may be, loses very largely his value to the company.

Now, in conclusion, a word or two as to the acceptance of

risks. You must remember that the acceptance of poor risks is disastrous, meaning as it does absolute loss to the company, for which no provision has been made. Also that the refusal of a good risk is not only a grave injustice to the applicant, but a direct financial loss to the company, to say nothing of the disappointment and loss to the solicitor or agent, who oftentimes has to work hard and long to secure the application. But let me say right here that there is oftentimes too much regard for the solicitor on the part of the examiner, whether through friendship or the fear that examinations may be turned into another channel, and defects are either minimized or concealed. The examiner should have absolutely the courage of his convictions, and trust that the home office will see that he gets his share of the examinations.

I would suggest that the universities include in the curriculum of their medical faculties a course of instruction in life insurance examinations. The instruction of students in medical life insurance is within the province of the Medical College. The insurance companies feel that with the great financial interests involved, furnishing as they do employment to so many physicians, medical colleges will be adding to their already great achievements in the promulgation of medical scientific knowledge if they will couple with such instruction the training of students in life insurance examinations, thereby broadening and deepening the knowledge of the physician entering the practice of medicine, and creating a still wider interest in the medical school.

Discussion on Fees for Life Insurance Examination.

We owe a debt of gratitude to our professional brethren of St. Catharines for the loyal manner in which they stood together and held out for an increase of fee. The Association of Welland County, of which I am secretary, decided at a meeting held last winter to stand by them, and feel that our support had something to do in bringing about the raise of fees on the part of the companies. I do not think we should stand still, but continue to make efforts to have the fees made $5.00, which, in my opinion, is little enough. The suggestion that the Ontario Medical Council take up the matter meets with my approval.

J. H. Howell.

Mr. Chairman,—I have done very little life insurance examining and perhaps am therefore properly qualified to speak on this question. After examining for a company at $3.00 for a few months, I felt that the fee was too small. They did

not wish to pay the $5.00, so I gave up the work. The surprise to me is that the companies are not alive to their own interests enough to voluntarily offer better fees and get better work done for them. It is a business transaction, and is a very vital procedure in connection with the business of life insurance.

The fee of $5.00 is certainly the lowest that should be accepted for this work, and I am glad to see this stand being taken. We may not be able to do anything effective to-day or this year, but if we keep at it the necessary change for the better must come.

The Ontario Medical Council might help us in this matter, not by coercing the various members of the profession, but by approaching the several companies and presenting the claims of the doctors in such a way that some general increase in fees would result.

Personally, the insurance work is distasteful to me because I do not feel that I can do justice alike to the company and the applicant by answering the set form of questions, and would certainly accept nothing less than $5.00 for examination work.

D. H. Arnott.

Discussion on Fees for Life Insurance Examination.

Dr. Acheson, Galt, reported for South Waterloo Association that it had been decided that $5.00 should be minimum fee, and they wished some expression of opinion from the Ontario Medical Association on the subject.

In the matter of examining applicants at their own homes, he thought if within a reasonble distance from the office it should be done for the regular fee, but if at any distance mileage should be paid.

The great difficulty is medical men will not hold together and stay. We should have the Ontario Medical Council take up the matter of straight line and fraternal examination fees.

J. C. McAlister,
Jerseyville, Ont.

Dr. Pepler, Toronto, was in favor of a flat rate of $5.00, as an examiner should give as careful an examination for $1,000 as $10,000. He spoke of the advisability of examiners making a specialty of this class of work in the cities.

When the Niagara District Medical Association applied to the committee for time on the programme to discuss fees for medical examinations for life insurance companies, we had notified the companies that our fee for the future would be a flat rate of $5.00 for $1,000 and upwards; that was towards the

end of March last. Since then, on May 6th, we agreed to accept a flat rate of four dollars. However, though the matter is settled for the time being, our association wished that some account of this effort for better fees should be reported.

The $4.00 fee was agreed to in the Maritime Provinces quite a long time ago, and the insurance companies, instead of offering the same fee to Ontario, continued the $3.00 fee until this agitation made them realize that something had to be done. Further, you must understand the Niagara district was not alone; the Ottawa Medico-Chirurgical Association, and the Ottawa Valley Medical Association had also taken independent action, and other parts of the province had also acted, each district for itself.

This agitation has been the means of bringing the medical men together; they get acquainted, and get to know one another, which is very much for their mutual good. And it would seem that the different districts should be in touch with one another, so that concerted action would be quickly possible at any future time when this question or some other of general importance comes up for solution. The Ontario Medical Association forms a bond of union, but we are loath to encroach on its limited time to discuss our business interests. It would seem to me that our business interests must be dealt with by district associations, but in many things, such as insurance examinations, fees, collection methods, public health matters, where general action is possible, our Ontario Medical Council should have power and take action.

Selected Article.

A CLINICAL LECTURE ON HAEMOPTYSIS AND EMPHYSEMA.

By Leonard Williams, M.D., M.R.C.P.,

Assistant Physician to the Metropolitan Hospital; Physician to the French Hospital in London.

There are a great number of people going about who are supposed to be tuberculous, but who are, in point of fact, no more suffering from tubercle than they are suffering from elephantiasis. This woman is a case in point. Her age is 53, an age at which, I admit, tubercle is rather apt to lay hold of those who have a predisposition in that direction. It is the age of decrescence, the "gloaming of life," as the French artistically put it *(l' âge crèpusculaire)*, and it is when the vital forces begin to decline that the powers of resistance against tubercle become depressed.

This patient has been going about with a diagnosis of tubercle upon her for some twelve months, and yet she does not look tuberculous. She is not only well-nourished, she is even stout, and so far from being anæmic, she is florid. She makes no complaints of night-sweats, and has no tuberculous family history. But she coughs, and not only so, but she has had two or three attacks of hæmoptysis, and it was apparently on this combination that the diagnosis of tubercle was based. Now, it is scarcely necessary for me to insist that hæmoptysis is by no means necessarily tuberculous. The accident owns many causes, amongst them, and one of the commonest, being mitral stenosis. A person with mitral stenosis may very easily have a chronic bronchitis from back pressure on the lungs, so that, to the attacks of hæmoptysis, there is superadded a chronic and distressing cough. Hæmoptysis, even when accompanied by a cough, is therefore by no means necessarily due to tubercle. Another cause of hæmoptysis is high blood pressure, the blood in this case issuing not from the pulmonary, but from the bronchial vessels, which are branches of the thoracic aorta; and, as you know, a person with high blood pressure may bleed from anywhere. He may bleed from his bronchial vessels, he may bleed from his nose, from his gastric mucosa, from his kidneys, and even into his retina. But the patient before us has not got

any lesion at her mitral valve, nor is her blood pressure (150 mm. Hg.) sufficiently high to lead us to attach the responsibility for her hæmoptysis upon her bronchial arteries. When you come to examine her you will find that she has an enlarged liver, and you might be led to suppose therefrom that this was a case of hepatic cirrhosis. In the out-patient room people are not very accurate in their statements, and they frequently say that they have coughed up blood when they have vomited it, and *vice versa*. I think, on the whole, that they prefer to say that they have vomited it, because the vomiting of blood seems to them to be a more heroic proceeding than the mere coughing of it up. However that may be, it is often very difficult to be sure from the patient's description alone whether the blood has issued from the stomach or from the lungs. In this case, happily, no ambiguity is possible, for she has been seen by an intelligent observer to cough up three or four teaspoonsful at a time. The enlarged liver, therefore, is evidently not the cause of the hæmorrhage. A little careful questioning of this patient will show that she has been troubled with a cough for several years, that the cough is always worse in winter and better in summer, and that it is of a wheezy, breathless type, very different from the dry, hacking, spasmodic effort which characterizes tubercle. An examination of her chest shows that she has, in effect, a very decided degree of emphysema. You will hear all over the upper part of the chest the high-pitched inspiration and the prolonged low-pitched expiration which is so characteristic of the condition. The normal areas of dulness are very difficult to elicit. If you trusted to percussion alone you would imagine that the heart had shrunk to the size of a shilling. The upper border of the liver is impossible to make out; all over both bases behind are the moist, wheezy *râles* of a chronic bronchitis.

Now what is the relationship between a condition of this kind, which is all too common in out-patient practice, and hæmoptysis? If you will consider the pathology of the disease you will, I think, agree that we ought in reality to feel surprised that hæmoptysis does not more often occur. In emphysema the air-cells run into one another by the breaking down of their partitions, and in these partitions there are blood-vessels. When this breaking-down occurs, therefore, it ought not to surprise us to find that a rupture of the vessel ensues. And not only so, but when emphysema has been in operation for some years, the amount of room in the lungs in which the blood may circulate is seriously diminished, so that the capillaries which remain are liable to be much overcharged with blood. When we consider their delicate texture it is surely only to be expected that they

should occasionally rupture and give rise to hæmoptysis. Emphysema, in fact, especially when complicated with bronchitis, offers the same difficulty to the return of the systemic venous blood as is offered by mitral stenosis. The difference is one of degree only. The block in the one case, it is true, is at the mitral valve; in the other case it is just in front of the pulmonary valve. The difficulty which the right ventricle encounters in getting the blood out of its cavity into the pulmonary capillaries is very much the same as the difficulty encountered by the auricle in getting the blood out of its cavity into the left ventricle. The results in both cases are more or less the same —namely, the production of a back pressure. In the case of mitral stenosis the back pressure shows itself primarily in the lungs, secondarily in the liver, and finally by the œdema of the lower limbs. In the case of emphysema it is the right ventricle which shows the first signs of trouble, and, in order to overcome that trouble, it hypertrophies. The blood which cannot be forced through into the lungs is passed back into the liver, which then acts as a reservoir for the superfluous fluid, and the train of events with which we are familiar in mitral stenosis then becomes repeated—the œdema of the lower limbs and the ascites.

Now, this being the state of matters, one is led to inquire how it is that hæmoptysis does not more often occur in emphysema. We know that there is a great destruction to the pulmonary capillaries, and we know also that the right ventricle tries to force the unoxygenated blood into the area where it may expect to meet with the vivifying oxygen. The remaining capillaries very soon become stretched, engorged and degenerated, so that here, if anywhere, is a condition eminently favorable to a hæmorrhage. Why does that hæmorrhage not more often occur? Well, the explanation was long ago supplied by Rindfleisch, who showed that wide communications are formed between the pulmonary artery and the pulmonary and bronchial veins, thus relieving the tension in the former vessel and allowing the blood to pass through the lungs without undergoing proper aeration. This want of proper aeration is, of course, the reason of so much distress amongst those who suffer from this disease, and when they live in a climate like our own, more especially in large towns, where at best there is a deficiency of oxygen, and where they are subjected to additional difficulties imposed by fogs, the results of this deficient aeration become extreme; the lungs are irritated by their futile attempts to obtain the necessary vapor, and a state of chronic inflammation ensues.

Now, it seems to me that what is to be learned from a case of this kind is, in the first place, to beware of making a diagnosis of tubercle except on sufficient grounds. Hæmoptysis alone does not afford such grounds. With very little care one ought to be able to come to a conclusion as to the cause of an hæmoptysis within a day or two of its occurrence. One of the best means of helping us to a conclusion is the use of the hæmomanometer. In the case of an hæmoptysis where the blood pressure is low, one certainly has good ground for grave suspicion. The bacillus of tubercle is a vaso-dilator; a tuberculous person almost invariably has a subnormal blood pressure. Where, on the other hand, the blood pressure is high, one may always assume that the blood has issued not from the pulmonary, but from the bronchial vessels—that, in fact, the hæmorrhage is due to what Sir Clifford Allbutt calls hyperpieses, to high arterial tension, and not necessarily to any organic disease. Where the blood pressure is at, or about, the normal level, one may be in the presence either of emphysema or of mitral stenosis. It rather depends upon the stage of either of these diseases what the blood pressure will be. In not very advanced cases the blood pressure may be low; in very advanced cases it may be high. But in a general way it is not conspicuously one or the other.

In our endeavors to exclude tubercle as a possible cause, we ought never to neglect the simple expedient of examining the sputa for the bacillus. I need not remind you that a negative result must not be regarded as conclusive; that it is necessary to repeat the examination two or three times; whereas from a positive result there is no appeal. But even where no positive result is obtained, there are other means of coming to a conclusion about the existence of commencing tuberculosis.

The mistake in diagnosis from which this woman has been suffering has resulted in a considerable aggravation of her difficulties. She has been fed on stimulating foods, and has been given stimulating and tonic medicines. This is, of course, the very reverse of what should have been done for her. Having regard to the fact that she has had more than one attack of hæmoptysis, it looks as if the communications described by Rindfleisch as being generally formed between the pulmonary artery and the pulmonary and bronchial veins, have not been formed in her case, so that the back pressure is obliged to relieve itself by these hæmorrhages. Obviously, therefore, the first thing to do, if you can get your patient to consent, is to perform venæsection. If she will not consent (and not many of them will),

you must have recourse to other forms of depletion: mercurial and saline cathartics freely administered and often repeated; a diet which is unattractive and unstimulating must also be insisted upon, for a time, at any rate; and, if it can be managed, she should be removed to some locality where the climate is more equable and the air is purer than it is in the north-east of London.

So far as drugs are concerned, there is not to my mind anything which can compare with the iodide of potassium. This, when combined with a little camphor and a little ammonia in an infusion of senega, acts more helpfully than anything else. There is in this case, of course, another factor which we cannot altogether leave out of account, and that is her age. She is at, or about, the change of life, and we must be careful in giving her medicaments and in prescribing for her *regimes*, that we do nothing to intensify the difficulties incidental upon that period. Fortunately, everything that I have suggested up to the present time is not in any degree contra-indicated by such a consideration. They are, indeed, all measures which are proper to the treatment of the menopause. If, however, any difficulties did arise, either as complications or otherwise—difficulties, I mean, of the functional neurotic type—the addition of some bromide of potassium to her medicine would in all probability speedily dispel them. There is another drug of which I have not yet had sufficient experience to speak with confidence, but of which I may say that it seems to offer considerable advantages, and that is valerianite of menthol. But of all the drugs which are useful at this time, probably none is more efficacious than a really active preparation of ovarian extract.—*Medical Press Circular.*

Progress of Medical Science.

MEDICINE

IN CHARGE OF W. H. B. AIKINS, F. A. CLARKSON, AND BREFNEY O'REILLY.

Medical Gymnastics in Myocardial Disease.

Babcock discusses the cardiopathies encountered in men generally of large physique who lead sedentary lives and are, in addition, hearty eaters and heavy smokers. These men generally take on weight and display an abdominal girth out of proportion to the chest development. In a certain percentage of these cases the men have been athletes at college, but on entering professional life have neglected physical exercise entirely. In the majority of instances they possess indomitable energy and almost tireless activity, and display a systolic blood pressure that is up to, if not above, the normal limits. In the late fifties or early sixties these men consult the physician for relief from symptoms which betoken long-continued and at length injurious cardiac strain. The entire cardio-vascular system is affected, though not uniformly. The kidneys also are involved, though in the cases referred to in this paper the renal inadequacy is overshadowed by the cardiac symptoms. Occasionally the coronaries are so involved as to present symptoms of angina pectoris. Babcock sends patients of this type to a medical gymnast to whom he had explained the end to be attained. The gymnastics to which the patients are subjected are of the kind investigated by Levin, who showed that if certain simple exercises were given properly it was possible to slow and strengthen the pulse instead of accelerating it, a very vital principle in these cases. The exercises given consist in both active and passive movements, according to the degree of myocardial incompetence present. The former comprise certain rolling and bending movements of the trunk executed by the gymnast, who, standing behind the individual seated on a wooden horse, with his feet held firmly by toe-straps, grasps the shoulders and firmly, yet not too vigorously, bends the body forward and then rolls it around to the opposite side in a backward direction, in such manner that, flexed in the beginning, the trunk becomes extended when the movement is half completed, and ends again

in a position of strong flexion. To these may be added passive flexion and extension of the extremities, and alternate expansion and compression of the chest, very much after the manner of performing artificial respiration. The active exercises, which in all cases are gentle at first and performed by the help of the gymnast, and only by degrees increased in vigor, consist in deep breathing, in bending, pulling, lifting, etc., on a horizontal bar or ladder, or such other movements as in the judgment of the gymnast will promote respiration and venous flow and reduce the girth of the abdomen. But whatever be the kind of exercises, one essential principle underlies them all, namely, the patient must not be allowed to hold his breath, but must breathe regularly and deeply in rhythm with the movements so as to inspire or expire according as the exercises expand or contract the chest and depress or raise the diaphragm.

The purpose of these exercises is not the development of the skeletal muscles, but the restoration of the functional integrity of the myocardium, and this they accomplish more or less effectively, not only by increasing venous flow on the one side and by dilating the intermuscular arterioles on the other, but also by improving cardiac metabolism. Of course, the degree and permanence of the improvement must depend largely on the state of the heart muscle. If this is extensively degenerated, no amount or kind of treatment can be expected to achieve much, and such improvement as is gained can not last long. In such cases, therefore, if dilatation and inadequacy are pronounced, the so-called resistance exercises are preferable, although to these may be added with advantage such deep breathing movements as, with the aid of a trained attendant, can be performed without danger of strain to the heart wall. As might be expected, the most pronounced benefit has been observed in cases of early or moderate myocardial incompetence, shown by breathlessness, or palpitation on slight cause, and on examination by increased cardiac dullness, feebleness of the first tone at the apex, accentuation of the pulmonic second sound, and sometimes a faint systolic whiff in the mitral area. In most, but not all cases, the blood pressure is elevated above the normal. In such cases the first indication of improvement is shown by the greater ease of respiration and a general sense of ease or lightness. Energy is increased and fatigue comes less easily, while a better action of the bowels and a diminution of waist measure are generally observed. Babcock states that his experience with medical gymnastics in cases showing early incompetence of the myocardium warrants him in recommending

them, if properly controlled, and in asserting the belief that, if these and allied physical exercises were used more extensively and systematically by men of the build and habits to develop chronic myocardial and arterial disease, they would delay, if not prevent, the onset of cardiac inadequacy.—*Journal of Medical Sciences and J.A.M.A.*

Hypodermic Use of Mercury in Tuberculosis.

This hypodermic use of mercury in tuberculosis has been advocated by B. L. Wright, U. S. Navy. In a recent article (*U.S. Naval Med. Bulletin,* July, 1908) he gives the following description of the technic:

"The preparation of mercury used is hydrargyrum succinimidum. Just before the injections are to be given distilled water is boiled for at least twenty minutes. A solution is then made so that 0.64 cc. (min. x) will be equivalent to gm. 0.013 (1-5 grn.) of mercury succinimide. The syringes and needles are boiled for twenty minutes.

"The skin of the patient's buttocks is scrubbed with hot water and tincture of green soap, then washed with alcohol, followed by ether, and this in turn by a solution of bichloride of mercury (1 to 3,000). The surgeon's hands are prepared as for any operation, and sterilized rubber gloves are worn. The patient being in a prone position on the table, the needle is driven deeply into muscle tissue by a quick downward plunge. If no blood escapes from the butt of the needle, the syringe is put in place and the drug is injected. If blood escapes, a vein has been punctured, and the needle is therefore withdrawn and inserted at another place.

"It has been our custom to start with gm. 0.013 (1-5 grn.) of the drug, and to repeat the injection every other day until 15 injections have been given; then to give gm. 0.026 (2-5 grn.) every fourth day until 15 more injections have been administered; then to give gm. 0.039 (3-5 grn.) once a week indefinitely. It is advantageous in some cases to give short courses of potassium iodide at varying intervals in conjunction with the mercury.

"The above procedure cannot be considered a hard-and-fast rule of routine, for some cases require larger doses and some smaller, and in this the physician must be guided by experience and close observation."

In a later article Wright says (*N. Y. Med. Jour.,* Aug. 29, 1908):

"Since the publication of my second report we have modified

the procedure for the administration of mercury as follows: We now give an injection every other day until thirty injections have been given, then follow by a two weeks' course of potassium iodide, gm. 0.64 (10 grn.) thrice a day, then one week's rest from medication, after which we resume the injection and repeat. This is giving us the most satisfactory results."

Good results are reported by Wright, but the method must be regarded as still on trial.—*Jour. A. M. M.*

Clinical Forms of Arterio-sclerosis.

Huchard considers that atheroma is to be separated from arterio-sclerosis. Atheroma is a disease of old age, 60 to 80, and the clinical history is that of vascular disease. Arterio-sclerosis occurs between 30 and 60, and the patients suffer from visceral disease, so that the name arterio-visceral-sclerosis is a better one.

Huchard points out that there is a sharp distinction, anatomically, clinically and pathologically, between the cardiopathies dependent on valvular endocarditis and those of an endo-arterial origin. In the latter, toxic symptoms are present to the end, inadequate functioning of the organs, tendency to hypertension with all its dangers, until the last period, characterized by incompetence of the mitral valve, and hypotension with the frequency of coronary stenocardia and sudden death.

Infectious diseases, with their toxic action, greatly add to the gravity of the toxic state which accompanies arterio-sclerosis. The five chief causes are gout and uric acid, lead, syphilis, alimentary disorders and tobacco.

The clinical evolution passes through four periods: pre-sclerotic, cardio-arterial, mitro-arterial, and stenocardia.

The pre-sclerotic stage is characterized by intoxications, arterial hypertension, inadequacy of visceral functions, intermittent claudications and painful accidents. Great importance attaches to the renal functions, impairment of which favors toxic retention and augmentation of the arterial tension. Latent atrophic kidney disease is revealed by chloride retention.

In the cardio-sclerosis the symptoms are of much more importance than the physical signs, thus in the incompetence of the mitral valve from arterio-sclerosis, the bruit indicates the mitral orifice as the site of the disease, but the patient is really suffering from an arterial lesion.

Cardiac disease of rheumatic origin may become associated with the arterial cardiopathies, and then a new evolution of the disease commences.

Asthma and emphysema may determine the symptoms of toxæmia and cardiac asystole if pre-existing arterial disease is present.

There is a dyspnœa, toxic and alimentary in origin and due to renal inadequacy, quite different from uræmic dyspnœa and often associated with a tachyarrythmia quite characteristic of arterial cardiopathic disease.

Treatment.

1. In the first period of pre-sclerosis, treatment must be directed to toxæmias by strict diet, milk or milk and vegetables. All foods rich in nuclein must be avoided. Diuretics are important, especially theobromine. For hypertension massage, gymnastics, hydropathy, diuretic waters, carbonic acid baths, and the nitrites. Iodides are useless and hurtful during this stage.

2. In the second period, characterized by the manifest lesions of the vessels, the heart and kidneys, the toxæmic symptoms are more pronounced, toxic alimentary dyspnœa with insomnia and tachycardia or arrhythmia. Here the diet should be milk and vegetables, and salt interdicted. Even exclusive milk diet may be necessary. All treatment which favors elimination by the bowels, skin and kidneys is indicated. In addition to the nitrates, iodides in small doses, 0.2 to 0.5 etg., for 10 to 15 days in a month may be given.

3. The third period is characterized by cardiac dilatation, lowering of the arterial lesion, tendency to dropsy and œdema of the viscera. The symptoms are a combination of toxæmia and hyposystole; dyspnœa may be constant and intense and albuminuria marked. Acute œdema of the lungs may occur, necessitating a large venesection. Repeated doses of digitalis are now required, and the diet should be exclusively of milk.

4. The fourth period is that of cardiectasy, the heart is greatly dilated and the œdema considerable; neither digitalis, theobromine, or other diuretics, are now active. Hydrothorax, œdema of the lungs, and congestion of the liver, are present. In this stage the essential requisite is to reduce the amount of liquids.—Huchard (M.), *Gaz. des Hôpit.*, *Medical Chronicle.*

Fibrolysin in Spondylarthritis Deformans.

Most cases of deforming spondylarthritis seen by G. Müller were of the progressive type, and all treatment did little good, until fibrolysin was used. The case, given in full, was that of a woman thirty-nine years old who first noticed pains in the

vertebral column, with a slowly developing curvature. When seen for the first time by the author there was pronounced anemia and hyphosis of the entire vertebral column; marked restriction of the movement of the arms in the shoulder joints and of the hips, and complete immobility of the dorsal and lumbar portions of the vertebral column. Pressure here and upon the dorsal muscles was very painful. Warm baths, massage, and gymnastics were used for six weeks without the slightest improvement, though the patient could walk a little better, with a suitable corset, which supported her back. Finally the corset could no longer be tolerated, and her arms became absolutely useless. As a last resort 20 injections, each of 2.3 Cc. fibrolysin, were made into the gluteal muscles during the course of four weeks. The results were astonishing, in that both active and passive motion improved steadily. The gait of the patient was again elastic, and the arms could again be brought up to the horizontal plane. Respiration became more free, and the curvature of the spinal column appeared less pronounced. The hip joints showed free mobility, and all tenderness had disappeared. The general condition and the anemia of the patient improved rapidly.

Müller concludes that fibrolysin is a specific for this condition.—*Med. Klinik*, 1909, No. 3.

The Sign of "Tapotage" in Pulmonary Phthisis.

In 1904 Erni described a symptom which frequently exists in pulmonary tuberculosis. In certain cases percussion—above all in the subclavicular region—will excite immediate cough and expectoration. Molle (*Lyon Méd.*, February 7th, 1909) has observed this sign of tapotage in several cases, and disagrees with Erni's opinion that the sign is distinctive of a subjacent pulmonary cavity. He found it in one case of early tuberculous infiltration in which cavitation was extremely improbable, and was not shown by any other sign. On the other hand, "tapotage" is frequently absent where a cavity undoubtedly exists. Nevertheless, the sign is by no means without diagnostic value. Molle has found that it is associated with the neuromuscular hemiparesis, such as Weil and Jacquet have described in pulmonary tuberculosis; it presents the same characteristic variability and inconstancy, and is due to a hyperæsthesia of the subjacent pulmonary parenchyma, the area of which is the same as the area of hyperæsthesia of the relatively superficial structures such as the muscles and nerves. The cough is, then, reflex rather than of mechanical causation.—*British Medical Journal*.

OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, K. C. M'ILWRAITH, FRED. FENTON AND HELEN MACMURCHY.

On Tubal Moles.

The formation of a mole in the Fallopian tube, that is to say, the conversion of a tubal gestation into a mass resembling a common carneous mole, is a not infrequent termination of an ectopic gestation. It is a far commoner occurrence than rupture of the tube, and it is quite possible that it happens more frequently even than we know of. It is only in the cases which end by extrusion of the mole from the abdominal ostium of the tube accompanied by peritoneal hemorrhage (tubal abortion) that the condition is evident, though moles are occasionally discovered when an operation is undertaken for "unruptured tubal gestation." The knowledge acquired in recent years of the pathological anatomy of ectopic gestation, and of the method of embedding of the fertilized ovum in the uterus as well as in the tube, has done much to clear up the difficult points in connection with the fate of a gestation sac in the Fallopian tube. Formerly rupture of the tube was looked upon as the usual fate of a tubal gestation, but now we know that this is a comparatively infrequent ending, and that mole formation, with or without extrusion from the abdominal ostium, is the commonest termination.

To understand this conversion of a tubal gestation sac into a mole, we must have a clear understanding of its anatomical relations to the tube. Recent research has shown that the fertilized ovum embeds itself in the wall of the tube in exactly the same manner as in that of the uterus. The early embryo is covered by a sheet of protoplasm, full of nuclei, but devoid of cell divisions, which is known as trophoblast; and having what may be called "phagocytic" powers, the trophoblast eats away the tissues in contact with it. Thus the embryo bores its way into the actual wall of the tube, beneath whose epithelium there is a very thin layer of connective tissue, so that it soon reaches the muscular coats. During this process the embryo and its coverings enlarge, so that the chorionic sac is soon larger than the hole through which it entered the tube wall. Thus the margins of this hole become expanded over the chorionic sac, and a kind of reflexa now known as the "capsularis"

is formed. This capsularis may contain muscle fibers, showing that the embryo and chorion have entered the muscle layers. During this embedding process blood-vessels are of necessity encountered, and in general, the eating away of their walls gives rise to the formation of small "blood islands" in the trophoblast itself, completely surrounded by trophoblast, and forming the earliest evidence of a maternal blood sinus, into which the villi afterwards dip. If this process of eating away the wall of the tube goes on sufficiently long, it must of necessity happen that the tube wall is at last quite destroyed on one side, and consequently rupture occurs and hemorrhage follows. But before this happens, in the majority of cases the opening up of blood-vessels gives rise to hemorrhage, not only into the trophoblast, but outside its area into the potential space between the advancing trophoblast and the tube wall. This blood coagulates around the villi of the trophoblast, compresses the small amniotic sac and eventually forms an almost solid mass, whose structure is essentially similar to that of a uterine carneous mole.

The great and sudden accession of bulk thus produced in the tube leads to distention and consequent pressure on nerve endings, and is the cause of the premonitory pains in the pelvis which are classical and which herald the final end of the condition. It is this pain, together with an unusual lump in the pelvis, with perhaps one missed menstrual period, which make up the clinical picture and provide grounds for operations in certain cases. We know very little about the fate of tubal moles which remain *in situ* and do not cause peritoneal hemorrhage. It is highly probable, however, not only that they do occur, but also that after a period of pelvic discomfort they are slowly absorbed, with complete restoration of the tube lumen. The more common fate of a tubal mole, however, is extrusion from the abdominal ostium, or hemorrhage into the peritoneum through the lumen of the tube and formation of a hematocele without actual extrusion of the gestation sac. In cases when the gestation sac is situated in the ampullary end of the tube, the gradual enlargement of necessity opens up the abdominal ostium. Sooner or later the gestation sac must protrude through the ostium, and when the greatest diameter is past the ostium the tube wall retracts by muscular action or elasticity, and the embryo and its coverings are extruded (tubal abortion). This means separation from its attachments and consequent hemorrhage. The amount of peritoneal hemorrhage

in these cases is not nearly so great as in tubal ruptures, and being more slowly poured out forms a localized hematocele around the abdominal ostium (peritubal hematocele). This is the condition so commonly found upon opening the abdomen in suspected cases. The denouement is not dramatic in all cases, as in tubal rupture, but may occur so gradually as to give very few symptoms. The condition then is only diagnosticated after several days or weeks when adhesions have formed, and the hematocele begins to cause pain by pressure and traction, accompanied, as a rule, by prolonged uterine bleeding. In other cases partial separation of the mole from its attachment causes hemorrhage which may at once find its way into the tube lumen, and so to the peritoneum, or may track along the muscle layers until it reaches the peritoneum. In this way again a peritubal hematocele may be formed if the blood issues from the abdominal ostium, or a paratubal hematocele if the blood tracks along and perforates the peritoneal coat. It is possible that an embryo may not be wholly separated from its attachments by these accidents, and as a result may be just sufficiently nourished to go on growing. In this case further hemorrhage may occur at a later date, or the embryo, by extending its area of attachment may even go on to an advanced period of pregnancy.—*Buffalo Medical Journal.*

The Pathogenesis of Eclampsia and its Relation with Normal Pregnancy, with Dropsy, and with the Kidney of Pregnancy. (Die Pathogenesis der Eklampsie, und ihre Beziehungen zur normalen Schwangerschaft, zum Hydrops und zer Schwangerschaftsniere.) A. Dienst, *Archiv. für Gynekologie,* last indexed volume.

In an extensive monograph, Dienst analyzes critically the origin of eclampsia. His investigations concerned themselves essentially with (a) The molecular concentration of the blood, (b) The white blood-cells of the blood, (c) The ratios between serum-albumin, serum-globulin, and fibrinogen.

In regard to the molecular concentration of the blood, he found that the freezing points of eclamptic blood and blood of normal pregnant women were practically the same. From this he infers that whatever substances are retained in the blood of eclamptics, *must be* of large molecular composition, *i.e.*, colloidal in nature. After studying the white blood-cells in numerous patients, he presents the *well-known* fact, that a *moderate* leukocytosis exists during pregnancy; often a *marked one*

during labor, and a *considerable* one in the early puerperium. He accentuates, moreover, the fact—but little recognized—that in eclampsia, a sharp rise in the total leukocytes, as well as in the polymorphonuclears, is to be expected. In some cases, the leukocytes have been as high as 45,000.

Dienst's studies on the ratios of the different albumins in normal pregnancy, and in eclampsia, were very thorough. The total "albumin content" of the blood in non-pregnant healthy women was found to be 6.66 or 8.11 per cent.; the total albumin content in healthy pregnant women 6.9 or 8.2 per cent.

The ratio between the serum-albumin and the serum-globulin, in healthy non-pregnant women, was 1.02 to 1.97 per cent. as against 1.48 to 1.54 per cent. in healthy pregnant women (no change practically). The amount of fibrinogen in the non-pregnant was 0.31 per cent., while in the pregnant it was 0.45 per cent. (slight increase). In four eclamptics examined, the total albumin per cent. of the blood-plasma was found to be *slightly lower*, viz., an average of 6.71 per cent., as against 7.64 per cent. (normal pregnant average). The loss was rather more in the serum-globulin than in the serum-albumin. The *fibrinogen* in three of the four eclamptics that lived, showed a *marked increase* over the normal-pregnancy average, viz., 0.53 per cent. In the case that died, the per cent. of fibrinogen was lessened.

This fibringon cannot come from the fetal blood, as the latter was found to contain less than the maternal. Dienst believes that it *must come* from the maternal surface of the placenta, and offers the probable conclusion that eclampsia is due to an *over-accumulation of fibrinogen and fibrin ferment in the blood.*

He believes that the increased metabolic requirements of pregnancy induce a hyperleukocytosis, with a resultant destruction of leukocytes, in excessively large numbers. This increased destruction of white cells liberates unusual amounts of fibrinogen and fibrin ferment.

Dienst considers that the placenta is the seat of greatest destruction of the leukocytes and it is in consequence in the retroplacental blood that the greatest percentage of fibrinogen is to be found. The fibrinogen and fibrin ferment are considered to have a pernicious effect upon the endothelial lining of the small blood-vessels throughout the body, but especially in the liver, kidneys, and brain. As soon as the body is unable to cope with this increase of fibrinogen and fibrin ferment, insuf-

ficiency takes place, particularly on the part of the liver and kidneys; a vicious circle is set up, and as a result, we find dropsy, albuminuria, eclampsia *with or without* convulsions, developing.

In the treatment of the condition, Dienst suggests a restriction in the salt-intake of the body, as well as in albuminous substance. He believes in the use of morphine. Finally, he advises the early rapid emptying of the uterus, both of child and placenta,—for the latter he believes to be a storehouse of fibrin ferment and should be delivered therefore at once after the birth of the child, before any additional supply may be thrown into the general system.—RALPH WALDO LOBENSTINE, in *Surgery, Gynecology and Obstetrics.*

Collargol Enemata in Septic Affections.

Curt Seidel, (Deutsche med. Wochenschrift, July 30, 1908,) says: The introduction of collargol into the system by the inunction of unguentum Credé develops a gradual effect and its employment is limited in cases of emaciation and in painful affections. Hence this method is indicated in mild to medium severe or localized and in chronic or subchronic infections. The intravenous injection of collargol, though the sovereign method in grave cases where a rapid and intensive effect is necessary, is often technically difficult. In such cases collargol is often advantageously administered per rectum as originally proposed by Loebl (Schlesinger's division of the Vienna Franz-Joseph Spital) in puerperal sepsis and endorsed by Witthauer in joint rheumatism.

Given by enema, collargol is, of course, less rapidly absorbed into the blood and tissue fluids than when injected intravenously; moreover, the entire quantity is rarely absorbed. Hence a correspondingly larger dose must be used per rectum.

Collargolum enemata have been given by Seidel in over 100 extremely severe cases, such as were formerly treated with collargol intravenously. He gives the case histories of eight typical ones. The treatment almost never fails, not even in very grave cases, if it is only pushed with the necessary vigor and persistence—a fact which Seidel desires to impress on those physicians who have spoken disparagingly of collargol after they saw no result from their timid and small doses. Collargol is, of course, no panacea; just as a rheumatism or a malaria can not be cured with a single dose of a salicylate or quinine, just so is it irrational to expect a sudden recovery from a sepsis or pyemia after one insufficient or delayed administration of collargol.

Seidel's cases showed that collargol enemata have a material, if not a decisive, influence on the favorable course of severe affections. They produced a rapid improvement in the general condition, return of sleep and appetite, and remission of fever, more or less quickly in accordance with the severity of the case. Self-deceptions are wholly excluded with one who has thoroughly studied collargol therapy.

Seidel gives the following directions for collargol enemata: (1) A cleansing clyster with warm soap suds. (2) Fifteen minutes after the rejection of the clyster and passage of the fecal residue, a careful irrigation with sodium chloride solution is made, to remove intestinal mucus. (3) Fifteen minutes thereafter an enema of 30 to 75 grains of collargol in two to four ounces of warm boiled water, once or twice daily. This is for severe cases; the dose in milder or chronic ones is 15 to 30 grains. (4) Upon the appearance of the effect, the dose is diminished, but the enemas should be continued for at least two weeks. In case of recrudescence, immediate resumption of the treatment, if the relapse is not due to abscess formation or other local process.

Rectal application of collargol, which leaves nothing to be desired in simplicity and convenience, is indicated not only in septic processes, but also in infectious diseases, and mixed infections. He enumerates rheumatism, pneumonia, typhoid fever, septic scarlatina, septic diphtheria, anthrax, leprosy, cerebro-spinal meningitis, dysentery, infectious gastro-intestinal catarrh (particularly in children), and other general local bacterial invasions such as angina, phlegmon, erythema nodosum, erysipelas, and septic nephritis.—*New York Medical Journal.*

Editorials

ONTARIO MEDICAL ASSOCIATION.

We desire again to remind our readers that the next meeting of the Ontario Medical Association will be held June 1-2-3 in the Medical Building of the University of Toronto. In connection therewith we offer our congratulations to the Committee on Business and Papers on their success in presenting the best programme that has ever been prepared for any medical meeting in Canada.

In support of this statement we shall call attention to some of its features. It fortunately happens that our friend Prof. Osler will be in America at that time, and has kindly promised to deliver the address in medicine. The address in surgery will be delivered by Dr. J. B. Deaver, the well-known surgeon of Philadelphia. He will deal with "acute septic peritonitis," a subject of special interest because of the extreme gravity of the condition, and also because of the great differences of opinion now existing as to the best methods of treatment. The indications are that the discussion following Dr. Deaver's address will be neither tame nor cold; in fact, we are told that it will be red hot, although we do not understand exactly what that means.

Dr. Emmett Holt, the well-known author and teacher of pediatrics in New York, will deliver an address on "Results of the Serum Treatment in Cerebo-spinal Meningitis." Dr. J. Alder, well-known as a teacher of medicine in New York, will deliver an address.

Dr. C. H. Vrooman, of Winnipeg, will read a paper on "The Use of Hyoscine and Morphine in Obstetrical Work." This is a very interesting subject much discussed at the present time, and Doctors Vrooman and Halpenny (also of Winnipeg) have been making a special study of it in a practical way for more than a year. We think the committee is fortunate in obtaining Dr. Vrooman's consent to giving the results of their investigations at this meeting.

Dr. Herman E. Hayd, of Buffalo, will read a paper on "Umbilical Hernia and its Operative Treatment with Special Attention to the Mayo Treatment."

Dr. F. W. Chapell, an eminent specialist from New York, will read a paper before the section on disease of the eye, ear, nose and throat.

Dr. A. R. Robinson, the well-known dermatologist, of New York, will deliver an address on "Tubercular Lesions of the Skin."

Dr. W. P. Manton, of Detroit, will read a paper on "The Ultimate End of Surgery with Special Reference to the Surgery of the Pelvic Organs in Women."

Dr. E. W. Cushing, of Cleveland, will deliver an address on "Copious Water Drinking in the Treatment of Typhoid Fever."

Dr. Ellice MacDonald, of New York, will read a paper on "Diagnosis of Genito-Urinary Diseases of Women." Dr. MacDonald was requested by the committee to speak on this subject because of the valuable work he has done in connection therewith during the last two or three years.

We have pleasure in stating that three of our friends from Montreal will read papers, namely, Doctors J. M. Elder, F. A. Lockhart, and Herbert M. Little.

We have much pleasure in adding on behalf of the committee that many physicians and surgeons in different parts of Ontario have kindly consented to read papers and take part in the various discussions.

The provisional programme has been prepared, and the secretary is now sending it to the profession.

HOSPITALS AND CHARITIES.

We have received the thirty-ninth Annual Report of the inspector, Dr. R. W. Bruce-Smith, upon the hospitals and charities of the Province of Ontario. The general remarks on hospitals, refuges and orphanages are very interesting. We

think it worth while in this connection to publish in full his remarks respecting the hospitals in the city of Toronto. He says: "Reference must again be made to the urgent need that exists in Toronto hospitals for better accommodation for the sick poor. Many of the public wards are so crowded that it is impossible to satisfactorily carry on the work, and conditions are tolerated that would not be permitted elsewhere. It is not fair to the other public hospitals of Ontario, which have been forced to maintain a proper standard of equipment in buildings in order to receive the annual government grant, that Toronto hospitals are permitted to display the indifference which seems manifest towards the need for improving the accommodations for the sick poor. Conditions as they are at present, and as they have been for some time, cannot be allowed to continue. There should be at the entrance to each public ward a card on the wall stating the number of cubic feet therein and the number of patients allowed in that ward. The number of cubic feet per patient should never be less than 1,500, with facilities provided for ventilation that will permit the air of the ward to be completely changed at least once each hour. The monthly return to the Department should show whether the capacity had been exceeded; and the Government grant would be allowed only for the number of public ward patients that there was authorized capacity for. I recommend that such a regulation as the above be authorized and put in force, for there is no reason whatever that the sick poor of Toronto should not be cared for in as sanitary surroundings as in the public hospitals in the other cities and towns of Ontario. Why should Toronto hospitals not afford as good accommodation for their public ward patients as is provided at London, Ottawa, Brockville, Sarnia, Lindsay, Stratford, and scores of other places in the province?"

We are not, in a way, very much surprised to note that our hospitals in Toronto are in some respects in a very unsatisfactory condition. We are, however, somewhat surprised to find that all other cities and towns in the province rank higher than Toronto in that regard. Wonderful improvements have been made in many hospitals of the province, and many beautiful

and clean little hospitals have been built in recent years in many of the small cities and towns. We learn from all quarters that these places are as a rule managed in an admirable way.

RESPONSIBILITY OF HOSPITALS.

We learn from the lay press that Mr. Justice Grantham gave a remarkable decision in the law courts, London, England, recently, which amounts to a declaration that, on the ground of public policy, a hospital cannot be sued for damages. An action was brought by Dr. W. H. Hillyer, who claimed damages against the governors of St. Bartholomew's Hospital. He asserted that while an operation was being performed on him for sciatica in the hospital, his left arm was allowed to hang down, and coming into contact with the heating apparatus of the operating table, was severely burned, and also that his other arm was badly bruised by someone pressing against it.

His counsel, in addressing the court, said :—"It will shock the public to know that by gross negligence on the part of a great nstitution like St. Bartholomew's Hospital this man is paralyzed. He will never be able to practise as a physician again." After considerable evidence had been given in support of Dr. Hillyer's claim, Mr. Justice Grantham stopped the case with the declaration, "I hold there is no case to give to the jury. It would be a policy fatal to give to the country, and the injury done would be untold, if I allowed this case to go to the jury." Judgment was then given against Dr. Hillyer with costs.

A correspondent, in commenting on this, says :—"It is nice for the hospitals, but very bad for the patients," and asks the following questions: Is a patient under an anæsthetic perfectly helpless against any kind of negligence or carelessness in a hospital? Can the officials legally cremate him alive, or only scorch him enough to injure him for life?

The *Medical Press and Circular*, in commenting on this case, says :—"With all due deference to the judicial view, we venture to think that there are certain responsibilities con-

nected with the discharge of public duties by hospital governors whether assumed in the case of charity or otherwise.

"The failure of treatment to effect relief or cure is a matter for which a hospital cannot be responsible, but we imagine that the mere reception of the patient implies that the governors are responsible for reasonable skill and care in the carrying out of all treatment that may be required."

THE "OLD BOYS" OF TORONTO GENERAL HOSPITAL.

The ex-House Physicians of the Toronto General Hospital held their annual meeting in Toronto April 12th. At the regular meeting of the association, held in the afternoon, Dr. Alexander Taylor, the president and first interne surgeon of the hospital, read a very interesting address, which we are glad to publish in this issue. Dr. Thomas S. Cullen, of Baltimore, also delivered an interesting address. At the banquet, which was held in the evening in the King Edward Hotel, the following were present :—Alex. Taylor, '69-70; E. Meek, '89-90; Geoffrey Boyd, '91-92; A. B. Wright, '03-04; Chas. A. Page, 1899-1900; J. H. Mullin, '97-98; D. A. L. Graham, '06-07; R. Nichol, '97-98; W. E. Gallie, '04-05; H. S. Hutchison, '01-02; W. S. Fawns, '05-06; H. Glendenning, '06-07; Herbert Wilson, '08-09; W. H. Lowry, '02-03; Adam A. Beatty, '96-97; S. H. Westman, '96-97; R. H. Robinson, '70-71; T. H. Middlebro, '92-93; F. G. Thompson, '88-89; Chas. M. Stewart, '98-99; N. P. Bradley, '98-99; J. N. E. Brown, '92-93; Thos. S. Cullen, '90-91; Chas. F. McGillivray, '90-91; Samuel Johnston, 1902-1903; Colin Campbell, 1899-1900; D. McGillivray, 1898-1899; G. H. McLaren, 1900-1901; C. H. Bird, '93-94; E. S. Ryerson, '01-02; G. E. Smith, '04-05; A. J. Mackenzie, '00-01; Chas. Hair, '04-05; R. J. MacMillan, '08-09; J. A. Kinnear, '07-08; W. B. Hendry, '04-06; C. B. Shuttleworth, '94-95; Charles Trow, '85-86; H. C. Parsons, '92-93; Arthur E. Ardagh, '88-89; J. Sheahan, '95-96; D. Anderson, '01-02; T. Alex. Davies, '05-06; H. B. Anderson, '92-93.

FIRE DRILL IN SCHOOLS.

We have recently learned that the fire drills in the Public Schools of Toronto are well conducted. The discipline existing among the scholars is very satisfactory. The trustees, in consequence, do not fear any such results as happened in the disastrous school fire in Cleveland, O., some months ago, when the lives of more than one hundred children were lost through the inadequacy of the fire drill. The inspectors found that in one of the schools there was a little crippled girl in a room, and when the alarm bell rang the first one at her side was a stalwart boy whose special duty it was to look after her. Behind the rest, who marched out in regular order, he came carrying the child in his arms. Arrangements are made for all such cases. When the pupil is so crippled as to be unable to walk, and is too large to be carried in the arms of a brother scholar, several of the larger boys form a basket with their arms for the purpose of carrying him out. It happened on the same day a tiny Jap attended the school for the first time. When the alarm bell rang he was surprised and confused, and the teacher at once took him under her protection and passed out with him after the others had formed into line.

THE GERMAN ROUND TABLE CLUB.

A few months ago there was organized a new club connected with the University of Toronto, which meets monthly in the Faculty Union. It is called the German Round Table, and has for its aim the meeting together in a social way of the professors and teachers of German of the various universities and also university graduates who have studied in Germany or Austria, or are interested particularly in the German language.

At the last meeting, held on the 17th of April, after an enjoyable dinner, Professor Reich, of Trinity University, delivered a magnificent address on the present relations between England and Germany from the standpoint of the German.

Following this there was a discussion on the subject, in which Prof. Fernow, Herr Pastor Müller, Prof. Vandersmissen, Prof. Needler and Herr Cohen of Berlin took part.

Physicians who desire to avail themselves of the opportunity of hearing German spoken as it is in Germany, and to participate in the work of the club, would do well to apply to Prof. Needler, the secretary of "The German Round Table," for membership.

WORK OF DR. WILFRED T. GRENFELL.

When Dr. Wilfred T. Grenfell visited Toronto two years ago our citizens admired the man for his modest, charming personality, and took much interest in his descriptions of the work he had done in Labrador and Newfoundland.

Dr. Grenfell again spent a few days in Toronto in the month of April, and told its citizens something more about his great work. The aim of the association which is supporting Dr. Grenfell is to establish a Seamen's and Fishermen's Institute, where sailors may have the conveniences of public-houses offered to them without going to ordinary saloons. He says: "As it is now, there is no place but a saloon where these men can wash, or sit down and rest when they come ashore."

The Institute will have a plunge bath, gymnasium, bowling, also social hall, library, reading room, temperance bar, and everything that will mean joyous hearts to those neglected people. It will cost about $100,000, and will be constructed of brick and native stone, with the most modern improvements.

INTERNATIONAL MEDICAL CONGRESS.

We learn from the secretary that the following Canadians are likely to attend the Congress at Budapest, from August 29th to September 4th :—Drs. W. H. B. Aikins, H. A. Bruce, A. H. Garratt, J. M. MacCallum, A. McPhedran, A. Primrose,

R. A. Reeve, and G. Sterling Ryerson, from Toronto. Drs. H. S. Birkett, A. F. Lachapelle, A. A. Marois, A. J. Richer, and F. J. Shepherd, from Montreal. Dr. Choquette, St. Hilaire de Bouville, Quebec. Drs. O. M. Jones, Victoria; S. T. Tunstall, Vancouver, and J. H. King, Cranbrook, B.C. Dr. J. D. Courtenay, Ottawa; Dr. J. H. Duncan, Chatham; Dr. H. Halpenny, Winnipeg; Dr. Ingersoll Olmsted, Hamilton. Among others who may attend but have not yet decided are :— Drs. R. A. Stevenson, A. H. Wright and I. H. Cameron, of Toronto, and J. D. Wilson and Drake, of London. Col.-Surgeon Ryerson will be the official representative of the medical service of the Canadian militia.

It is important that the list of Canadians who have definitely decided to attend the Congress should be completed as soon as possible. Others who decide to go are requested to inform Dr. A. McPhedran, the president, or Dr. W. H. B. Aikins, the secretary of the Canadian National Committee.

Re accommodation in Budapest, the following letter was received :—

Central Booking Office of the Royal Hungarian State Railways.

Budapest, 1 April, 1909.

In conformity with the arrangement made with the presidency of the Sixteenth International Medical Congress, we have been entrusted to find accommodation for the partakers of the above-mentioned congress, and this we perform in advance for the whole duration of the Congress by issuing "accommodation orders."

The period of validity for such accommodation orders is seven days with hotels and eight days with private dwelling houses, and it is to be understood that the day of arrival with the hotels is the 28th of August, but with private dwelling houses the 27th of August.

Should the arrival in Budapest take place after the 27th August (with hotels after the 28th of August), and the departure from Budapest before the 4th of September, no reimbursement will be made for the time the lodgings were not used.

At the same time we have the pleasure to inform you that we are able to dispose of chambers at the following prices :—

In Hotels.

Arrival on the 28th of August—Departure on the 4th of September.

Rent for a stay of 7 days.

Prices in Kronen.

Ser. A.—Single-bedded, K. 70-140; double-bedded, K. 84-210; three-bedded, K. 105-245.

Ser. B.—Single-bedded, K. 48-69; double-bedded, K. 64-83; three-bedded, K. 80-104.

Ser. C.—Single-bedded, K. 21-47; double-bedded, K. 36-63; three-bedded, K. 42-79.

In Private Dwelling-Houses.

Arrival on the 27th of August—Departure on the 4th of September.

Rent for a stay of 8 days.

Ser. D.—Single-bedded, K. 61-70; double-bedded, K. 76-100; three-bedded, K. 91-115.

Ser. E.—Single-bedded, K. 31-50; double-bedded, K. 46-75; three-bedded, K. 61-90.

Ser. F.—Single-bedded, K. 16-30; double-bedded, K. 30-45; three-bedded, K. 45-60.

Such chambers may be engaged in the following way:—The person who orders lodgings indicates himself in which series and at what price he desires a single-bedded, a double-bedded chamber, or one with three beds, and whether in an hotel or in a private house. It is left to the choice of him who engages the room to fix the price between the maximum and the minimum rent of the respective category. The amount corresponding with the price chosen is to be transmitted to us in advance. In return for it, and in conformity with the order received, we remit the sender an accommodation order for an appropriate lodgings.

To recompense our trouble and expense taken in the accommodation, the presidency of the Congress has stipulated a commission of kronen 8.50 per person; this commission is to be remitted to us at the same time with the rent, and receipt of it will be acknowledged separately, because the accommodation order acknowledges receipt only of the rent we have to pay for the respective lodgings without any deductions.

In case the renter should be prevented from coming and

taking possession of the lodgings—notice of which, however, has to reach us before the 20th of August—the rent paid in advance will be refunded against reception of the "accommodation order," however, with a deduction of kronen 10 a head; should such notice reach us after the 20th of August, kronen 20 will be deducted per person.

You will oblige us very much if, by taking into account the tables above, you would kindly fix upon the room suitable to your purpose, and kindly remit us the corresponding rent in addition to the commission, whereupon we shall immediately deliver you the necessary "accommodation order."

NOTES.

Memorial to Dr. Bull.

It is proposed to build and endow an Institute for Surgical Research in memory of the late Dr. Wm. T. Bull, of New York. The institution will be connected with the College of Physicians and Surgeons, Columbia University, where Dr. Bull received his degree in 1872, and where he was for many years professor of surgery. It is further stated that Mrs. Bull will erect a memorial hospital for the treatment of tuberculosis.

The third annual meeting of the Canadian Hospital Association was held in Toronto during the week ending April 17th, under the presidency of Dr. W. J. Dobie, Weston. Dr. Henry E. Webster, of the Royal Victoria Hospital, Montreal, was elected president, and Dr. J. N. E. Brown secretary for the association for the ensuing year.

The Regina, Sask., Medical Association was organized April 3rd, and the following are the elected officers:—President, Dr. John M. Shaw; Vice-President, Dr. H. M. Stevens; Secretary, Dr. Harry Morrell; and Treasurer, Dr. A. Rothwell.

Lord Lister completed his eighty-second year April 5th. *The British Medical Journal* announces that his "collected papers and addresses" will shortly be issued in two volumes by the Clarendon Press. The *Journal* also adds that the profession throughout the world will join in wishing increased length of days and happiness to the man who has been the means of saving more human lives than have been destroyed by all the conquerors that have been the scourge of mankind.

Personals.

Dr. Mackenzie King recently paid a visit to Pekin, China.

Dr. Bruce Riordan, after a visit to Texas, returned to Toronto April 12.

Dr. John Caven returned to Toronto after a visit to Florida April 15th.

Dr. Geo. McDonagh returned to Toronto April 15th, after a trip to South America.

Dr. Kenneth Campbell, of Bruce Mines, has been appointed assistant coroner for the District of Algoma.

Dr. S. T. White, of Shelbourne, has been made an associate coroner for the County of Dufferin.

Dr. W. F. Loricks, of Campbellford, is appointed associate coroner for the united Counties of Northumberland and Durham.

Dr. Margaret S. Wallace, Toronto, has been appointed Professor of Medicine in the College of Medicine for Women, North India.

Dr. Grenfell was entertained by the Dean and members of the Medical Faculty at a dinner on the evening of the 10th in the Faculty Union.

Dr. Ernest Jones has established himself at 407 Brunswick Avenue, Toronto, and informs the profession that he confines his practice exclusively to nervous diseases.

Dr. Thos. MacCrae, of Baltimore, visited Toronto April 15th, and proposed the toast to Professor Robert Ramsay Wright at the banquet given on that evening.

Dr. W. J. Kerfoot, of Bishop's Mills, has purchased the practice and property of Dr. G. S. Young, of Prescott. Dr. Young intends to remove to Toronto to practise.

Dr. Frederick Cleland, of New York, visited Toronto March 28th, and remained about one week. He will probably leave New York in September and commence practice in Toronto.

Prof. Ramsay Wright, professor of biology was entertained at a banquet in the Toronto Club, April 15th, in honor of his having completed his thirty-fifth year as a professor in the University of Toronto.

Dr. Howard, of Boston, and Dr. C. Holmes, of Cincinnati, two hospital experts engaged by the governors of the Toronto General Hospital, visited Toronto April 19th, and consulted with Messrs. Darling & Pearson respecting the plans of the new hospital.

Obituary.

PETER DAVID GOLDSMITH, M.D., L.R.C.P. (Lond.) M.R.C.S. (Eng.)

Dr. P. D. Goldsmith was a well-known medical practitioner for many years in the Bay of Quinte district. He received his medical education in "Rolph's School" and the degree of M.D. from Victoria University in 1868. After practising for a time in Campbellford, he went to England and engaged in post-graduate work. On his return to Canada he practised for a time in Peterborough, and then moved to Belleville, where he practised for a number of years. He retired from active practice about two years ago and removed to Toronto. Early in April he went to Belleville on a visit, and while there had an attack of faintness and died within a short time. Dr. Perry Goldsmith, of 84 Carlton Street, is his son.

Lieut.-Col. Chas. Clark, formerly member of the Ontario Legislature, and Speaker of the House from 1880-86, and Clerk of the House from 1891 until the time of his retirement, died at Elora, April 6th, aged 83. He was the father of Dr. Chas. K. Clark, the superintendent of Toronto Hospital for the Insane.

Mrs. Robert Hay, mother of Dr. S. M. Hay, Toronto, died at Los Angeles, Cal., April 1st.

Mrs. Hodgetts, wife of Dr. Chas. A. Hodgetts, of Toronto, died March 31st.

Book Reviews.

THE EXPLOITS OF A PHYSICIAN DETECTIVE. By Geo. F. Butler, M.D., Professor and head of the Department of Therapeutics, and Professor of Clinical Medicine, Chicago College of Medicine and Surgery. Chicago: Clinic Publishing Co., 1410 E. Ravenswood Park, 1909.

These stories hinge upon a physician's impossible hypnotic power, which always solves the problems presented in an incredibly short time. The book is a cheap imitation of Conan Doyle, with the brains left out.

NEW AND NON-OFFICIAL REMEDIES, 1909. Containing descriptions of the articles which have been accepted by the Council of Pharmacy and Chemistry of the American Medical Association prior to January 1, 1909. Chicago: Press of the A.M.A., 103 Dearborn Avenue, 1909.

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D., Professor of Therapeutics and Materia Medica, Jefferson Medical College, Philadelphia. Assisted by H. R. M. Landis, M.D., Visiting Physician to the Tuberculosis Department of Philadelphia Hospital, etc. Vol. 1, March, 1909. Lea & Febiger, Philadelphia and New York, 1909.

The contents of this volume are :—Surgery of the Head, Neck and Thorax, by Chas. H. Frazier; Infectious Diseases, including Acute Rheumatism, Influenza and Croupous Pneumonia, by R. B. Preble; Diseases of Children, by Floyd M. Crandall; Rhinology and Laryngology, by D. Braden Kyle; and Otology, by A. B. Duel.

No other work in the English language makes it so easy for a busy man to keep up to date. He knows the last word to be said on any subject under discussion. Furthermore, the views of many observers are given, but always in the fairest way, and best of all, there is ever that sense of due proportion which is usually so hard to find in works of this nature.

PROCEEDINGS OF THE ROYAL SOCIETY OF MEDICINE. Vol. 2, Nos. 4 and 5. February and March, 1909. Longmans, Green & Co., 39 Paternoster Row, London, New York, Calcutta, Bombay. 7s. 6d. net.

DISEASES OF THE EYE. By Stephen Mayou, F.R.C.S., late Hunterian Professor, Assistant Surgeon and Pathologist to the Central London Ophthalmic Hospital. With 119 original illustrations and eight colour plates. London : Henry Froude ; Oxford University Press ; Hodder & Stoughton, Warwick Square, E.C. Price $1.50.

This is a splendidly illustrated, well-written little volume of 330 pages for the use of the student and the general practitioner. One does not know of a better book to give a student as good an idea of diseases of the eye, while the practitioner will find in it all that is necessary for the study of an ordinary case. There is an appendix dealing briefly with the Calmette reaction and giving the visual tests required by the services. There is also a useful list of prescriptions at the end of the book.

Selections.

Tincture of Strophanthus and Strophanthin.

As a result of research upon strophanthus and its active principle, Hatcher and Bailey reach the following conclusions in the *Journal of the American Medical Association* of January 2, 1909 :—

The dosage and the proper mode of exhibiting strophanthus and strophanthin require clinical investigation. The action of strophanthin may be elicited promptly in suitable cases by injecting it subcutaneously. Three-tenths to half a milligramme of the crystallized strophanthin in sterile (boiled) salt solution, 1:4000, may be injected deeply into the gluteal muscle once in twenty-four hours without fear of abscess formation or other side actions.

The single adult dose of crystallized strophanthin by the mouth is about 5 milligrammes or less, the daily dose 30 milligrammes or less. The single adult dose of the official strophanthin by the mouth is probably about 10 milligrammes, and the daily adult dose by the mouth is probably about 60 milligrammes, but the latter dose should not be used until we have further clinical experience concerning the various factors governing its absorption.

The action of tincture of strophanthus by the mouth and the factors modifying its absorption require further clinical study. Uniformity of action can only be secured by uniform absorption, and this is influenced by the menstruum in which the drug is given and the condition of the alimentary canal at the time of administration.

It is quite possible that diet may influence the absorption of strophanthin in the human alimentary canal, so that man may at one time resemble the rodent and at another time the carnivorous animals (cat and dog) in susceptibility to strophanthin.—*Therapeutic Gazette.*

Bacterio-Therapy.

When Wright first enunciated his now obsolescent theory of opsonins it was the expressed hope in certain quarters that a final solution of the vexed problem of specific therapy had been reached. The theory is an attractive one, and on first sight appears to rest on a demonstrable physiological foundation. The existence of substances in the body whose function is modifica-

tion of an invading agent so as to render it susceptible to phagocytosis is an assumption which in the present state of our knowledge is wholly unwarranted. As an interpretation of observed phenomena it is a failure. Further immunization with the causative organism in an individual already afflicted with an infective disease process does not cause an increase in hypothetical opsonins, but exerts its influence altogether upon the disease foci. This is in obedience to a biologic law, formulated by the writer after extended observation, that injection of extraneous materials into an organism having a localized area of disequilibrium occasions reaction in the diseased and not in the normal areas.

Although bacterio-therapy as a curative procedure is a part of the practitioner's armamentarium, the method of governing the reactions by estimation of the opsonic indices is slowly losing ground. From the first, physicians as a body did not accord it a very enthusiastic reception. The method is complex and technical to a degree that wearies the man in general work. As a laboratory method no doubt it has a place, but for routine office work it is out of the question. A small number of enthusiasts still advocate opsonic estimations as a routine measure, but these, too, will eventually return to the more dependable clinical evidences of reaction as guide to the administration of bacterial vaccines.—H.S. in *The Lancet-Clinic.*

Incontinence of Urine in Children.

Dr. A. L. Mentzikovsky, of St. Petersburg, who has made a special study of the Incontinence of Urine in Children, has formed the opinion that the pathology of this morbid condition consists chiefly in the degree of sensitiveness, and of vascularity of the mucous membrane of the bladder and urethral canal. He distinguishes two types. In the one the mucous membrane of the urinary passages is extremely sensitive and hyperæmic. The least touch excites acute pain with intense reaction, so that it is impossible to introduce a catheter without a general anæsthetic. The second type is, on the contrary, characterized by diminished sensibility, and the interior of the bladder and urethra can be explored without causing any reaction on the part of the child. In the first case the smallest accumulation of urine in the bladder occasions a reflex contraction of the muscles and causes a continual incontinence of urine. In the second case the sensibility of the mucous membrane of the bladder is so diminished that the reflex contraction of the sphincter vesicæ

is not called forth except by special volitional control, and nocturnal incontinence results. This distinction of the two types enables the appropriate treatment to be applied. In the first type of cases the author resorts to daily local applications of cocaine solution with adrenalin, first to the urethral passage and *then to the bladder itself, combined with the internal administration* of bromide. In this way the sensitiveness is gradually diminished and the bladder becomes accustomed to retain the urine. For the second type of case the author advocates injections of 1 to 3 per cent. silver nitrate solution twice a week, in order to increase the vascularity and sensitiveness of the parts. He thinks that the mechanical irritation by instrumentation for the introduction of the solution contributes largely to the cure.—*The Hospital.*

Ethylmorphine Hydriodide, a new Dionin Preparation.

Since Wolffberg published his first paper on the lymphagogue action of dionin, ten years ago, B. Sylla has used the drug freely in affection of the anterior and posterior portion of the bulb. As a rule, the powder or the 10 per cent. solution is preferred. The two disadvantages are that the application is often painful and that the patients soon become accustomed to the drug. If, however, iodoform powder is used with or after the dionin, better results will be obtained and opacities will clear up in a remarkably short time. This is believed to be due to the iodine which is gradually given off from the iodoform. As dionin is chemically the hydrochloride of ethylmorphine, it was thought that if the corresponding hydriodide is employed there will be less pain and more rapid action. The new salt, ethylmorphine hydriodide, is less soluble than the hydrochloride, hence is preferably applied as powder. A pronounced swelling will rapidly set in with partial anesthesia, just as with dionin itself. When patients had been treated for a long time with dionin and had become accustomed to the drug, the hydriodide still gave good results. It may, therefore, be advisable to alternate the two in suitable cases. The scars resulting from the hydriodide are generally smaller and more delicate. Particularly good results were obtained in tears of the cornea with injury to the lens and in chronic trachoma with pannus of the cornea.—*Woch. f. Therap. u. Hyg. des Auges.*

Miscellaneous.

Treatment of Rheumatoid Arthritis.

The following is an epitome of an article by C. F. Bailey, of the Sussex County Hospital, appearing in the *British Medical Journal* of January 2nd, 1909. The author accepts the theory that the disease is primarily due to micro-organisms, or their toxins, but does not lose sight of the fact that certain local conditions have their place in the etiology, more especially as regards predisposition to, and aggravation of, the inflammatory lesion.

Part of the want of success we obtain from the administration of bactericidal drugs, is due to the minute quantities which necessarily circulate in the normally slow nutrient streams which supply the joint tissues. It is with the view of increasing this flow that Bailey recommends the following course of treatment. He condemns the use of the ordinary methods of applying heat locally, on account of the "moist air heat," which has been almost unavoidable up to the present, and the difficulties found in its regulation; the ordinary low candle-power lamps in use give out rays almost entirely yellow and yellow-orange, while "high candle-power" lamps supply rays from ultra-red to ultra-violet, and it is from this type, apparently, that the most satisfactory results are obtained. He recommends a single large lamp, with a thick carbon filament, having a luminosity of 500 candles, mounted in a reflecting funnel. With this a dry heat of 400 deg. F. can be obtained, endured by the patient, and its intensity easily regulated. The result consists in dilatation of the blood and lymphatic vessels, lowering of local arterial pressure, and increase in local metabolism; a rapid alleviation of pain also follows. The light is usually used for about twenty minutes, when treatment by "ionization" follows.

It is an accepted fact that when a constant current passes through living tissue from electrodes soaked in two per cent. solution of any salt, the basic radical travels into the tissue from the positive towards the negative electrode, whilst the acid radical travels in the opposite direction. It is found that the quantity of nascent radical travelling with a two milliampere per square centimeter current is quite appreciable; if the joint be already rendered hyperemic by local heat, the

amount entering will be considerably augmented, and the maximum effect of the drug obtained; 30 to 70 milliamperes are usually required to obtain the desired result. This cataphoresis is usually used immediately following the heat treatment; for instance, Bailey suggests that in applying this method to the wrists, both arms are immersed in two per cent. baths of lithium iodide if large joints are involved, four thicknesses of lint soaked in the desired solution are applied to the affected joint, and an "indifferent" pad of the same material, saturated with, say, sodium or ammonium chloride solution, is applied to another region of the body.

In addition, one must never omit general constitutional measures, and the usual administration of drugs *per oram* in the course of treatment.

The Use of Antiseptics in Gynecology, with Special Reference to Uterovaginal Catarrh. By M. LUTHER SPRIGGS, M.D., Joplin, Mo.

During recent years much has been said and written concerning the value of antiseptics, and the wonderful changes wrought by their use have been little short of marvelous.

A large percentage of the pelvic diseases occurring in the female are of bacterial origin, and the recognition of this fact and the application of the modern principles of alkaline antiseptics are responsible for the relief of many cases which were formerly a source of great anxiety to both patient and physician because of their intractability.

Another important field of usefulness for alkaline antiseptics which should not be overlooked in gynecologic practice, and which is second only in importance to the relief of already existing pathologic conditions, is in the prevention of disease, or, when such disease already exists, in limiting its action to the minimum. As an example many cases of uterovaginal catarrh, simple enough in themselves, will, if neglected or improperly treated, terminate in complications of a very serious nature.

There is not the slightest doubt but that many of the inflammatory diseases to which women are liable may be prevented by absolute cleanliness and the use more or less regularly of a suitable antiseptic.

We have at our disposal numerous agents possessing decided antiseptic properties, but, unfortunately, the usefulness of many of these is limited by other properties of an objectionable nature.