

THE SASKATCHEWAN MEDICAL JOURNAL

VOL. 2

OCTOBER, 1910

No. 10

Original Memoirs

THE COMPLETE PHYSICIAN*

By J. George Adami, M.D., F.R.S., McGill University, Montreal.

"To each, Athene and Apollo give some gift, and each is worthy in his place, but to this child they have given an honour beyond all honours; to cure while others kill."

It is right and fitting that some formality be associated with the entrance of the man into direct preparation of his life's work—that the novice in medicine should not simply signalize his entrance into medical life by a humdrum or utterly commonplace visit to the University Registrar and a commercial transaction over the counter, but that he should participate in a ceremony which, however simple in its form, is nevertheless in its essence an initiation. This evening your Professors and the Faculty of Medicine formally but none the less sincerely welcome you. This evening formally you enter upon your novitiate in medicine—to-day marks the beginning of your life-work as members, even if junior members, of that well wishing band of those who devote their lives to the care of the sick and the maimed, to the prevention of disease and the raising of the standard of health, efficiency and happiness in the community. And I should point out to you, not merely are you and your teachers involved in this ceremony. You, gentlemen of the Freshmen year, are privileged to be old enough, and yet young enough, to have been

*Being the opening address at the School of Medicine, University of Toronto, September 27, 1910.

brought up in that great classic of the nursery, Rudyard Kipling's Mowgli cycle. I am old enough, I may add, to have been privileged to read those Jungle Books time and time again to my own youngsters. Thus, if your early education has not been painfully neglected, you will remember all about the Council Rock and how the cubs were brought to the Pack meeting that the other wolves might identify them, after which inspection the cubs were free to run as they pleased, until such time as they had shown their ability to kill their first buck. In this last matter possibly the metaphor is a little strained, I might even say unfortunate. It depends wholly upon what era in the student career you take as representing the killing of the first buck. Well, gentlemen, this is a Pack meeting. To-night you are presented to the whole pack, from Akela, the great grey lone wolf who leads by his strength and cunning, through the badger-colored veterans who can handle a buck alone, to the young black three-year-olds, some of whom already think that they could; others, also, yet younger are gambolling around. And, of course, as in the Cycle, the good old bear of a Baloo is omnipresent, ready to teach the Law of the Jungle. "Good hunting, brothers!" whether it be but cub hunting in these days or later the real grim strenuous work of the world!

For myself, I still remember my inaugural lecture, or rather the occasion thereof. I think it is Osler who somewhere remarks that looking back on his professional life he finds that he recalls not one steady unfolding of episode out of episode but a series of vignettes—episodes separated from one another by blankness of the forgotten. I know it is the same with me. I was talking the other day with a young minx of fifteen and she volunteered the observation that certain places and events at the ages of four, six, seven and so on, survived unconnected in her memory, and she wondered whether they too would in time follow their fellows into oblivion. Wherefore, I suppose, we are all constituted alike; though, by-the-by, I recall that Osler gives the exception of a distinguished graduate of Toronto—a medical man who has made his mark in literature—who seems to show, by the elaborate analysis of his mental attitude at different periods, that he remembers every little event in his career. It

may, therefore, be that Torontonians as a body are differently constituted. But I remember vividly that inaugural lecture, just as I remember my first morning in the dissecting room and the colossal appetite I had for lunch after it. That stands out as one of the greatest appetites of my life. I wonder if you will have the same experience. And of my first year in medicine I recall very little else. I do not recall anything that was said by the lecturer on that occasion. It is indeed given to very few men in a generation to enunciate thoughts in words that remain engraved upon the minds of their hearers, and as a class medical men, even if they be college professors, do not shine as orators. Most of us are amply satisfied if we can talk clear common-sense without frills, save it may be for an occasional aside, or anecdote, to flick up the attention of our hearers. You must not expect too much of us, or of me. But I have a vivid mental picture of the chemical theatre of the school in which, because of its size, the lecture was held, with medallions of the great chemists on the walls, of the array of the staff, with the Principal in the chair; of the dense crowd of students on the benches; a vivid memory of my attitude of mind; the unaccustomedness of it all; the wonderment what friends I should find in that crowd of strange faces; the wonderment that the new life would lead to. And so I imagine it will be with you. You to-night are taking part in an event which will remain with you through life. Wherefore I would that my remarks, if they cannot be memorable, be at least attuned to the state of mind of you who to-night enter upon your medical career.

And here, Mr. Dean, and more particularly gentlemen of the final year, perchance I owe you an apology. There are two orders of inaugural lectures. The one order strives after that supreme sensation that may come to the mountain climber who, starting at early dawn deep down in the valley, still so folded in shadow and filled with clinging mist that even the immediate path is scarced to be traced, experiences a sudden rift in that mist and through the rift is vouchsafed a transient view of the topmost pinnacle he would attain unto, poised in the upper air, its cold pure snow flushed and glowing in the generous sunlight—a revelation that with invincible attraction calls him onwards and

upwards. It may be that as inaugural lecturer I am expected to play the part of the sun, to dispel the mist, in my erudition to afford to freshmen and faculty alike a glimpse of the topmost heights of medical science.

The sensation undoubtedly is supreme, but unfortunately the sun may not always be sufficiently strong to dispel the mist, or may at most reveal the clouds that cap the summit. And if it be vouchsafed, such a revelation avails more to the practised mountaineer than to the novice. For him the other order of address is the more serviceable, where the lecturer takes the part of the practised climber and advises about the path and its dangers—the pine tree's withered branch, the awful avalanche, and so on—and above all strives to enthuse into his hearers the spirit and ideals of a mountaineer. This is the course that I shall take to-night, and happily there is at hand a text—or rather a whole bible—whereon to base my remarks. Indeed I do not doubt but that from one end to the other of this continent the inaugural lectures of the medical schools are this year being based upon this one document. I refer, of course, to the recently published report of the Carnegie Foundation for the Advancement of Teaching upon "Medical Education in the United States and Canada." It is a work that is extraordinarily full of meat and so frank and fearless in its criticism of the various schools of medicine and their methods, or want of method, that action for libel has already been taken against its authors in more than one quarter and others promise to follow. It has stirred up the profession on this continent in diverse ways, but more particularly to realization of the ideals of medical training, of the possibilities, and of present defects, to an extent that no individual man, or association, or plan of campaign, has ever accomplished.

I am not going to inflict upon you a detailed study of this remarkable work, but, without implying that I accept all its decisions, I want to utilize its data and conclusions in such a way that I may give to you, undergraduates of Toronto, some idea of your opportunities, some idea of what you have before you to attain unto, some idea of the complete practitioner as we regard him in this year of grace.

You are born into an era not of medical renaissance—re-birth—but of medical new-birth. Are you going to make use of your opportunities? Is the school you have chosen going to give you the opportunity to seize the chances that offer? It is evident from the disclosures of the Carnegie Report that these are all-important questions. You have had a large choice afforded you: there are seven schools in Canada, and as judging from the past it is more than an even chance that after graduation you will practice in the United States, it may be added that there are one hundred and forty-eight schools that one or other of you might have selected south of the border. Think of it, one hundred and forty-eight schools! This excludes the post-graduate schools, but includes three for women only, seven for negroes only, thirty-two devoted to medical sectarianism (15 homeopathic, 8 electric, 1 physio medical and 8 osteopathic)—all I would emphasize in the United States. The number available for the ordinary medical student is still over one hundred.

Have you made a wise choice in this abundance of opportunities? We can, I may say, answer the question in the Scottish way by asking another question or series of questions and finding the answers to them.

What ideals, in the first place, should you have before you? What should be your estimate of the complete physician? What, therefore, should be the ideal course of training that you should place before yourselves? Let us think this out and then consider the means afforded to you for accomplishing these objects.

First and foremost as to the complete physician. He must be thoroughly trained in the practice of his profession. What does this mean? Not that when he graduates he is to be fully supplied with all the data concerning disease. That were impossible. The medical man is or should be learning new facts, new methods his whole life long; not five years, not ten years suffice to give him full knowledge. It does mean, however, that he shall be thoroughly equipped to know how to proceed in the making of a diagnosis and in affording rational treatment; that he shall, as I have said, be a thoroughly trained man. He must already have such close personal experience of the com-

moner ailments that he can recognize and treat them with sureness; he must be so equipped that approaching any case that presents itself he is able to utilize the appropriate modern methods of diagnosis, and, applying them, to come to a sound conclusion as to the nature of the disease, and from this be prepared to treat that disease rationally to the utmost possible degree. To do full justice to his patient, to possess for himself a quiet conscience, the practitioner must feel that he has accomplished all that is possible. I do not mean that he personally must be able to do everything for the patient, that he must combine all the specialties. But he must have that amount of knowledge which tells him either what he himself can do, or what may appropriately be done for the case by others rather than by himself.

What does this imply? It means that as regards ordinary ailments he shall already be thoroughly familiar with them. Lectures and books cannot afford that familiarity. He must have come into personal contact with them. This necessitates a long training in the hospital and the dispensary; in the dispensary that he may encounter abundant examples of minor ailments and more chronic ambulatory cases and learn thus to recognize their salient features; in the hospital, that studying day by day at the bedside individual examples of more acute disease, he may gain a knowledge of the evolution and course of disease processes.

Here I may point out is the weakest spot in American medical education. According to the Carnegie report there are not thirty schools in the United States and Canada that enjoy acceptable hospital facilities—nay, reading the report carefully, there are at the present moment not fifteen. Most schools, it is true, advertise an official connection between themselves and one or more hospitals and dispensaries, but on closer study it is evident that the connection is little more than on paper; either the wards are filled with pay patients who cannot be examined by the student, so that what is heralded as a hospital of three hundred beds is for student purposes but one of twenty or thirty—or by the rules of the hospital the free patient is free to elect whether to submit to examination by students or no; or while the hospital is open to the students the school staff has no status

as such in the hospital. Thus even Harvard, for example, has no initiative in filling staff positions at the Boston hospitals. Often the services rotate every three or four months, irrespective of the needs of the student. Too often while the material is abundant, as at the great Cook County hospital in Chicago, the student is not allowed within the wards, the most that is granted to him being a transient examination of patients wheeled into the clinical amphitheatre. No opportunity is afforded him to sit down quietly at the bedside and study the patient, to make a detailed examination, to follow the course of the disease, or the results of an operation. Under these conditions is it a wonder that, after graduation at these imperfect schools, American graduates crowd to Vienna and Berlin, to make use of the abundant clinical material there afforded and so complete their education? Is it a wonder that, thanks to their appalling ignorance of elementary clinical matters, they are a matter of contemptuous amusement and a proverb to our European colleagues? They cannot in Europe understand a system which at the same moment evolves some of the most brilliant workers in modern medicine, along with a multitude of egregious ignor-amuses. As a result the status of American medicine suffers. Men are skeptical as to the value of our work because the fruit is so unlike what their knowledge of the tree would lead them to expect.

Well, gentlemen, in this respect you may set yourselves at ease. Toronto—and, as in private duty bound, I must add, McGill—are among the fifteen or so institutions in which the hospital facilities pass muster. We have preserved the British tradition. There is here cordial co-operation between the school and the hospitals; you will have free access to the wards, and if in the past there have been too many pay patients in the wards here, unavailable to the students, by the time you reach your fourth and fifth years, the great new University hospital will be ready to receive you. I do, indeed, congratulate you on your choice of a school which will afford such noble opportunities.

But hospital and dispensary attendance of to-day is a very different matter from "walking the hospital," as known to previous generations. Our forbears depended for their knowl-

edge and diagnosis of disease upon their unaided senses, and undoubtedly, doing this, they trained certain of those senses, notably sight and touch, to a degree of acuteness that few in these degenerate days nearly approach. But, granting this, it must be acknowledged that their knowledge of disease was much more limited than what it is in your power to possess nowadays, and that their treatment was in the strictest sense empirical. The advances have been rapid and remarkable; in the field of surgery they approach the marvellous. In little more than a generation medicine has been elevated from an art to a science, and to practice it the individual has to have a training in science and acquire the scientific spirit. To use rationally the instruments of precision now afforded to him he must have a sound training in Physics; to utilize the information that the body fluids and discharges of the patient can yield him, to understand the action of the drugs he uses, and comprehend the normal and abnormal processes within the tissues, he must be so much of a Chemist that he is familiar not merely with the principles of chemical action but with the data of organic chemistry. Since the processes of disease are but the outcome of factors operative in health, either working in an excessive or a defective manner, to have any sane understanding of morbid states he must be well grounded in Physiology—the study of the functions of the body in health—while to give him a broad and sane grasp of the principles that govern living matter, a course in Biology is equally essential. It goes without saying that he must know Human Anatomy if he is to perform any operation, or have an adequate mental picture of the disturbances of the mechanisms of the body or of the individual viscera. Nor can he do his duty toward a patient suffering from one or other of the acute infectious diseases unless he has undergone a course in Bacteriology and thereby gained a knowledge of the technique of bacterial diagnosis and of the nature of bacterial vaccines and anti-toxic sera. And lastly, as the coping stone of this arch upon which is built the scientific study of disease, he must in the post-mortem room and in the laboratory study the actual effects of disease upon the body, so that he may be familiar with the disturbances that may be set up in the individual tissues, and

may, when he encounters his patient, have so vivid a mental picture of the association of disturbances likely to be present in any given form of disease, and indicated by the various symptoms and physical signs, that, as though provided with a mental fluoroscope, he sees that patient through and through and is able to picture to himself the effect that disturbance of the one viscus must have upon another and upon the system at large. For upon sound Pathology depends pre-eminently sound diagnosis, intelligent prognosis and rational treatment.

Think what all this means! If the prospective doctor is to embrace the opportunities afforded to him in the hospital it means that before entering upon the study of medicine proper, he must spend years of preparation, years studying various branches of natural science. There is at present great debate as to where these years should in the main be spent. I see that the Carnegie report only places in the first class of medical schools those, sixteen in number, which demand that before entering the four years' course in the medical school, the student shall have attended a college or university for two full years. Not making this demand, Toronto and McGill, while referred to repeatedly with approval, are considered as of a lower class. Nor does it seem to me that the fact that we demand an additional fifth year in medicine is fully appreciated. Here two questions may be asked, namely, "Is a college course and Arts degree essential for the complete physician?" and secondly, "Is the Carnegie Report justified in making the entrance requirements of the school the standard whereby to classify the medical schools of this continent?"

Now, gentlemen, let me confess that I find some difficulty in answering the first of these questions. As I shall point out later, knowledge of medical science is very far from being all that is required of the medical man and, for his development, it is of the highest degree important, not so much that we have culture and an acquaintance with "the humanities" in the narrower sense, but that at the formative and most susceptible period of his career he shall have mingled and become intimate with those having various interests in life. Than this there is nothing more broadening. It is the generous intercourse of man with man,

the learning to know and look up to and copy one's fellows for their innate worth apart from all sordid considerations, the mingling with and weighing all sorts and conditions of one's fellows—the education in humanity, rather than in the humanities—that constitutes the supreme value of an Arts course. He is a better man who has experienced this.

But, on the other hand, I cannot conscientiously urge that we demand of all our graduates eight years at the University—three in the Arts course, five in the medical school; or even seven years, with but two in the Arts course. For one thing, so prolonged a training leads a man to become stale—as we termed it at Cambridge. Intensive learning cannot be continued year after year without sapping the capacity to receive and perceive facts. Time and again I noted at Cambridge that men who had already won high distinction at Scotch universities in mathematics or classics and who had come to the English university to gain further academic distinction along the same lines and sweep the boards of prizes—academic hogs, if I may so term them—were beaten easily by younger men fresh from the English public schools. They had grown stale. And at McGill we have noted as a common occurrence that the frequent B.A.'s. among our students—of course, as in the foregoing instance, there are brilliant exceptions—do but poorly in their first two or three years under us. In part this must be attributed to staleness; in part, I am convinced, to the fact that the more bookish academic training, if too long continued, actually unfits a man for the dissecting room and the laboratory and the frame of mind necessary for scientific research—for using his eyes and brains and depending upon what his sense tells him rather than depending upon authority. As a rule in the final years these men get into their pace again and do excellently. Their brains are better trained organs and this eventually tells. But all the same I believe that they have wasted roughly a year of their student life; that they would have been equally capable and equally equipped with two years only in Arts. In short, I believe that the combined course such as is afforded in Toronto is educationally superior to what the Carnegie Report accepts as its ideal. But this, you will urge, is practically the standard commended by the

Carnegie Report. That also asks for two years in "college." Let me say that while I regard this modern American plan as better than nothing, it is in my opinion radically defective. It is a method merely of removing from the medical school the burden and the responsibilities of directing the preliminary scientific education of the medical student so as to afford time for adequate instruction in the other branches of the Medical Curriculum. It holds that Biology, Physics, Inorganic and Organic Chemistry are best given to the student before he enters the Medical School. Here I am prepared to join issue. Into the effects of the plan upon reducing the number of eventual medical graduates I will enter later, only saying here that I doubt if this be the soundest method of attaining that result. There comes in here the matter of economy of effort. Take, for instance, the subject of chemistry and let us admit, as will be admitted, that the student has already obtained the grammar of this subject at the high school. Which is more economical—which will afford the better education, that the student attend the academic course in this subject, courses devised for those intending to be teachers, metallurgists, commercial chemists, scientists of various orders, courses in which, from the natural delicacy of the Arts professor, the illustrations are drawn as a rule from every branch of chemical industry save the medical; or a course or courses forming an integral or graded portion of the medical curriculum, in which illustrations, equally valuable from the educational point of view, are afforded which have a direct bearing upon medical science, illustrations which the student can apply in his later years, which must come into and be known by him in his later life work?

I speak feelingly, for I cannot but acknowledge that I have suffered permanently from the harmful effects of such an academic course. It was a course given by one who in his day was accounted the foremost teacher of chemistry in England. Without doubt I learnt something from it. I must have. But also I learnt to dislike the subject. All that I remember to-day regarding it is the waste of hours over details and diagrams regarding the Vinegar method of making white lead or the White Lead method of making vinegar—I really forget which: it does not

matter—the various methods of making sulphuric acid, the properties of vanadium and other of the rarer metals. All these details which had to be learnt repelled me. I needed and longed for matter such as I obtained in the zoology course, run as it was by a man with a biological mind and not a systematist—matter which I could not but feel was golden grain that must germinate and bear fruit for my later studies.

The student has so much to do, so much to accomplish in the few years of his undergraduate course, that it is our duty not to burden him with unnecessary matter. I who say this do it with full memory that I worked steadily for ten years between registering as a medical student and obtaining my diploma to practise. You must not think that this lengthening of the course is an American movement; America is the last part of the civilized world to fall into line. This ten year course was mapped out for me in its essentials in 1877. But I am convinced it is better that special courses be afforded for the medical student in the preliminary scientific subjects rather than he should attend the routine academic courses in the same; in other words, that he should take up those subjects as a medical and not as an Arts' undergraduate, and that the medical faculty should at least have the supervision over the courses in these sciences, even if they be given by the Arts' professors and their staffs and not in the medical college itself. Hence, I am convinced that our five years' curriculum at Toronto and McGill—a curriculum which allows us to guide and control the teaching of the preliminary sciences, which allows us to afford this with the greatest benefit to the student and the greatest economy of his time and labor—I am convinced, I say, that, educationally speaking, this is superior to the Statesian ideal of academic teaching of most of these subjects during a two or three years' Arts course, with only four years spent in the medical school. So great, in short, is the economy, that though, as I have said, I prefer that the students should have two years in Arts, studying the humanities primarily and elementary science only as a secondary consideration, I nevertheless believe that we can turn out a thoroughly sound medical man even if he comes to us merely with a good high school education. Saying this I believe that the time is at hand when we

should demand the first year's academic course from all our students.

Here parenthetically may I interject a word and a warning to the student before me. It bears upon what I have just been saying. I refer to the common failing of students as a body, that of regarding each separate subject and course as a water-tight compartment, something that has to be got up by itself, that has to be crammed up for examination purposes, and when the examination has been passed: "Thank God that's over and done with; now for the next." This is largely human, largely a survival of the attitude of mind fostered by a cast iron curriculum in the Arts course, in which perhaps the student may be pardoned for not recognizing fully the bearing of certain political economy, rhetoric or other courses that he is required to take. To some extent, but not entirely, it is the fault of us as teachers, that we do not sufficiently emphasize the constant interdependence of the various branches of medical science. I know that it is not entirely our fault. Thus as one means of breaking down this feeling, I give a course in elementary bacteriology at the end of the first year, as a direct continuation of the course in biology. Nay more, to make the relationship felt I give that course in association with the professor of Botany. But notwithstanding, if in the examination I so frame a question that its answer demands reference to data and principles which have been treated by my colleagues in the biology lectures, I doubt if 10 per cent. of the examinees apply their biological knowledge and answer the question. Indeed, I hear rumors of grumbling that my conduct is not exactly sportsman-like. Of course they are only freshmen, but we want even freshmen to be something more than mere parrots. What on earth, or in the heavens, is the use of a man cramming his head with knowledge which is not to be applied?

All the same I think we teachers could do more to grade and dovetail our courses. It is impossible to do this by solemn inquisition of the whole Faculty. At McGill I have urged that in connection with each chair there be a consultative committee of four or five, composed of professors of related subjects—in connection with my own subject of Pathology, for example: the

Professors of Physiology, Histology, Medicine and Clinical Medicine, Surgery and Clinical Surgery—which committee should be called together by the holder of the chair once a year that he may receive suggestions how more effectually to make his teaching supplement and help the teaching in the allied subjects.

And now I come to the question asked several minutes ago and still unanswered, namely, are the authors of the Carnegie Report justified in classifying the medical schools of the continent primarily according to the entrance requirements? I have no hesitation in answering, certainly not. It is not the *entrance* but the *outcome* that should determine the status of the school. Thus a school may demand an Arts degree for entrance, but if it has not proper control of a hospital or hospitals, if its students have not free entrance to the wards, or if having that entrance the hospital is so full of pay patients that the number of patients available for ward-work and bedside instruction is lamentably inadequate; if, therefore, the students have to be taught by the "case method," by written reports and details of real or suppositious cases rather than by the study of the actual palpitating patient; if, I would add, a school permits its students to begin to specialize before the two, too brief four years' course is complete; then I say in all confidence, it may turn out learned men, but as practical, capable practitioners, ready to do their work in the world, its graduates are not to be put on the same plane with the graduates of a school which, while affording a thoroughly sound education in the preliminary scientific subjects, and controlling that education, affords in addition the fullest clinical opportunities: a school which has trained its students to study intimately and abundantly the living patient.

Let me be absolutely frank. I like the Harvard man. I enjoy him as a friend and cultured companion. Nay, speaking here, for myself, had I out of an indiscriminate dozen Harvard men and a dozen Toronto or McGill men to pick six with whom to live a year, it is quite possible that the majority of that half-dozen would turn out to be Harvard men. Had I again to appoint a thoroughly qualified teacher and investigator in one of

the ancillary medical subjects in Physiology, Pathology and so on—I would have little fear in selecting a Harvard man. But if I were taken ill in one of the flourishing country towns over the border and my choice lay between placing myself in the tender mercies of two men, the one a young Harvard graduate, the other a young McGill or Toronto graduate of approximately the same year, there is no doubt into whose hands I would deliver myself. I would choose the Canadian trained man every time. That after all is the crucial test. By their fruits shall ye know them: not by the sapling state.

Wherefore, gentlemen, I cordially congratulate you. If you have the heart to work, if you seek opportunities and ensue them, you have come to one of the four best schools on the American continent.

I have spoken more than once of the complete physician. Strangely enough the Carnegie Report passes over, so far as I can see, in absolute silence a most important phase of his equipment. It has been said, and I think truly said, that the ideal physician is the man who knows and makes it his duty to treat the patient, not to treat the disease. The Carnegie Report deals only with the education that trains the man how to treat the disease. One rises from reading the report with the impression that he is the most fully qualified practitioner who has the fullest knowledge of the data of disease; the best training to treat each case as a subject of scientific research. The ideal hospital, we are told, for teaching purposes is that in which the medical and surgical departments are directed and controlled by University Professors without private practice, who devote their whole time to teaching and research. Such a hospital, I freely grant, will turn out the greatest mass of valuable papers and monographs upon disease. Will it turn out the best medical men? I know that as a Professor of the Science of Medicine you will expect me to take the view expressed in the report. But while I am a Professor of Pathology, and while my home was not that of a medical man, I have in my veins the blood of five successive generations of country doctors; and I feel it in my bones that the view is mistaken, or at least must be received in a modified form. It is inevitable in a hospital so conducted that the staff

from the heads of the departments downward regard the patients not as human beings to be cured but as cases to be investigated. The inevitable tendency must be that the students trained in such a hospital go out into the world with the conception that their duty is to treat the disease. Now I say straight out that this training does not make the complete physician. It makes the relative failure.

Let me read you a parable from my own experience. When I passed from Cambridge to the hospital, I became acquainted with two men. The one had already for two years been house physician. He had passed through a distinguished course in Arts, had carried everything before him in the medical school, had obtained, if my memory does not fail me, the gold medal in medicine at the London University—which in many respects may be regarded as the Blue Ribbon of the English medical student. But he was poor and had to make his own way; could not afford to hold on longer connection with the hospital or to announce himself as a consultant and wait for others to send him patients. At the end of this year, therefore, he mounted his brass plate in one of the artisan suburbs of the great city, in the hopes that even if individual cases did not afford high fees, the teeming population would afford abundant work and opportunities for practice. I may add that his morals were irreproachable; he was of the "unco' guid," a leader in the prayer meeting movement. Now there was in the final year another man, a very different character. He had entered the school at the same time as the former. That he had ability there was no question. The way in which he kept the students' common room lively was in itself evidence of that. He was not, however, what might be termed a model student. The fact that he had taken three more years to get his license rather enforced this conclusion. In fact, although somehow one could not help liking him, he was more than a little bit disreputable. We may put it that he enjoyed the society of his fellows more than that of his books. One heard of him attending race meetings, one heard of his exploits in sundry bar-rooms, one saw him very cheerful and distinctly prominent at the annual dinner. If you paid one of your rare visits to the theatre you come across him there so much at his ease, hail

fellow well met with every one, that it looked as though he had perpetual entry. And when supplies failing, he at last found it necessary to scrape through, his record did not recommend him for a hospital appointment; it did not recommend him for a partnership or establishment in any first-class neighborhood, and as a coincidence he lighted upon the same second-class suburb as the first, and set up his plate at the opposite side of the road.

Here is the point: By the end of the year the first of the two was still going on foot. I was informed that scarce a baker's dozen of patients had called him in. The second was already doing so well that he could hire a trap. By the end of the second year he had invested in a dog-cart of his own; at the same period scarce one of the baker's dozen of patients had called our first friend in again; they had not even recommended him to their acquaintances; the prospect was so hopeless that he had taken down his plate and was leaving the neighborhood. I hear of him now, after years of struggle, as a consultant of moderate reputation, the only position he is qualified to fill. Even here his lack of humor prevents him from being a full success. He treats the patients he sees for a brief quarter of an hour as cases, not as living and frail human beings; he does not create a bond of human sympathy between himself and the practitioner who calls in his aid. The practitioner selects him in the hope that his extensive knowledge, his familiarity with recent literature, may be of use in suggesting some other method of treatment. The ideal consultant, you will find, is on good terms with his patient in two minutes, in five he has become such an old friend that the patient is exposing freely all his or her foibles and anxieties, in fifteen he has so thorough a grasp of the character and disposition of the patient that he can proceed to treat him or her over and above his or her disease. That, gentlemen, is what you have to strive after. I do not suggest to you for a moment you take my second acquaintance as your example, but in citing his case I assuredly want to impress upon you that the sympathetic study of your fellow-men and fellow-women, the capacity to enter into their lives, to see the world from their standpoint, this is the primary desideratum. He had acquired

this, and to it was due his limited but nevertheless very real success as a second-class practitioner. You can do the same without frequenting race-tracks and bar-rooms, without cutting lectures and hospital work. There is abundant humanity to profit from, even in the Y.M.C.A. The ancient philosopher laid down as the rule for a right existence, "Know thyself." You will remember Pallas Athene's proffered gift to Paris in "Oenone"—"Self reverence, self knowledge, self control," verily a noble endowment, and happy the man possessed thereof, for these lead surely to sovereign power. Nevertheless it is not sovereign power that the medical man places foremost. The rule for the complete physician is, I would maintain, "Forget thyself, know thy fellow." After all it is the old, old lesson that I have to preach to you. Though you know all the 'ologies and practice all the modern methods of diagnosis and treatment, though you know Latin, German, French, Italian, and "speak with tongues of men and of angels and have not charity"—do not let your hearts go out to your fellows—you are become "as sounding brass and as a tinkling cymbal."

It has been the main glory, the main strength of British medical education that it has recognized this; the main weakness of German medicine that it has too largely neglected it. Do not think from this that I esteem lightly the university hospital as a centre for medical research. I doubt if any one here more fully appreciates its importance in this relationship than I do. By all means, I would say, appoint a paid Professor of Medicine and a paid Professor of Surgery, to devote their days to teaching and research; but let them be each *primus inter pares*, giving them the deciding voice in matters of teaching within the hospital, but by no means give them control of all the wards. On the contrary, give them direction purely of a ward or wards, that may be devoted to the study of particular diseases and conditions, on the study of which they for the time being are concentrating their energies; give them the right to all cases of one or other order that present themselves at the hospitals. Many patients are only too glad to think that they are being made the object of intensive study. My old Cambridge friend, Dr. Strangeways, has proved this to the hilt. At present he and his

colleagues in the hospital he has established are studying Rheumatoid Arthritis and, knowing this, patients present themselves for admission from all over England. As regards the main mass of the beds, place these in the hands of certain leading physicians and surgeons of the city who at the same time through their work and power of teaching are recognized members of the Medical Faculty. The very fact that these men have gained leading positions is proof positive that they possess the supreme gift of sympathy with and the understanding of the patient. It is from these men as they pass from case to case and from bed to bed that the student will learn the invaluable lesson of the approach and study of the individual. I would even go so far as to say, make a point of appointing to the staff the leading family physician of the city as distinct from the consultant or specialist. He may not be able to lecture "worth anything." Do not expect him to. But the students who accompany him round the wards are likely to obtain lessons of greater value from him than from any other single member of the staff.

As already stated, it is for its value in this study of humanity that I particularly esteem the years spent in the Arts faculty. Similarly for its formative value I entreat you, gentlemen of the freshmen year, to enter heartily into the life of your year of the faculty. Work heartily, work thoroughly, but do not be book-worms and smugs. Mingle freely with your fellows, study them and get to know them—yea, regard it as a treasure of price if you have the fortune to gain the entree into the homes and family life of the citizens of this good city.

Lastly, although I believe that the new fifth year, spent as it will be largely in the hospital, will be magnificent training, I would urge every one of you to strive by every means to spend one or two years as a resident in some hospital, before embarking in general practice. You may ill be able to afford the expense, and it may seem as though you are casting your bread upon the waters. I could only assure you that the loaves will be returned to you a hundred fold in the years that are to come.

An education such as you receive here in Toronto, the rational and necessary training of a capable physician, already let me impress upon you, costs double as much as either you

or your parents pay for it. It is to the interest of the State that you should have the best possible education. But the result of the enormous increase in the cost of a modern medical education is that the proprietary medical school which in the past flourished in Canada, as it has done in the States to an even greater extent, is doomed. In competition with the schools connected with reputable universities it cannot afford the necessary expenditure without a heavy deficit. Within the last year no less than twelve of these have disappeared. The unglorified revelations of the Carnegie Report must result in the disappearance of all of them, and with them will go that manufacture of the crude unfinished article, that has been the discredit of American Medicine, the article poured out in such quantities that compared with European, and it may be added, with living standards, this continent possesses at least four times as many medical men as are necessary. There is no need today—there is no place today—for the poor untrained student. The poor trained student is a very different matter. Living in Montreal is expensive, more expensive than it is in most cities of this continent. Nevertheless a recent prizeman under me, one of the first three men in the final year results, was a qualified mason who during his course put in one of the summers as a bricklayer in order to place him in funds. He is the only man who in his papers has given me the derivation of all terms, distinguishing between origin from classical and New Testament Greek. I looked up the words and found him correct in every case. While saying this I cannot but feel that on this continent we are sadly deficient in that system of government and other scholarships which in the old country help the bright but poor student from the elementary to the high school, from the high school to the university, even to what we are accustomed to regard, mistakenly, as those most exclusive and expensive institutions, Oxford and Cambridge.

Admittedly the increasing length and the increasing cost of the Medical course penalizes the poor student. The establishment of scholarships would remove this defect in what from every other consideration is a laudable as it is a necessary advance.

But, once graduated, with the reduction of the output the well trained man need not fear as to his future. Looked purely from the commercial aspect, gentlemen, you can well afford the extra time necessary to make you sound practitioners.

It is to the interest of our universities, and for their reputations, that a thoroughly trained product be turned out, that quality not quantity be the goal. But unaided they cannot bring about the elevation of the medical profession. They need the support of public opinion and of the State. They must have, I would particularly add, the support of the provincial licensing bodies. What is the use of the University doing its best if the examination afforded by the provincial college of Physicians and Surgeons is of such a nature that it permits improperly qualified men to creep and intrude and climb into the fold? From what I have seen I am wholly at one with the contention of the Carnegie Report, that the method of examination followed by the State and provincial licensing bodies is imperfect. It must be so when we find that some of the notoriously inefficient schools of this continent—schools without proper laboratory equipment, without clinical facilities—pass as large a proportion of their graduates as do the reputable schools. The examination being, too often, purely written and oral upon set subjects, the student has only to obtain the questions set for the last three or four years to find out what is expected of him and floor his examiners. It is merely a matter of pernicious cram. Your trained teacher can distinguish between genuine knowledge and parrot-like statements of undigested facts. And so long as the professional teacher is regarded as anathema by the provincial board for so long must the examinations lay themselves open to criticism. I do not ask that the University be given control; far from it; but when it is the object of both University and Provincial Board or college to give their "exeat" only to fully qualified men let the general profession of the province and the universities be united in this matter of examination. Particularly when, as here in Ontario, both University and Provincial Board are State Institutions. And, I would add, let competent practitioners make the examinations a genuine test. Make the examination practical. Let competent practitioners test the candidate

at the bedside. I know the difficulty in carrying out this recommendation. It means a great increase in the length, and in the expense, of the examination, and this extra expense ought to be borne by the candidate, who nevertheless at this particular period of his career is least able to bear it. I do not see, however, why it is not possible to place the candidate under bond, and require of him payment in instalments over, say, five years.

I could worry my text to much greater length but must by now have stretched your patience to breaking point. If I have criticized the Carnegie Report I ask you not to go away thinking that I depreciate it. On the contrary. No one interested in the future of medical education on the continent but must welcome it and its fearless review of defects, even if it itself is not without defects. A strong progressive school has nothing to fear, everything to gain from it. The loud squealing of the institutions whose nakedness, poverty and false pretences are exposed to the light is only natural. All I have to point out is that the Report does not cover the whole field; that we can go farther than the Report. Sound training in medical science is an essential but you, gentlemen, if you want to develop into the complete physician you must add to his knowledge of, the sympathy for, the love of your fellow-men.

LABORATORY METHODS FOR THE GENERAL PRACTITIONER

SIXTH PAPER

The Gonococcus.—Like every other manipulation in the laboratory, the staining of the gonococcus for microscopic examination, though not complicated, must be carried out with the greatest care and attention to detail. Every bit of work done in the laboratory is more or less delicate, and the demonstration of the gonococcus is no exception to this rule. The finding of gonococci in pus from a urethritis is positive proof of a specific gonococcic infection.

Cases of simple or catarrhal urethritis do exist, but rare, and no matter how typical the clinical signs exhibit, one is not justified in making a positive diagnosis, until after a complete examination shows conclusively the presence of gonococcus in the pus or urine.

Before proceeding with the technique, it may be stated that on account of other bacteria becoming prominent in the field with gonococci, simple staining of the smear should not be depended upon. Another point is, that the practice of spreading the small drop of pus between the cover-glasses and drawing them apart is objectionable, as it disarranges the elements of the cells.

First Method, Simple Staining.—The smear is prepared by placing a small quantity of the urethral pus on a cover-glass and spreading it thinly with the platinum wire loop; the specimen then is dried in air, then passed three times through a flame to fix it.

To Stain—The gonococcus stains readily with the aniline dyes, of which methylene blue is the best adopted for this simple process.

ERRATA

Formula for Paltauf's Solution.

Anilin oil	3 parts
Absolute alcohol	7 parts
Distilled water	90 parts

Shake for two minutes. Filter through moistened paper until filtrate is clear. Add two grammes of Grubler's powdered gentian violet. Set aside for twenty-four hours. Pipette supernatant fluid as required.

Logul's Solution.

Iodine	1 part
Potassium Iodidi	2 parts
Distilled water	300 parts

This is applied for precisely two minutes.

The specimen is now stained by adding to it a few drops of Loeffler's Alkaline Methylene Blue (see formula given before), allow this to stain for three minutes without the addition of heat. The excess of stain is now removed by flowing water from the cover-glass and dried. A cover-slip with a drop of Canada balsam in the centre is prepared and the specimen is everted onto it. The specimen is now ready for the microscopic examination.

The gonococcus will be found to stain a deep blue or black, while the pus-cells and the epithelial cells are less intensely stained (see plate). Other bacteria, such as the staphylococcus and the streptococcus, when present, are also stained, but the staphylococcus is seldom arranged within the bodies of the pus-cells, and is, therefore, readily differentiated from the gonococcus. By this stain it is not possible to distinguish the gonococcus from other cocci by its peculiar diplococcus (biscuit) formation.

Second Method—Gram Reaction.—Gonococci do not take the "Gram." This means that if these cocci are stained first with an anilin dye and with Lugol's reagent (see below), the resultant stain may be washed from them, from the cells, from many other bacteria, but *not from staphylococci* and other Gram-positive cocci which, under the microscope, otherwise resemble true gonococci.

Formula Paltauf's Solution.

Anilin oil	3 parts.
Absolute alcohol.....	7 parts.
Distilled water	90 parts.
 Lugol's Iodine	 1 part.
Sol'n. Potassium	2 parts.
Distilled water	300 parts.

This is applied for precisely two minutes.

Shake for two minutes. Filter through moistened paper until filtrate is clear. Add two grammes of Glubler's powdered gentian violet. Set aside for twenty-four hours. Pipette supernatant fluid as required.

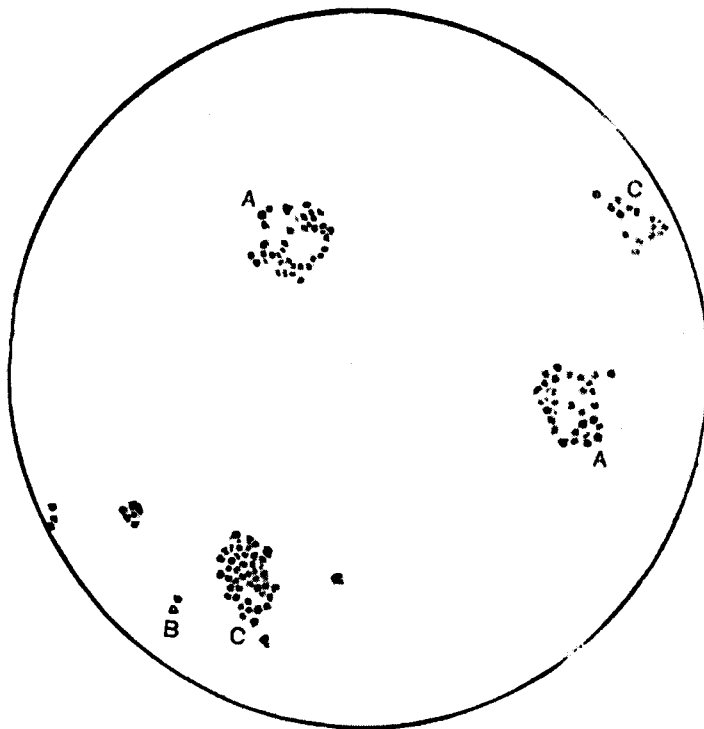


PLATE II.

Gonococcus in Urethral Pus.

The gonococci is stained with methylene blue.

At *A* the cocci are *inside* the leukocytes, showing phagocytosis, or that the bacteria have been prepared for ingestion by the opsonins.

B shows the cocci *outside* the leukocytes not prepared for ingestion by the opsonins.

C shows the cocci having probably been ingested by the white blood-corpuses, but the toxins of the gonococci have destroyed the leukocytes.

Courtesy of the H. K. Mulford Co.

Hence, when the Gram stain is applied, a thorough washing with alcohol leaves the cells and gonococci colorless, while the pseudogonococci stand out in bold relief, stained darkly by the combined color of the aniline dye and the Gram stain.

In order to make the effect of the Gram stain more apparent, it is customary to restain the cells and gonococci with a contrasting color, in order that the true gonococci may be visible for direct comparison with the false.

Preparation of the Specimen.—The recognition of the gonococcus depends upon the proper preparation of the specimen—the proper performance of the Gram test—and while the test is not complicated, it is delicate, and, like so many other laboratory methods that appear entirely simple when one is familiar with them, it does not succeed at the hands of the beginner. Hence every practitioner is by no means competent to perform and interpret the Gram stain; but anyone who can smear a slide and focus a microscope may become competent by practice.

The Smear.—A very small drop of the pus to be examined is placed upon a clean glass slide. Upon this another slide is dropped, the two pressed together and slid apart. This leaves each covered with a thin film of pus (the thinner the better). Each is then dried by evaporation at a gentle heat and fixed by rapidly passing it three or four times through the flame of a spirit lamp or a Bunsen burner.

The First Stain.—One of the films is now covered with Paltauf's solution. This is left on for three minutes, the excess washed off with water (no water must be used if the Gram stain is to be employed), the glass dried in the flame and examined with the oil immersion lens. If no bacteria with the morphological characteristics of gonococci are seen after a careful examination, it is a waste of time to employ the Gram. But if what appear to be true gonococci are found, the Gram test is applied to the other cover-glass. The stain is applied for three minutes, as above described, but this time the excess of solution must be shaken from the specimen. *No water or alcohol* may be applied

at this juncture. The slide is immediately blotted and flooded with Lugol's solution.

The "Lugol." The formula has been given above and it is applied for precisely two minutes.

The Alcohol.—As soon as the slide is removed from the Lugol solution it should be washed with absolute alcohol for precisely thirty seconds.

The Contrast Stain.—After using various more or less satisfactory counter-stains, the following has given the best satisfaction:

Carbolic acid 2 parts
Saturated aqueous solution of Bismarck brown...98 parts

If the decolorized smear is covered with this solution for three or five minutes and then rinsed in water, it acquires a light brown tint, and under the microscope the cells and gonococci appear yellowish and in marked contrast to the deep purple, almost black pseudogonococci. A more prolonged staining with the brown gives the gonococci a deeper color, which is not so readily distinguished from that of the pseudogonococci.

Such is the technique of staining the gonococcus, which may be employed by anyone having an elementary familiarity with medical microscopy, and which may be depended upon to furnish accurate results, if followed accurately. The essentials likely to be overlooked are the employment of *Grubler's* violet, *precise* staining, by the watch, employment of *absolute* alcohol, and exclusion of *all* water until after counter-staining.

(*Note*—The above technique is taken from the latest work by E. L. Keyes Jr.)

THE SASKATCHEWAN MEDICAL JOURNAL

HARRY MORELL, M.D., C.M., *Chairman of Publication Committee*

All communications relating to this publication should be sent to the
Saskatchewan Medical Journal, Regina, Saskatchewan, Canada.

Box 1106.

Editorial Notes

Through the efforts of our Commissioner of Health, Dr. Seymour, the proceeds from the sale of the Christmas Red Cross Anti-Tuberculosis Seals or Stamps is to be deflected to our own Anti-Tuberculosis Institution in Saskatchewan.

Charity Begins at Home

The following taken from the Regina Leader explains this worthy project as follows: "For the past two years at Christmas time the people of Saskatchewan through The Leader and other channels have contributed a substantial sum to the Muskoka Free Hospital for Consumptives by the purchase of the Red Cross Christmas Stamp issued for the benefit of that most deserving institution.

"This year, however, the opportunity will be afforded the people of this province of assisting in a similar manner an institution of their own, having for its object the carrying out of a work more or less identical with that being performed by the Muskoka Hospital.

"As is announced elsewhere in today's Leader, the Saskatchewan Anti-Tuberculosis League, which has been in progress of organization for several months past under the personal direction of the Provincial Commissioner of Health, Dr. M. M. Seymour, has decided to issue a Christmas Red Cross stamp for sale throughout the province, the proceeds of which will go towards

the building of the sanatorium which it is intended to establish in Saskatchewan for the benefit of tubercular patients.

"The claims of such an institution upon the generosity of the public hardly call even for the barest mention. They must be obvious to all, and we do not doubt that, generous as was the response in connection with the Muskoka Christmas stamp, the stamp which is shortly to be issued to assist our own new provincial institution will prove even more popular and be in consequence more widely used by those who during the Christmas season desire to show their interest in and their solicitude for their fellow men who need such help as the proposed sanatorium will offer.

"It is expected that the stamps will be available for distribution at an early date and in the meantime those who are willing to contribute towards a deserving object are asked to bear the matter in mind and either place their orders with The Leader in advance or watch for further announcements which will shortly be made."

Anything pertaining to this Act is extremely interesting to the profession at large, and to show that the act is being ~~The~~ Roddick attended to in the Dominion House Dr. Black, of Bill Hants, introduced this bill again. He explained that it contains at least one provision of more than ordinary importance, viz., the placing in the Federal laws of an enactment giving to a medical practitioner qualified to practice in any Canadian province the right to practice in any other province.

The Month

In the last issue of this publication, it was stated that we would take action and see if it were not possible to have an accounting of the funds in the hands of the Council of the College of Physicians and Surgeons of Saskatchewan as provided by section 72, chapter 28.

The following is the correspondence:

November 14, 1910.

To His Honor the Lieutenant-Governor,
Province of Saskatchewan.

Your Honor,—

By to-day's mail there is transmitted to you a copy of the *Saskatchewan Medical Journal*, in which is marked certain matters respecting the medical profession in this province.

The Medical Profession Act, chapter 28, section 72, states that certain information may be obtained through your Honour.

The information asked for is within reason and has been requested from time to time, but it has not as yet been attended to.

This information is asked for not for my own edification, but is requested for for a considerable number of practitioners within the province.

I have the honour to be, Sir,

Respectfully,

HARRY MORELL.

Government House,

Regina, November 16, 1910.

Sir,—I have the honour to acknowledge the receipt of a copy of the *Saskatchewan Medical Journal* in which is marked certain matters respecting the medical profession in the province, for which I thank you.

I have the honour to be, Sir,

Your obedient servant,

(Signed)

G. W. BROWN,

Harry Morell, Esq., M.D.,
Regina.

Lieutenant-Governor.

News Items

Dr. D. Low, of Regina, has recently visited North Battleford for the purpose of inspecting a suitable site for the Provincial Asylum, where the Government have decided to place this institution.

A dispatch from Edmonton states that according to the health officer fourteen cases of infantile paralysis have been reported in the Edmonton district during the past year, eight of these in the city. Two city cases have proved fatal, the others recovered.

An interesting legal battle has been in progress before the Supreme Court of Saskatchewan between Dr. R. A. Sandwith, of Nokomis, the plaintiff, and Dr. C. Culbert, of the same place, the defendant. The plaintiff holds that certain statements made by the defendant in a newspaper are untrue and malicious and not matters of public interest, and further that the words used are not fair comment, but that on the contrary they are not warranted by the facts. As yet no decision has been arrived at.

At a recent meeting of the medical staff of the Regina General Hospital the following were elected to confer with the Hospital Commissioner on equipment for the new hospital—President, Dr. H. M. Stevens; Secretary, Dr. Harry Morell.

Personals

Dr. and Mrs. Washington, Wolseley, have returned from their visit to the Pacific Coast.

We sympathize with Dr. W. J. McKay, of Saskatoon, who has been called upon to meet a loss in the death of his wife, who met with her death in a terrible manner, being severely burned on the 2nd of October. Her death occurred next day, after intense suffering.

William Caniff, M.D., M.R.C.S., famous as a historian and physician, passed away at Belleville, Ont., on 17th October, of senile decay at the age of eighty years. The deceased had been living in Belleville the last few years in seclusion, owing to ill health. He will be remembered as having been medical health officer of Toronto many years ago, and as the author of "The Settlement of Upper Canada."

During the last few years he had been engaged on the revision of this work in two volumes. The original edition of 1868 is now so rare that secondhand copies sell at as high a figure as \$10 each. The deceased has a brother living in Toronto, Philip, and relatives in this neighborhood.

The village of Cannifton, three miles from Belleville, was named in honor of his progenitors. Mr. W. H. Canniff, of the Toronto Post Office, is a son of the deceased.

An exceptionally bright week socially was concluded Saturday afternoon, October 15th, by the large reception given by Mrs. W. M. Martin, Regina, in honor of her sister, Mrs. W. E. Graham, a bride, who with her husband, Dr. Graham, is staying over for a little visit in Regina on her way to her new home in Calgary.

Book Reviews

LIPPINCOTT'S NEW MEDICAL DICTIONARY: A vocabulary of the terms used in Medicine and the Allied Sciences, with their Pronunciation, Etymology, and Signification, including much collateral information of a Descriptive and Encyclopaedic character. By *Henry W. Cattell*, A.M. (Laf.), M.D. (U. of P.). Editor of *International Clinics*, Fellow of the College of Physicians of Philadelphia, etc. Octavo, 1,100 pages, freely illustrated with figures in the text. Flexible leather, round corners, patent thumb index. J. B. Lippincott Company: Philadelphia, London and Montreal. Price \$5.00. The compilation of the finished work must have been stupendous to produce this volume. The publisher's prospectus has this to say, as to the system used: "*An elaborate system of collateral reading both within the dictionary and to outside books and journals.* This is accomplished by a series of cross-references within and after the definitions, by printing in small capitals such words as are defined, and under which information of an encyclopaedic nature is to be found in other portions of the dictionary, and by numerous abbreviated references to outside sources, giving the year of publication of the book or magazine from which the information has been derived, or, in some instances where the information was of such a special interest that space could not be allotted for its elucidation, the matter referred to will be found described in detail.

The *Canada Lancet* says: "This is an exceptionally attractive looking book. The binding, paper, type, illustrations, and thumb index all go to make it a most convenient and useful volume."

Those of our readers contemplating purchasing a dictionary cannot make any mistake by procuring a copy of this work, and in our belief the best.

HARRY MORELL.

APPLIED ANATOMY. By *Gwilym G. Davis*, Associate Professor of Applied Anatomy, University of Pennsylvania, Octavo, 600 pages, 575 illustrations in colors and black. Cloth. J. B. Lippincott Company: Philadelphia, London and Montreal.

DISEASES OF THE PANCREAS: Its Cause and Nature. By *Eugene L. Opie*, Professor of Pathology, Washington University, St. Louis, Mo. About 400 pages with numerous illustrations. Second Edition. Rewritten. J. B. Lippincott Company: Philadelphia, London and Montreal.

Obituary

One of the most kindly and courteous of gentlemen in the person of Dr. James Ingersol passed quietly away at his residence in the Lansdowne Hotel, Regina, on November 12th last. His was a familiar figure to the early residents of Regina, to whom he was endeared by his sympathetic interest in their hours of trial.

The Doctor graduated from Queen's University in May, 1867, after which he spent a considerable period in Europe, visiting the prominent hospitals and institutes and always displayed a lively interest in his profession. He was a surgeon in the Army of the United States for many years with headquarters near Kansas City. As a litterateur and raconteur he had few equals, but his humor was without malice and his anecdotes always illustrative.

Items of Interest

THE HYPODERMATIC TABLET AS AN EMERGENCY AGENT

If there is one class of therapeutic agents which more than another should be chosen with discretion and judgment, the hypodermatic tablet represents that class. When he administers a preparation hypodermically the physician wants prompt action and he wants to be certain that he is going to get it. To have that assurance he must use a tablet that is active, that has definite strength, that dissolves promptly and wholly. Cheap tablets, poorly made tablets, tablets concerning which there is the slightest doubt as to medicinal quality, may well be left alone. And there is no need to err in the matter of selection. Hypodermatic tablets of the better sort are easily obtainable. Perhaps the brand which comes readily to mind is the brand which is exploited so extensively to physicians under the familiar caption of "Five Seconds by the Watch." The makers, it is hardly necessary to add, are Messrs. Parke, Davis & Co., who guarantee their hypodermatic tablet unequivocally as to purity, solubility, activity and stability.

Practitioners in and around Regina or in the Province of Saskatchewan, may obtain any of Mulford's serums from W. M. Van Valkenburg, Limited, Regina. In an emergency use the phone or wire. This firm have just received a large stock of this serum, and the arrangement will be a great convenience to many.