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PRESIDENT'S ADDRESS.*

By JOHN STEWART, M.B., Halifax, N.S.

FRIENDS and Colleagues,—My first duty is to thank you for the honor you have conferred upon me in electing me to preside over this meeting.

I can assure you that my pride in this great honor is tempered by a feeling of very great responsibility and a sense of marked inaptitude for the duties of this position. And in thanking this Association for an undeserved honor, I wish to thank, especially, the most earnest, energetic and cheerfully laborious Executive which any President ever had.

I wish to express my sense of obligation for the presence of His Honor, the Lieutenant-Governor, whose more than eighty years of strenuous and honorable life give exceptional value to the kind words of appreciation in which he has just welcomed our Association to this city.

Permit me also to express my pleasure in having on the platform my dear old friend and colleague, the Honorable D. McN. Parker, one of the founders of this Association.

And now I bid you welcome, welcome to this picturesque province of Nova Scotia and to the city of Halifax.

I bid you welcome on behalf of the medical men of this province; for when it became known that the Canadian Medical Association was to meet here, there came in from all over the province, from the county societies and from individual practitioners, expressions of a desire to have a share in your entertainment, and therefore it is that we are here to-day as the guests of the Medical Society of Nova Scotia, and that we have listened to the warm welcome of its President.

In welcoming you to this place I should perhaps say a few words of introduction to a city and a province new, perhaps, to many of you. If you are interested in history you will find much here to occupy your attention.

In the early morning mists of our history we see Leif Ericson in his Viking galleys steer along our coast. Four hundred years ago the Cabots took possession of these regions for King Henry VII. And then

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for two hundred years the intrepid navigators of old France, De Monts, Champlain, St. Denis, LaTour, explored these bays and headlands.

If you can spare time to visit Annapolis you will find traces of the French occupation, and see still in good preservation the old powder magazine, the oldest European masonry in America north of Mexico, and built of stone brought from France. Midway in the province, you come to Grand Prè, with its crowded memories of the past, and its wide acres of fertile dyke lands, which we owe to the industry of the early French settlers. And in the extreme east you will find the historic ruins of Louisburg, where the sea birds cry over the rain-swept turf which covers many a gallant heart. Nova Scotia may indeed claim its share in thrilling memories of "old, unhappy, far-off things and battles long ago."

We can point with pride to the distinguished names of many Nova Scotians. I shall avoid the troubled waters of political life and will mention only the fact that two of the most distinguished college presidents in this country were Nova Scotians, viz., Sir J. W. Dawson, of McGill, and Rev. G. M. Grant, of Queen's. In literature we are proud of the reputation of Haliburton. The hero of Kars and the defender of Lucknow were both Nova Scotians. Our shipbuilders and our sailors have carried our name around the world, and it is safe to say that there are few ports in the world where you may not find a Nova Scotian sea captain.

This city of Halifax is crowded with historic memories. It was up this harbor that the ill-fated squadron of D'Anville, shattered and storm-tossed, came to anchor, to meet a more deadly foe than wind and wave in the pestilence which destroyed hundreds of brave soldiers. It was here that Cornwallis, stout soldier and sagacious statesman, arrived in 1749 and laid the foundations of this city. St. Paul's Church, built in 1750, is the oldest Protestant church in the Dominion of Canada, and the old churchyard of St. Paul's is one of the most interesting cemeteries in this country. In it were laid side by side the heroic dead who made the names of the *Shannon* and the *Chesapeake* famous.

In the old Provincial Building, where we hope to meet this evening, Mr. Lawrence Kavanagh stood in 1827, the first Roman Catholic member since the Reformation to represent a constituency in British dominions.

And there is another old building here, which to my mind should be full of interest for all Canadians. It was a Nova Scotian, Sir Samuel Cunard, who had the enterprise to start the first line of transatlantic steamships, and there are men in Halifax to-day who remember when the *Britannia*, the first Cunarder, came up the harbor and to the shipping office of S. Cunard & Co.

And may I draw your attention to our geographical position, and to our incomparable harbor. It has the largest dry dock on this side of the Atlantic; it is defended by one of the most powerful fortresses in the world, and at any hour of day or night, summer or winter, in any state of the tide, the largest and swiftest ships afloat may come alongside the pier, or leave it punctually, without delay of interruption.

I trust that when this Association meets next in Halifax it will find the western terminus of the fast Atlantic service safe in the keeping of the "Warden of the Honor of the North."

Finally, bear with me if I point to our educational institutions. Dalhousie University, the only undenominational college in the province, has not only supplied professors to several universities in the United States, but furnished a distinguished successor to the renowned Tait of Edinburgh, and only the other day, sent one to the University of Birmingham. We have also a medical college whose graduates are now dotted all over the Dominion and the United States, reflecting credit on their province and their Alma Mater. There is the Institution for the Deaf and Dumb, where results are obtained equal to those of any similar institution anywhere; and finally we have this school for the Blind in the hall of which we are met, which is presided over by Dr. Fraser, a gentleman second to none on this continent in the skill and success of his methods, and whose marvellous personality overcomes all disabilities and inspires all who come in contact with him.

This is not the first occasion on which the Association has met in Halifax.

In 1875 the Association first met here, and again in 1881, when the General Secretary was a young Montreal physician, whose name is now a master word in the schools of Esculapius the world over—the Regius Professor of Medicine in Oxford. At the meeting of 1881 the attendance was 53; to-day we have already registered over 200.

It is only fitting that I make reference to some of those who were with us then and to-day are not. The President was Dr. G. E. Fenwick, of Montreal, a distinguished surgeon, who occupied the chair of Surgery in the University of McGill for fifteen years. The Vice-President for Nova Scotia was the late Dr. R. S. Black, one of the leading physicians of Halifax for many years, a man of wide culture, and especially familiar with Spanish history and literature.

There are two names to which I wish particularly to refer in this place on account of their connection with this province and their interest in this Association. The late Dr. Edward Farrell was one of the foremost citizens of Halifax, and took a leading part in our political life, having been a member of our legislature. He was one of the founders of the Halifax Medical College, where he held the chair of

Surgery from its foundation until the time of his death, and his admirably lucid, well-ordered and emphatic style made him one of the best lecturers whom I have ever heard. He was surgeon to the Victoria General Hospital for thirty years. He took a keen interest in the subject of tuberculosis, especially in the organization of methods to prevent the dissemination of the disease, and was appointed by the Dominion Government to represent us at the Congress on Tuberculosis in Berlin. And it was in the discharge of his duty as a member of a commission appointed by our own local government, to select a site for a sanitarium, that he contracted his fatal illness, through exposure to cold and wet when driving in the country; and on the first day of this new century he passed away from among us, but the brave and cheerful spirit, the ready wit, the warm, kind heart are memories that remain.

And what can I say of Dr. Wm. Scott Muir? I may say, I believe, that no member of this Association was better loved or more heartily welcomed to its meetings. He had been a Vice-President, and upon at least one occasion he was nominated for the Presidentship, but generously insisted on giving way to others. He was a very regular attendant at our meetings, and his stalwart figure and cheery voice had become familiar to the profession throughout Canada. His business ability and his knowledge of affairs made him invaluable in committees, and his contributions to the scientific work of the Association were marked by keen observation and practical common-sense. He was my own dear friend, and I shall not trust myself to say more of what his loss has been to us.

And so one by one, just as we learned to value them more, our comrades fall, and what can we say but

"Fare you well:
Hereafter, in a better world than this,
I shall desire more love and knowledge of you."

It is perhaps a weighty sense of the responsible position in which you have placed me that gives to my thoughts to-day a somewhat serious turn.

I look upon this great assembly, I think of the years of study, the expensive education, the physical and intellectual toil, the laborious days and anxious nights, and when I consider the results I am tempted to ask—what is the good of it all? We toil to save, and how often it is that the valuable lives, the bread-winners, the wise, the strong, the true, are taken, and we succeed in saving the idle, the dissolute, the degenerate. There is only a sense of futility, there is horror in the thought that our art may in unworthy hands be degraded to be a servant of evil passions.

And have all these men—our brothers and our forebears—died in vain? Have their lives been wasted, and would it have been better had they had no part in aught that's done beneath the circuit of the sun?

Perish such thought! These dark imaginings are nothing but rank pessimism, and pessimism is fatal to us of all men. Of all men the medical man must be an optimist. If our work is to save and prolong life, we must believe that life is something worth having and worth keeping, or we are not true to ourselves, and are false to other men.

Now, what is the value of life? Character. And what makes life worth having and worth keeping?

The more we reflect upon human life in all its manifestations, the more do we become convinced that its true criterion is character. To the unthinking it may seem that this subject is outside our province, and that health and character are in different categories. But we cannot dissociate the physical from the intellectual and moral elements of our nature. As anatomists we may study the physical framework of man, but as practitioners of medicine we must consider the living man as a body, soul and spirit.

Our nature is threefold, and health and character pertain to each component, the Physical, the Intellectual and the Moral. We may admit that so far as we can see, perfect physical health may exist with feeble intelligence and degenerate morals, but the ideal condition for which we should aim is the balanced blend and perfect equilibrium of all these elements. And even though at first glance it may seem that one component may attain perfection, while the others are defective, a close observation convinces us that it is not so. The brilliant intellect is hampered in its working by the diseased body which forms its transient tabernacle; the "eye sublime," subdued so that it works in by a vile spirit, loses its brightness, and

"Faults in the life breed errors in the brain,
And these reciprocally those again."

And as Maudsley put it the other day at the British Medical Association, "Mind works in every function of the body; a sound body is the foundation of a sound mind and the lunatic is lunatic to his finger ends." We cannot think soundly about life if we ignore this essential and indissoluble trinity. Experience tells us that in our work of detecting, preventing, eliminating disease, we cannot treat our patient to advantage if we regard only his physical condition and neglect consideration of his mental equipment and moral proclivities. Indeed, the manner of man our patient is is determined more by those invisible forces than by his corporeal form, or as we have it in the sayings of the Wise Man, "As he *thinketh* in his *heart* so is he."

And it is with the community as with the individual: that which makes a nation great is not the wealth of its people, or their intelligence, but their good name. It is because I believe that the medical profession may have a large influence in moulding the spirit of a nation, that I wish in the hour which custom allots me here, to offer a few remarks on National Character and Public Health.

How may our national character help or hinder us in our work, and how may we, as the guardians of the public health, help to make or mar our national character?

The public health laws of a country will depend largely on the character of the people. The character of the people will be conditioned largely by their public health, that is, by that standard of health of the individuals composing the nation which, as a national ideal, all the people are interested in and willing to make sacrifices for. This is Public Health in the largest view.

And first let us consider some of the features of national character which may influence public health.

There is *love of liberty*, and a free people is usually a vigorous and healthy people.

But there is a liberty not according to knowledge. When an individual claims the right to act according to his own judgment in matters of which he is profoundly incapable of judging, his boasted liberty may prove a perilous possession to himself and his neighbors. When a community refuses to be bound by laws which Sanitary Science has declared to be necessary, it abuses its liberty and may bring serious damage upon itself. The laws of health cannot be broken with impunity, and this spurious love of liberty frequently stands in the way of sanitary reform.

We have a striking instance of it at present in the stupid rebellion against sanitary laws shown by many communities on the lower Mississippi in the present epidemic of yellow fever.

From the thought of liberty to that of bondage may seem a strange step, yet the next national characteristic which I mention as having an influence on public health, namely, the worship of material things and the feverish haste to accumulate wealth, lays upon us a bitter and grievous bondage. The public and the representatives of the public are too apt to regard with impatience, if not with scorn, the claims of any interest which does not seem to have immediate or direct bearing on the great national occupation of money making.

There is an epigrammatic expression in the works of Aristotle which might well be inscribed in letters of gold over the council chamber of our legislatures and our boards of trade. It may be freely translated thus, "It is not seemly for a free people to be always seeking for cash returns."

I think the Greek philosopher saw the glitter of the golden manacles and would warn us, if we value freedom, to set our affections on other things than gold.

This national characteristic, disinclination to invest in medical securities, is, perhaps, due to various things. It is partly due to ignorance, to an incapacity of appreciating scientific teaching, to a hesitation in trusting the expert opinion of Science—for which, perhaps, Science herself is somewhat to blame. It is not entirely the fault of avarice. When our people are convinced that any measure is for the public weal, they are generally willing to aid. And I may perhaps draw attention here to the fact that the first public sanitarium for tuberculosis, the first in Canada erected as a Government work, is now in operation in Kentville in this Province.

But, as a rule, there is great difficulty in inducing corporations and municipalities to expend a reasonable sum in carrying out the details of a public health system—to pay the water supply, drainage, sewerage, removal of garbage, disinfection. It is not too much to say that apathy in regard to questions of public health is a national characteristic.

Like the Sybil with her precious scrolls, Hygeia comes to Demos, and Demos will not buy.

And the yearly tale of death and disease preventable by sanitary measures, increases, and perhaps the only effectual clarion to rouse the indifferent will be—as it has been before in the world's history a pestilence.

Possibly if the public could see the mere financial loss incurred by preventable disease, the loss of time, the inefficiency of workers, the increased rates to maintain the families who have lost the bread-winner, they would be willing to give more to the Health Department.

There is a feature of our public life which I think may fairly be described as a national characteristic, and that is our tolerance if not encouragement of quackery. I mention it here because I wish to point out the great injustice of this to our profession.

The youth who aspires to the practice of medicine is required by the laws of his country to undergo a certain course of study, tedious and expensive. He has to pass certain examinations and give proof of familiarity with the requirements of his profession. He has to satisfy the authorities as to the integrity of his moral character before he is allowed to begin practice. And now see him, embarking on the practice of his profession. From his window he sees the apothecary's shop, and knows that for one patient who has gone there to have a prescription filled, a dozen go to buy some proprietary medicine. He buys the morning paper and finds one-tenth to one-fifth of the space for which he pays taken up with the advertisements of nostrums, often with testimonials signed by

otherwise intelligent and moral people. He dines at his club and he hears nothing but the wonderful cures wrought by some itinerant quack who has never fulfilled one requirement of the Medical Act. Truly Demos loves the quack and seems to have a special spite at him who would practise his profession scientifically in accordance with the noble spirit of the Hippocratic oath.

There are, indeed, many ways in which the traits of national character may influence the health of the people.

In the report of the Royal Commission on Physical Deterioration, no evidence seems to me more interesting than that of Mrs. Close. This lady, who has given her life to the study of domestic conditions among the laboring classes of almost every country in Europe, has no doubt of a deterioration in the physique of the laboring classes in England. And the explanation of this she finds in a diminished sense of duty, a debased ideal of the duties of wife and mother. Love of amusement and the attractions of the theatre interfere with the old-fashioned domestic economy. Houses are untidy. Food is badly cooked. Early rising is a vanished virtue. The children are hurried off to school without a proper breakfast, and the husband finds in the public house the comfort he is denied at home. The picture is too true and its replica may be found in every town in Canada.

And now, how may we, in the exercise of our daily calling, contribute to the development and growth of national character?

In the first place, we should accustom ourselves to remember that the body with which we deal is of value only as the tenant and instrument of an indwelling spirit, and that the health of the body is our care simply because its ill-health may hamper the action of the intellectual and moral energy within it.

When we prescribe diet and exercise, let us remember that the luxury and excess and love of ease, which are the most potent factors in disease, injure mind and soul as well as body. Let us press the claims of temperance—that true temperance which walks the golden midway, and turns neither to asceticism nor to indulgence.

In the love of Canadian youth for manly exercise we have a most powerful lever for raising the standard of health and morals.

If we are consulted as to occupation, let us sing the praise of the simple life. Civilization is becoming terribly complex, and it seems on all hands to fungate into luxury. And history points a warning finger to the past. When culture joined hands with luxury decadence was already at the door.

This is an age of *sedentary occupations*, and a large proportion of the ills which we are called to treat owe their origin to the exigencies of the sedentary life. It is not a natural life for man.

Will it be thought very much out of place if I say, let us honor the farmer? His is the only natural, the original, and the essential work. There is a moral in the fable of Hercules and Antæus. It was not until Hercules had lifted the giant bodily from the ground and so broke the magic contact that he was overcome, and the prescription for many of the ills of the body and of society to-day is in the cry, "Back to the land!"

I have spoken of occupation as bearing on health and character. There is one other factor in our social life to consider, and that is our amusements. Indeed, among some people this question seems to take precedence of work. Amusement and relaxation are necessary, but to give them so prominent a place in our life as they appear to occupy to-day is a menace to the health of the body which they are meant to secure, to the intellectual powers and to moral character.

Pleasure takes precedence of duty, and camp-laisant sophistry may even justify this order. To scorn delights and live laborious days is now considered folly. We amble along the primrose path of dalliance and avoid the "asperous way that leadeth to the house of sanity."

It is a delight and a hopeful omen to see an interest taken in athletics, and to know that our country takes such an honorable place in all manly exercises. But for one young man whom you will find on the football field, or plying oar or paddle, you will find many who simply waste their time, their only interest in athletics being the spectacular interest of a match or the dubious financial result of a bet. If we could only influence these young men to take a more heroic, a more manly view of life, we should be doing them and our country a service.

Even in our sports there is room for some earnestness, and it might be well if we took our pleasures, as Froissart says our ancestors did, seriously, and sympathised with the spirit of the old English ballad of Ulysses and the Syren :

"To spend the time luxuriously
Becomes not men of worth.

.....

".....suppose there were
Nor honor, nor report,
Yet manliness would scorn to weare
The time in idle sport;
For toyle doth give a better touch
To make us feel our joy;
And ease finds tediousness, as much
As labour yeelds annoy.

.....

"But natures of the noblest frame
These toyles and dangers please;
And they take comforts in the same,
As much as you in ease;
And with the thought of actions past
Are recreated still,
When pleasure leaves a touch at last,
To shew that it was sill."

This was the "great spirit of high desire" of the Elizabethan days.

But in addition to what we do effect in this way in our own generation, we and our ancestors wield a great power in the laws of heredity.

The observation of centuries and the universal experience of everyday life, no less than the laborious and well-planned experiments of science, tell us that the organism of to-day is the resultant of forces acting in the past, and the diversity of operation of these forces is what gives Nature her infinite variety. To us who see every day the working of the inevitable law, which visits the sins of the fathers upon the children and to whom the phenomena of reversion and atavism and variation are constantly present, to us heredity is one of the great powers of Nature. And we believe that by a careful application of scientific principles to the environment, education and occupation of our race, we may and can exercise a beneficial determinant action on generations yet to be, eliminating disease, stimulating and clarifying mental processes, strengthening and purifying moral qualities.

But, enormous and far-reaching as we believe the power to be of the laws of heredity, we must not allow them to dominate us. They are not the forces of a blind, inexorable Fate. These laws are well ordered in all things. When, in view of the depressing influences of the researches of Lombroso and his school, we feel that we are all smitten, when each scans anxiously his brother's face for stigmata, or fancies himself the bearer of a hall-mark of some degeneration, let us remember that not only can we, to some extent at least, control the working of the laws of heredity, but so far as we ourselves are concerned, can bid them defiance.

We may, if we will, say, "Evil, be thou my good," and turn our backs upon our good angel who points us to an honorable ancestry and bids us follow in her path. But, when the angel of the Pit, with mocking leer, that "Men of Hell who calls himself Despayre," bids us throw up our hands, tells us we are captives of circumstances bound in millennial chains, tempts us to give up the hopeless struggle, we may, if we will, say, "Stand thou on that side, for on this am I." We must not forget that divine part of us, that mysterious, undeniable power for good or evil—the human will.

Thirty years ago a young man lay in the Royal Infirmary in Edinburgh. Fortune had not smiled upon him and now, maimed and crippled for life, that life seemed "Doomed to dumb forgetfulness a prey." But not to despair. The "Star of the unconquered will" rose and stood over the lonely bed of William Ernest Henley, and inspired these lines, the finest assertion of the Free Will I have ever seen :

“Out of the night that covers me,
Black as the pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.

“In the fell clutch of circumstance
I have not winced nor cried aloud,
Under the bludgeonings of chance
My head is bloody, not unbowed.

“Beyond this place of wrath and tears
Looms but the Horror of the shade,
And yet the menace of the years
Finds, and shall find me, unafraid.

“It matters not how strait the gate,
How charged with punishments the scroll,
I am the master of my fate;
I am the captain of my soul.”

“Sir,” said Dr. Samuel Johnson, “the man who has vigor may walk to the East, as well as to the West, if he happen to turn his head that way.”

Heredity may condemn us to a life of struggle with bodily weakness and mental incapacity, to “Defects of doubt and taints of blood.” It cannot chain the free spirit, and he who can say, “I will, I will not,” is still a man.

We, the members of this Association, as practitioners of the Healing Art, are the heirs of a great past. The Masters of Medicine have passed from our world, but their influence survives—their spirits still live.

Nothing is plainer in the study of the lives of the greatest of our predecessors than the influence of great ideals. From the days of the grand pagan whom we call the Father of Medicine, and whose recognition of the power of spiritual forces is so clearly seen in the oath which he laid upon his successors, to the great authorities of to-day, we can trace the power of faith in the Unseen Universe.

Let me quote from the illustrious Pasteur: “Happy he who carries with him a God—an ideal of beauty, and who obeys him. An ideal of Art, an ideal of Science, an ideal of Patriotism, an ideal of the virtues of the Gospel.”

And if we are to have strength for our work, courage and hope to cheer us in our long contest with all these shapes of foul disease, we must bear in mind the supreme importance of high ideals—of life—and of man.

“You touch God,” said Novalis, “when you lay your hand upon a human body.” The spark of life we tend is a part of the divine, and immortal.

“The soul that rises with us, our life's star,
Hath had elsewhere its setting,
And cometh from afar.”

We deal not with Dust and to-day, but with Life and Forever. And when we realize this, our own nature becomes ennobled that it works in and can rise to still greater power.

We who deal perforce so largely with the material and perishable, if we would keep sight of the indestructible and immortal, should cultivate a power of detachment, should rise through the cloudy region of the world, and accustom ourselves to the free air and larger atmosphere of a universe.

As the Healer of the world came from beyond its confines, so we who would help in the healing should be able to rise into the ether, where we can have a proper perspective of Time. We should visit the ethereal region where, with Amiel, we may "Listen to the music of time and the hosannas of the world," or with our own Wordsworth hear "Oftentimes the still, sad music of humanity," and be conscious of

"A presence that disturbs us with the joy
Of elevated thoughts; a sense sublime
Of something far more deeply interfused,
Whose dwelling is the light of setting suns,
And the round ocean and the living air,
And the blue sky, and in the mind of man."

And how may we best acquire this power but by the study of our subject—the philosophic study of man?

What our profession requires to-day, even more than an increase in scientific knowledge, is more of the study which gave character to the great masters of the past, and a realization of the grandeur of the divine possibilities in man. True, we see much of the lower nature, weakness and suffering and sin, but we also see in every soul the capacity of Honor, Courage and Love. Let us rather look on these. "Whatsoever things are true, . . . whatsoever things are pure, . . . whatsoever things are lovely, . . . if there be any virtue, . . . let us think on these things."

ADDRESS IN MEDICINE.*

By D. A. CAMPBELL, M.D., Halifax.

MR. *President and Gentlemen*,—The first duty resting upon me is to thank you for the wholly undeserved distinction which you have conferred in choosing me to deliver one of the general addresses at this meeting of this Association.

I wish to apologize for my presumption in undertaking so serious a responsibility, feeling that local reasons, rather than any fitness on my part, must have counselled your request.

* Read before Canadian Medical Association, Halifax, Aug. 22nd to 24th, 1905.

The subject upon which I shall endeavor to address you may be entitled "The Growth and Organization of the Medical Profession in Nova Scotia."

It was not without misgivings that I selected such a local topic, but I have been assured that there are ample precedents for such a course.

It may be confidently stated that there is at the present time a growing interest in the history of the medical profession in all its aspects. This may be regarded as part of the modern recognition of the important fact that no subject can be thoroughly studied and fully understood unless studied historically. Not only is this fact acted upon by the leaders of modern thought and the great teachers of the age, but it is becoming generally recognized by all thinking men that we must have some knowledge of the past to understand, really, the present, and to make progress in the future. Every movement has its past history, its present struggles, its ideals for the future.

The satisfactory condition of the medical profession in this province to-day has not been attained without much effort and a long history.

The present standard of medical education is sufficiently high, and the average attainments of the rank and file of the profession satisfactory, so that everywhere the public can obtain the services of men capable of coping with the ordinary emergencies met with in practice. The members of the profession are respected, and exercise considerable influence in social and public affairs. In their organized capacity they enjoy self-government—a privilege which they have used for the public benefit, but have never abused. There are active and energetic associations for mutual improvement and protection. The grosser forms of quackery are not prevalent, and what may be called "medical heresies" are scarcely represented. It can be affirmed without exaggeration that the position of the profession in Nova Scotia compares favorably with that which obtains in other provinces of Canada or in the states of the American Union. Such a status for the profession has not been achieved except by the continuous struggles of many generations.

It is to the past, then, that we may now turn attention for the better understanding and appreciation of the present. And if, in doing so, I should seem to present much that belongs to general history rather than specially to medical history, my excuse is that it is desirable, if not essential, to note the general condition of the province and its population, at different periods, in order to see what field there was for the special work of the profession.

It is now just three centuries since the first European settlement was made in this region of North America, at Port Royal, now Annapolis Royal, in this province, which is, thus, the oldest continuous

European settlement on this continent north of Florida. The settlement was really made and the colony established by Poutrincourt, under a grant from de Monts, who had arrived there the previous year, 1604, with a grant, from Henry IV. of France, of all the territory between the 40th and 46th parallels of latitude. The Acadia of the seventeenth century was thus a very wide region, including the present New Brunswick, and, indeed, for a long time, the name Nova Scotia was applied to the same region. Sieur de Monts made many extensive explorations during the summer, crossed the Bay of Fundy, and established a settlement on the island of St. Croix. The colony of St. Croix suffered great hardships during the winter of 1604-5; and it is from that settlement that we have the earliest account of anything of strictly medical special interest in Acadia. That year Samuel de Champlain—a name illustrious in Canadian history—was with de Monts at St. Croix, and he has left a most interesting account of a serious malady which attacked the colonists. Here let me quote part of Champlain's narrative:

“During the winter, many of our company were attacked by a certain malady called the mal de la terre, otherwise scurvy; as I have since learned from men. There were produced in the mouths of those who had it great pieces of superfluous and drivelling flesh (causing extensive putrefaction), which got the upper hand to such an extent that scarcely anything but liquid could be taken. The teeth became very loose, and could be pulled out with the fingers without its causing them pain. The superfluous flesh was often cut out, which caused them to eject much blood through the mouth. Afterwards a violent pain seized their arms and legs, which remained swollen and very hard, all spotted as with flea bites; and they could not walk on account of the contraction of the muscles, so that they were almost without strength and suffered intolerable pains. They experienced pain also in the loins, stomach and bowels, had a very bad cough and short breath. In a word, they were in such a condition that the majority of them could not rise nor move and could not even be raised up on their feet without falling down in a swoon. So that out of seventy-nine, who composed our party, thirty-five died, and more than twenty were on the point of death. The majority of those who remained well also complained of slight pains and short breath. We were unable to find any remedy for these maladies. A post-mortem examination was made of several to investigate the cause of their malady.

“In the case of many, the interior parts were found mortified, such as the lungs, which were so changed that no natural fluid could be perceived in them. The spleen was serous and swollen. The liver was woody and spotted, without its natural color. The vena cava, superior and inferior, was filled with thick coagulated and black blood.

The gall was tainted. Nevertheless, many arteries, in the middle as well as lower bowels, were found in a very good condition. In the case of some, incisions with a razor were made on the thigh where they had purple spots, whence there issued a very black, clotted blood. This is what was observed on the bodies of those infected with this malady. Those who were continued sick were healed by spring, which commences in this country in May. That led us to believe that the change of season restored their health, rather than the remedies prescribed.

"During the winter all our liquors froze, except the Spanish wine. Cider was dispensed by the pound. The cause of this last was that there were no cellars under our store-houses, and that the air which entered by the cracks was sharper than that outside. We were obliged to use very bad water, and drink melted snow, as there were no springs nor brooks; for it was not possible to go to the mainland in consequence of the great pieces of ice drifted by the tide, which varies three fathoms between low and high water. Work on the hand mill was very fatiguing, since the most of us, having slept poorly, and suffering from insufficiency of fuel, which we could not obtain on account of the ice, had scarcely any strength, and also because we ate only salt meat and vegetables during the winter, which produced bad blood. The latter circumstance was, in my opinion, a partial cause of these dreadful maladies."

Thus it appears that three centuries ago the French surgeons who accompanied this expedition were impressed with the value of post-mortem examinations for determining the nature of disease, and that they at least suspected the causal connection between salt food and scurvy. And this latter view was confirmed by further observation. After the awful experiences of the first winter at St. Croix, the survivors moved to Port Royal. There were still fatal cases of scurvy. By the third winter affairs had greatly improved, owing, no doubt, to the fact that the colonists had taken to hunting and providing themselves with fresh food instead of salt. Champlain reports of this third winter:

"We spent the winter very pleasantly and fared generously, by means of the *Ordre de Bon Temps*, which I introduced. This all found useful for their health and more advantageous than all the medicines that could have been used. By the rules of the order a chain was put, with some ceremony, on the neck of one of the company, commissioning him for the day to go a-hunting. The next day it was conferred upon another, and, thus, in succession. All exerted themselves to the utmost to see who would do the best and bring home the finest game."

With the de Monts' colonists were several surgeons, some of whom may have fallen victims to the then mysterious disease, before the *Ordre de Bon Temps* brought fresh game and health to the adventurous little company.

In 1613 the colony of Port Royal was greatly injured by an expedition from Virginia; war between France and England followed; but upon the restoration of peace, in 1632, France was still permitted to hold Acadia.

The work of colonization was resumed under the auspices of the new company of France; some sixty families of farmers, fishermen and artisans were brought over, settling first at La Have, and subsequently at Port Royal. Most of these came from districts on the west coast of France where it was customary to protect the low-lying lands from the encroachment of the sea by dykes, and they adopted the same method, with notable success, to reclaim the rich and extensive marshes about the Bay of Fundy, and soon made comfortable homes for themselves. The progress of colonization was long retarded by internal dissensions, and by strife between the rival claimants to the territory—France and England.

From the final cession of Acadia to Great Britain and the peace of Utrecht, in 1713, to the year 1749, when Halifax was founded, not the slightest effort was made in the direction of securing British settlers for Nova Scotia. France, by the retention of Cape Breton and the fortification of Louisburg, was enabled effectively to checkmate the plans of England. When war broke out between the two nations in 1744, the governor of Louisburg promptly sent an expedition to regain Nova Scotia. Canso was attacked and destroyed, and it was determined to capture Annapolis—which meant the capture of all Nova Scotia. This attempt failed, but it so exasperated the New England people that they resolved to secure possession of Louisburg. A scheme, planned by a lawyer and executed by a citizen commander, with an army of artisans, fishermen, farmers and lumbermen, snatched, by sheer audacity, from the grasp of France the great stronghold of Louisburg, defended by a garrison of veterans. At the close of the war, however, Louisburg, conquered by arms was restored by diplomacy. A storm of indignation swept over New England, which had the effect of quickening a plan long cherished by the British government, of establishing a permanent settlement, and strong military station on the Atlantic coast of Nova Scotia, as a counterpoise to Louisburg, and Halifax was founded in the early summer of 1749.

HALIFAX.

A fleet of transports, with 2,576 immigrants, of which 1,546 were adult males, sailed for Chebucto Bay, under the command of Hon. Edward Cornwallis. New Englanders also came in considerable numbers, and contributed largely to the success of the undertaking. The plan of the town was quickly made, building lots were assigned to the

settlers, and before winter closed in all were under shelter. A little later a German colony was planted at Lunenburg.

In 1758 Louisburg was captured by General Wolfe, and Quebec in 1759. With British rule thus assured immigrants from New England and elsewhere soon began to flow into the country and to occupy the fertile lands and the best fishing stations, so that by 1770 there was an estimated population of 13,000 in the Nova Scotia of that day.

During the progress of the war between England and the revolted colonies of New England, many adherents of the Royal cause were driven from their homes and sought refuge in Nova Scotia. After the evacuation of Boston about two thousand refugees came to Halifax with the British forces. When the war closed large numbers of Loyalists withdrew from the United States, the greater part settling in Ontario and Nova Scotia. They consisted chiefly of the middle and upper classes, and were an intelligent and enterprising body of men, of sterling character. They diffused themselves quite generally among the older colonists, and also laid the foundation of new settlements in widely scattered parts of the province.

Among the 2,500 settlers who came to found Halifax in 1749 there were twenty-eight medical men. Eleven of the number were accompanied by their families, which indicates that they, at least, came with the intention of staying in the country. All, probably, were army surgeons, thrown out of employment at the termination of the war with France, who were thus willing to accept a free trip to America and a grant of two hundred acres of land. How bitter must have been their disappointment when they beheld for the first time an unbroken expanse of forest, and realized that this was the home upon which they had based great hopes. Some found employment in connection with the hospital which had been established, but this did not last long, as the home authorities complained to Cornwallis that he supported too many surgeons and apothecaries. Only three out of the twenty-eight appear to have had the courage to face such a future. These remained with the other colonists, shared their hardships, and achieved some measure of success. The names of the three were Robert Grant, John Steele, and Alexander Abercrombie. These were the pioneers in medicine in Halifax. Grant became a member of His Majesty's Council; Steele, a member of the House of Assembly; and Abercrombie, when he died twenty-eight years later, was deeply lamented, both for his medical skill and his benevolent disposition. The fate of the other twenty-five is unknown.

Only one physician accompanied the 1,500 German colonists who settled at Lunenburg, and it is uncertain whether he remained in the country. The New England and North of Ireland settlers, who came

to the province prior to the Revolutionary War, were usually able to obtain medical aid. The missionaries, who regularly visited the sparsely settled and remote districts, had some medical knowledge. At some points the garrison surgeons looked after the sick. A few physicians came from New England and engaged in practice in the more thriving districts. Of these latter the professional knowledge and skill may not have been great, but they were usually resolute, enterprising men, and useful members of the community, in which they lived.

A large number of medical men accompanied the Loyalists. They were well qualified. The majority had served as surgeons during the war, and their influence in improving the status of the medical profession was marked, owing to their number, skill, and strong personality. In respect to the effect of the Revolutionary War on the fortunes of physicians and surgeons, Sabine remarks:

"The physicians who adhered to the Crown were numerous, and the proportion of Whigs in the profession of medicine was probably less than in either that of law or theology. But unlike persons of the latter callings, most of the physicians remained in the country and quietly pursued their business. There seem to have been an understanding that though pulpits should be closed, and litigation suspended, the sick should not be deprived of their regular and freely chosen attendants. I have been surprised to find from verbal communications, and from various other sources, that while the 'Tory doctors' were as zealous and fearless in the expression of their sentiments as Tory ministers and Tory lawyers, their persons and their property were generally respected, in towns and villages where little or no regard was paid to the bodies and estates of gentlemen of the robe and surplice. Some, however, were less fortunate, and the dealings of the Sons of Liberty were occasionally harsh and exceedingly vexatious. A few of the Loyalist physicians were banished; others, and these chiefly who became surgeons in the army or provincial corps, settled in Nova Scotia or New Brunswick, where they resumed practice."

I feel, sir, that this address bids fair to become too long, and there is still much ground to be covered. It seems, desirable, therefore, that I should present the chief remaining facts of this subject in a summary form, and for this purpose it appears best to select certain important points, and to group the facts around these dates.

1749-1790.

The first date I have chosen is 1790, as we have an estimate of the population for that year. Prior to that date the population fluctuated very considerably; afterwards it steadily increased. The estimated population of Nova Scotia, in 1790, was about 35,000. The number

of practitioners in the province at that time, as far as I have been able to ascertain, after considerable research, was thirty-five, a very large number when we consider the slender resources of the inhabitants and the limited extent of the settled area. The presence of so many practitioners at that early period is explained by the circumstances that fully one-third of the number held permanent appointments in connection with the military establishments at Halifax, Windsor, Annapolis, Shelburne, and Sydney—appointments which they had received as a partial compensation of the losses they had sustained by the Revolution. Their official duties were light, and gave them ample time for general practice. After the founding of Halifax about nine-tenths of the physicians who came to Nova Scotia came from New England, and of the thirty-five practitioners in 1790 fully three-fourths were Loyalists. The latter did much to create that ingrained respect and loyalty towards the profession which is a characteristic of Nova Scotians, and this was accomplished by the individuality and force of character of those men as well as by their professional skill. The inscription on the tombstone of Dr. John Haliburton, in the old St. Paul's Cemetery, might not unfittingly be applied to each one of them :

"If unshaken loyalty to his King, steady attachment to his friends,
active benevolence to the destitute, and humble confidence in God, can
perpetuate his memory, he will not be forgott "

1790-1828.

After 1790 no distinctive event stands out from which we can look back upon the growth of the profession, until the year 1828, when an Act to regulate the practice of medicine was passed by the legislature. During this period of thirty-eight years the population had risen from 35,000 to 150,000—an increase largely due to an extensive immigration from the Highlands of Scotland. The older settlements had made substantial progress, and afforded an improved field for practice. The number of medical men had increased from 35 to 65; but the ratio to population had fallen from one in about 1,000 to one in about 2,300.

Two of those in practice in 1790 still survived—Jonathan Woodbury, of Annapolis, who came to the province as early as 1763, and Joseph Norman Bond, of Yarmouth, a veteran of the Revolutionary War, who enjoys the distinction of being the first medical man to perform vaccination in Nova Scotia. This was in 1802.

The additions to the ranks of the profession, during this period, were principally British graduates, who brought with them the traditions and customs of the profession in Great Britain. Many of them

were retired army and navy surgeons, who had seen considerable service, and were accustomed to order, discipline, and regulations. Their personal influence proved a potent factor in improving the status of the profession; their intimacy both with their comrade in active service and with the practitioners of the province became a means of diffusing throughout the country a knowledge of the advances and improvements in our art, at a time when communication was slow and uncertain and professional periodicals were still in the age of infancy.

During this period a few medical men also came from the United States. About 1800, we note the appearance of native Nova Scotians, who had studied either in Great Britain or in the neighboring republic. Towards the close of this period there was a decided increase in the number of these. The first Nova Scotians were: Samuel Head, of Halifax, son of Dr. Michael Head, who came from Ireland to the province shortly after 1756; David B. Lynd, of Truro, a graduate of the University of Pennsylvania; Robert Bayard, of Cornwallis, a graduate of Edinburgh, better known in New Brunswick than in his native province; and W. B. Almon, of Halifax, also an M.D. of Edinburgh, and son of Dr. W. J. Almon, who first came to Halifax during the Revolutionary War. All of these were in practice in 1810.

The preamble to the Medical Act, and a subsequent amendment, point to the presence of a number of unqualified practitioners, especially in districts where medical aid could not be easily obtained. Many of these were men who had gained some knowledge, either through apprenticeship or a partial course at some college. Generally speaking, they were a deserving class, and should not be regarded in the same light as quacks and pretenders.

The early practitioners had to encounter many hardships and difficulties, except in the more populous districts. Many of the roads were mere bridle paths through the forest. Streams had to be forded. Water carriage, when available, was regarded as a boon. In the winter snowshoes were often necessary to complete a journey. Accommodation was very poor; domestic comforts were few; medical periodicals did not exist, and libraries were limited to a few volumes. The serious emergencies of a mixed practice had to be surmounted single-handed. Yet, in spite of all these disadvantages educated men toiled through long years, serving well their generation, and adding their quota to the slow but steady advancement of their profession.

Another point worthy of note is that, owing to the scarcity of educated laymen, and the absence of lawyers outside of Halifax, the doctors also rendered service to the public in the capacity of magistrates, judges of the Inferior Court of Common Pleas, prothonotaries, sheriffs, judges of probate, and they were frequently elected to the

House of Assembly. This added to their labor and perhaps their income, and widened the sphere of their influence. It may be affirmed with justice that no other class gave more useful service to the public than the physicians; nor do the best men of the past suffer by comparison with the leaders of to-day; and they have left us patterns of humanity and energy well worthy of imitation.

1828-1854.

The next important step in the progress of the profession was the formation of the Medical Society of Nova Scotia in 1854. This association grew out of, or rather was an expansion of, the Medical Society of Halifax, which had been formed in 1844.

Between 1828 and 1854 the population had nearly doubled, chiefly through natural increase, and the number of practitioners had risen from 65 to 120. An analysis of the list of practitioners in 1854 indicates that more than one-half of them had been born in the province. Of the total number 50 per cent. had been educated in the United States, 35 per cent. in Great Britain, and 17 per cent. were provincial licentiates. During this period the medical supply reached its lowest ebb, because but few practitioners came from abroad, and the cost of a complete medical education in a foreign country was greater than many Nova Scotians could afford. Quackery became prevalent and offensive. The petitions of medical men to the legislature had been disregarded, and the conviction became general that the only way to secure a remedy was by united action; hence the formation of the Medical Society of Nova Scotia.

1854-1872.

The next period, extending from 1854 to 1872, when a new Medical Act of great importance was secured, is characterized by a less rapid expansion of the population, owing to the fact that the era of emigration from the province had begun. But for the people who remained there was a better medical supply.

The new medical society soon made its influence felt. For some years its efforts were concentrated upon safe-guarding the interests of the profession and the promotion of measures to improve the public health. In 1856 the old Medical Act was amended, and new provisions were added to repress unqualified practice. A tariff of fees was framed; a code of ethics adopted; better remuneration for public services was secured; health legislation was improved, and an act for the collection of vital statistics was obtained.

The union of the provinces in 1867 widened the outlook of the profession; and the new order of things was promptly signaled by

the formation, that year, of this Canadian Medical Association. And here permit me to refer to the fact that the honor of first presiding over the deliberations of this important organization was accorded to a Nova Scotian, a gentleman of high standing in his profession, but one whose widely-recognized pre-eminence as a political leader and constructive statesman has caused his professional career to be almost forgotten—I refer, of course, to the Hon. Sir Charles Tupper. And I cannot omit mention of the second president of this association, also a Nova Scotian, and the ablest practitioner in the province, chosen for that place of honor because of his sterling character, public spirit and successful professional career, one who fortunately is still with us, an inspiring influence for all that is noble and good—I refer, of course, to the Hon. Dr. Parker.

In the same year, 1867, the Medical Society of Nova Scotia was reorganized. Up to that time the society had held all its meetings in Halifax. It was then decided to hold the annual meeting at different points in the province, with the view of securing the more hearty co-operation of members in the various parts of the country.

In 1867, also, a medical school was founded in Halifax in connection with Dalhousie College. At first nothing more than a short preparatory course, during the summer months, was aimed at. The venture met with success, and in 1870 it was decided to establish a full course of study and to confer degrees. This project encountered considerable opposition at first, and was not approved by the Medical Society. The supporters of the medical school took advantage of a strong and growing sentiment in the profession in favor of a more prolonged period of study than was required in the schools of the United States, from which the great majority of students obtained a qualification; and they took steps to secure the adoption of a new Medical Act, succeeding in 1872. The existence of a medical school within the province lessened materially the force of the objection raised in the legislature that the cost of a more prolonged period of study would restrict competition, and seriously affect the medical supply of the more sparsely settled districts. The propriety of founding a school at that time has been fully proved by the important part which it has played in promoting and maintaining a greatly improved system of medical education.

1872-1905.

Before considering the Medical Act of 1872, mention may be made of some minor events which have resulted in good. The Nova Scotia branch of the British Medical Association, formed in 1887, which meets at Halifax during the winter months, and the Maritime Medical Association, formed in 1891, which holds its annual meeting alternately

in the three capitals of the Maritime Provinces, have greatly promoted harmony and good feeling, as well as mutual improvement. The *Maritime Medical News*, founded in 1888, has been of material benefit to the various associations by preserving in an accessible form a record of their proceedings, and of their more valuable contributions.

The medical legislation in 1872 is of so much importance that I trust you will pardon me for giving an account of various steps leading to it. By medical legislation I mean, of course, enactments designed to regulate the study and practice of medicine, it being generally conceded that the state has full power in his respect. The basis of medical legislation is the necessity of affording protection to the people against ignorant persons and pretenders. The intention of such legislation is to secure a standard of professional education to be exacted of every one who is desirous of engaging in the practice of medicine, and such standard is obtained in various ways needless to specify.

The first step was taken while the military element in the profession predominated, and was perhaps suggested by the Medical Acts of Upper and Lower Canada. The Medical Act of 1828 is very brief, and is entitled "An Act to Exclude Ignorant and Unskilful Persons from the Practice of Physic and Surgery." Its substance is as follows: No person shall demand or recover any fee or award for medical or surgical aid unless he has a diploma from some college legally authorized to grant the same, or of having been examined in respect to his professional capacity by judges to be appointed by the Governor-in-Council. The Act being simple in character and adapted to the wants of that period, had some influence in restraining irregular practice, and it afforded partially instructed and deserving men already in practice a chance to obtain a legal qualification.

Next came the Act of 1856, promoted by the Medical Society of Nova Scotia. It provided for the registration of qualifications in the office of the Provincial Secretary. In addition to being unable to recover fees for services, unregistered persons were prohibited from holding provincial medical appointments, and were also liable to a fine of £5 for practising. Persons with defective qualifications could still become duly qualified by passing an examination before a board of examiners. This Act, like the previous one, was moderate in its provisions, and free from objectionable features. It remedied some defects which practical experience had shown to exist in the former measure.

The Act of 1872 conferred the privilege of self-government, as its provisions secure to representatives of the profession full control of all matters relating to medical education, registration and discipline. The Act has since been frequently amended, but its essential features remain unchanged, and as they are similar to those of other provinces,

further explanation is not necessary. But the composition of the governing body, and its policy in respect to some questions, demand brief consideration.

The profession as a whole is not incorporated in Nova Scotia, as it is in Ontario. The Act makes provision for a body corporate, called the "Provincial Medical Board," consisting of thirteen qualified medical practitioners, of not less than seven years' standing—seven to be appointed by the Governor-in-Council for life, and six to be elected triennially by the Medical Society of Nova Scotia. No other provision is made for collegiate representation, and there is no annual tax as in other provinces, the revenue being obtained wholly from examination and registration fees.

Until quite recently the requirements for registration differed in one important respect from those in other provinces, inasmuch as submission to a professional examination was not required from holders of diplomas from reputable schools, obtained after a sufficient course of study. Instead of examination the board insisted upon a rigid compliance with all its regulations relating to the preliminary examinations, period of study, and course of study—tests which effectually excluded applicants from schools of doubtful repute. This policy enabled the board, while maintaining the status of the profession, to keep an "open door" for licentiates from other provinces—a courtesy which so far has met with no reciprocal recognition. At the same time honest men from schools of good repute were spared "vexatious penalties of mind and body."

The principle of state examination was adopted a few years ago, not through conviction of its merits or necessity as a test of professional fitness, but from a desire to co-operate with other provinces in a general scheme of reciprocity. For the past three years an examination in the practical subjects has been demanded from all applicants for license, and the day is probably not far distant when the policy of the board, in this respect, will be adopted by other provinces, as it is now very generally recognized that medical boards and councils have not the requisite equipment, and can scarcely provide competent and independent examiners, to conduct examinations in the scientific subjects on the lines of the more recent methods of instruction.

The Act of 1872 proved an important factor in causing a diversion of students from American to Canadian schools.

The ever-increasing proportion of Canadian graduates added yearly to the Medical Register is a marked feature of this period, and is worthy of special notice. An analysis of the Medical Register of 1875—thirty years ago—shows that of the whole number of practitioners, 78 per cent. were American graduates, 14 per cent. were British

graduates, 2 per cent. were Canadian graduates, and 6 per cent. were Nova Scotia licentiates. A similar analysis of the Register of 1904-5 gives widely different results. Of the whole number, 53 per cent. were Canadian, 44 per cent. were American, and 3 per cent. were British graduates. The change in favor of Canadian schools is still more strikingly illustrated by an analysis of the additions to the Register from 1895 to 1904. Of the number added, 85.5 per cent. were Canadian, 14.2 per cent. were American, and 0.3 per cent. were British graduates. During the year 1904-5 the additions to the Register were exclusively Canadian graduates.

The predominance of the American graduates, numerically, has come to an end, but their influence, always exerted for good, will be felt for years to come; and it is pleasing to observe that the many evils which resulted from a lowering of the standard of medical education in the United States did not sensibly affect the status of the profession in Nova Scotia. This has been due in some measure to our geographical isolation, but chiefly to the circumstance that, from the earliest period down to the present time, the students from this province who went to the United States to obtain a qualification, have almost invariably selected the best schools in Boston, New York and Philadelphia.

The burden of maintaining and improving the status of our guild in this province, and throughout our great Dominion, is now fairly placed on the shoulders of Canadian graduates.

I fear, Mr. President and gentlemen, that I have rather over-taxed your patience, but trust that I have made it clear that our profession in this part of Canada has had a long and ever-widening history, and hope I have shown, by the citation of definite facts, that the profession in this province has, to say the very least, fully kept pace with the general progress of the country.

THE STUDENT LIFE. A FAREWELL ADDRESS TO CANADIAN AND AMERICAN MEDICAL STUDENTS.*

By WILLIAM OSLER, M.D., of Oxford, England.
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EXCEPT it be a lover, no one is more interesting as an object of study than a student. Shakespeare might have made him a fourth in his immortal group. The lunatic with his fixed idea, the poet with his fine frenzy, the lover with his frantic idolatry, and the student aflame with the desire for knowledge are of "imagination all compact." To an absorbing passion, a whole-souled devotion, must be joined an en-

* Delivered before the medical students of McGill College, Montreal, and the students of the Medical Department of the University of Pennsylvania, Philadelphia.

during energy, if the student is to become a devotee of the gray-eyed goddess to whose law his services are bound. Like the quest of the Holy Grail, the quest of Minerva is not for all. For the one, the pure life, for the other, what Milton calls "a strong propensity of nature." Here again the student often resembles the poet,—he is born, not made. While the resultant of two molding forces, the accidental external conditions, and the hidden, germinal energies, which produce in each one of us national, family and individual traits, the true student possesses in some measure a divine spark which sets at naught their laws. Like the Snark, he defies definition, but there are three unmistakable signs by which you may recognize the genuine article from a Boojum—an absorbing desire to know the truth, an unswerving steadfastness in its pursuit, and an open, honest heart, free from suspicion, guile and jealousy.

At the outset do not be worried about this big question—Truth. It is a very simple matter if each one of you starts with the desire to get as much as possible. No human being is constituted to know the truth, the whole truth and nothing but the truth; and even the best of men must be content with fragments, with partial glimpses, never the full fruition. In this unsatisfied quest the attitude of mind, the desire, the thirst (a thirst that from the soul must rise!), the fervent longing, are the be-all and the end-all. What is the student but a lover courting a fickle mistress who ever eludes his grasp? In this very elusiveness is brought out his second great characteristic—steadfastness of purpose. Unless from the start the limitations incident to our frail human faculties are frankly accepted, nothing but disappointment awaits you. The Truth is the best you can get with your best endeavor, the best that the best men accept—with this you must learn to be satisfied, retaining at the same time a due humility and an earnest desire for an ever larger portion. Only by keeping the mind plastic and receptive does the student escape perdition. It is not, as Charles Lamb remarks, that some people do not know what to do with truth when it is offered to them, but the tragic faith is to reach, after years of patient search, a condition of mind-blindness, in which the truth is not recognized, though it stares you in the face. This can never happen to a man who has followed step by step the growth of a truth, and who knows the painful phases of its evolution. It is one of the great tragedies of life that every truth has to struggle to acceptance against honest but mind-blind students. Harvey knew his contemporaries well and for twelve successive years demonstrated the circulation of the blood before daring to publish the facts, on which the truth was based.* Only steadfastness of purpose and humility enable the student to shift his position to

* "These views, as usual, pleased some more, others less; some chid and calumniated me and laid it to me as a crime that I had dared to depart from the precepts and opinions of all Anatomists." Chapt. I, *De Motu Cordis*.

meet the new conditions in which new truths are born, or old ones modified beyond recognition. And, thirdly, the honest heart will keep him in touch with his fellow-students, and furnish that sense of comradeship without which he travels an arid waste alone. I say advisedly an honest heart—the honest head is prone to be cold and stern, given to judgment, not mercy, and not always able to entertain that true charity which, while it thinketh no evil, is anxious to put the best possible interpretation upon the motives of a fellow-worker. It will foster, too, an attitude of generous, friendly rivalry untinged by the yellow peril, jealousy, that is the best preventive of the growth of a bastard scientific spirit—loving seclusion and working in a lock-and-key laboratory, as timorous of light as is a thief.

You have all become brothers in a great society, not apprentices, since that implies a master, and nothing should be further from the attitude of the teacher than much that is meant in that word, used though it be in another sense, particularly by our French brethren in a most delightful way, signifying a bond of intellectual filiation. A fraternal attitude is not easy to cultivate—the chasm between the chair and the bench is difficult to bridge. Two things have helped to put up a cantilever across the gulf. The successful teacher is no longer on a height, pumping knowledge at high pressure into passive receptacles. The new methods have changed all this. He is no longer *Sir Oracle*, perhaps unconsciously by his very manner antagonizing minds to whose level he cannot possibly descend, but he is a senior student anxious to help his juniors. When a simple, earnest spirit animates a college there is no appreciable interval between the teacher and the taught—both are in the same class, the one a little more advanced than the other. So animated, the student feels that he has joined a family whose honor is his honor, whose welfare is his own, and whose interests should be his first consideration.

The hardest conviction to get into the mind of a beginner is that the education upon which he is engaged is not a college course, not a medical course, but a life course, for which the work of a few years under teachers is but a preparation. Whether you will falter and fail in the race, or whether you will be faithful to the end depends on the training before the start, and on your staying powers, points upon which I need not enlarge. You can all become good students, a few may become great students, and now and again one of you will be found who does easily and well what others cannot do at all, or very badly, which is John Farriar's excellent definition of a genius.

In the hurry and bustle of a business world, which is the life of this continent, it is not easy to train first-class students. Under present conditions it is hard to get the needful seclusion, on which account it

is that our educational market is so full of wayside fruit. I have always been much impressed by the advice of St. Chrysostom: "Depart from the highway and transplant thyself in some enclosed ground, for it is hard for a tree which stands by the wayside to keep her fruit till it be ripe." The dilettante is abroad in the land, the man who is always venturing on tasks for which he is imperfectly equipped, a habit of mind fostered by the multiplicity of subjects in the curriculum; and while many things are studied, few are studied thoroughly. Men will not take time to get to the heart of a matter. After all, concentration is the price the modern student pays for success. Thoroughness is the most difficult habit to acquire, but it is the pearl of great price, worth all the worry and trouble of the search. The dilettante lives an easy, butterfly life, knowing nothing of the toil and labor with which the treasures of knowledge are dug out of the past, or wrung by patient research in the laboratories. Take, for example, the early history of this country—how easy for the student of the one type to get a smattering, even a fairly full acquaintance with the events of the French and Spanish settlements. Put an original document before him, and it might as well be Arabic. What we need is the other type, the man who knows the records, who, with a broad outlook and drilled in what may be called the embryology of history, has yet a powerful vision for the minutiae of life. It is these kitchen and back-stair men who are to be encouraged, the men who know the subject in hand in all possible relationships. Concentration has its drawbacks. It is possible to become so absorbed in the problem of the "enclitic de," or the structure of the flagella of the *Trichomonas*, or the toes of the prehistoric horse, that the student loses the sense of proportion in his work, and even wastes of a lifetime in researches which are valueless because not in touch with current knowledge. You remember poor Cassaubon, in *Middlemarch*, whose painful scholarship was lost on this account. The best preventive to this is to get denationalized early. The true student is a citizen of the world, the allegiance of whose soul, at any rate, is too precious to be restricted to a single country. The great minds, the great works transcend all limitations of time, of language and of race, and the scholar can never feel initiated into the company of the elect until he can approach all of life's problems from the cosmopolitan standpoint. I care not in what subject he may work, the full knowledge cannot be reached without drawing on supplies from lands other than his own—French, English, German, American, Japanese, Russian, Italian—there must be no discrimination by the loyal student, who should willingly draw from any and every source with an open mind and a stern resolve to render unto all their dues. I care not on what stream of knowledge he may embark, follow up its course, and the rivulets that feed

it flow from many lands. If the work is to be effective he must keep in touch with scholars in other countries. How often has it happened that years of precious time have been given to a problem already solved or shown to be insoluble, because of the ignorance of what had been done elsewhere. And it is not only book knowledge and journal knowledge, but man knowledge that is needed. The student will, if possible, see the men in other lands. Travel not only widens the vision and gives certainties in place of vague surmises, but the personal contact with foreign workers enables him to appreciate better the failings or successes in his own line of work, perhaps to look with more charitable eyes on the work of some brother whose limitations and opportunities have been more restricted than his own. Or, in contact with a master-mind, he may take fire, and the glow of the enthusiasm may be the inspiration of his life. Concentration must then be associated with large views on the relation of the problem, and a knowledge of its status elsewhere; otherwise it may land him in the slough of a specialism so narrow that it has depth and no breadth, or he may be led to make what he believes to be important discoveries, but which have been long current coin in other lands. It is sad to think that the day of the great polymathic student is at an end; that we may, perhaps, never again see a Scaliger, a Haller, or a Humboldt—men who took the whole field of knowledge for their domain and viewed it as from a pinnacle. And yet a specializing generalist may arise, who can tell? Some twentieth century Aristotle may be now tugging at his bottle, as little dreaming, as are his parents or his friends, of a conquest of the mind, beside which the wonderful victories of the Stagirite will look pale. The value of a really great student to the country is equal to half a dozen grain elevators or a new trans-continental railway. He is a commodity singularly fickle and variable, and not to be grown to order. So far as his advent is concerned there is no telling when or where he may arise. The conditions seem to be present even under the most unlikely externals. Some of the greatest students this country has produced have come from small villages and country places. It is impossible to predict from a study of the environment, which a "strong propensity of nature," to quote Milton's phrase again, will easily bend or break.

The student must be allowed full freedom in his work, undisturbed by the utilitarian spirit of the Philistine, who cries *cui bono* and distrusts pure science. The present remarkable position is applied, and industrial trades of all sorts have been made possible by men who did pioneer work in chemistry, in physics, in biology, and in physiology, without a thought of any practical application in their researches. The members of this higher group of productive students are rarely understood by the common spirits, who appreciate as little their unselfish devotion as their unworldly neglect of the practical side of the problems.

Everywhere now the medical student is welcomed as an honored member of the guild. There was a time, I confess, and it is within the memory of some of us, when, like Falstaff, he was given to "taverns and sack and wine and metheglins, and to drinkings and swearings and starings, pribbles and prabbles"; but all that has changed with the curriculum, and the "Meds" now roar you as gently as the "Theologs."

What I have said upon the general life and mental attitude of the student applies with ten-fold force to you on account of the peculiar character of the subject-matter of your studies. Man, with all his mental and bodily anomalies and diseases—the machine in order, the machine in disorder, and the business yours to put it to rights. Through all the phases of its career this most complicated mechanism of this wonderful world will be the subject of your study and of your care—the naked, new-born infant, the artless child, the lad and the lassie just aware of the tree of knowledge overhead, the strong man in the pride of his life, the woman with the benediction of maternity on her brow, and the aged, peaceful in the contemplation of the past. Almost everything has been renewed in the science and in the art of medicine, but all through the long centuries there has been no variableness or shadow of change in the essential features of the life which is our contemplation and our care. The sick love-child of Israel's sweet singer, the plague-stricken hopes of the great Athenian statesman, Elpenor, bereft of his beloved Artemidora, and Tully's daughter mourned so tenderly, are not of any age or any race—they are here with us to-day, with the Hamlets, the Ophelias, and the Lears. Amid an eternal heritage of sorrow and suffering our work is laid, and this eternal note of sadness would be insupportable if the daily tragedies were not relieved by the spectacle of the heroism and devotion displayed by the actors. Nothing will sustain you more potently than the power to recognize in your humdrum routine, as perhaps it may be thought, the true poetry of life—the poetry of the commonplace, of the ordinary man, of the plain, toil-worn woman, with their loves and their joys, their sorrows and their griefs. The comedy, too, of life will be spread before you, and nobody laughs more often than the doctor at the pranks Puck plays upon the Titanias and the Bottoms among his patients. The humorous side is really almost as frequently turned toward him as the tragic. Lift up one hand to heaven and thank your stars if they have given you the proper sense to enable you to appreciate the inconceivably droll situations in which we catch our fellow creatures. Unhappily this is one of the free gifts of the gods, unevenly distributed, not bestowed on all, or on all in equal portions. In undue measure it is not without risk, and in any case in the doctor it is better appreciated by the eye than expressed on the tongue. Hilarity and good humor, a breezy cheerfulness, a nature sloping toward

the southern side, as Lowell has it, help enormously both in the study and in the practice of medicine. To many of a sombre and sour disposition it is hard to maintain good spirits amid the trials and tribulations of the day, and yet it is an unpardonable mistake to go about among patients with a long face.

Divide your attentions equally between books and men. The strength of the student of books is to sit still—two or three hours at a stretch—eating the heart out of a subject with pencil and note-book in hand, determined to master the details and intricacies, focusing all your energies on its difficulties. Get accustomed to test all sorts of book problems and statements for yourself, and take as little as possible on trust. The Hunterian “do not think, but try” attitude of mind is the important one to cultivate. The question came up one day, when discussing the grooves left on the nails after fever, how long it took for the nail to grow out, from root to edge. A majority of the class had no further interest; a few looked it up in books; two men marked their nails at the root with nitrate of silver, and a few months later had positive knowledge on the subject. They showed the proper spirit. The little points that come up in your reading try to test for yourselves. With one fundamental difficulty many of you will have to contend from the outset—a lack of proper preparation for really hard study. No one can have watched successive groups of young men pass through the special schools without a profound sympathy for the haphazard, fragmentary character of their preliminary education. It does seem too bad that we cannot have a student in his eighteenth year sufficiently grounded in the humanities and in the sciences preliminary to medicine—but this is an educational problem upon which only a Milton or a Locke could discourse with profit. With pertinacity you can overcome the preliminary defects, and once thoroughly interested, the work in books becomes a pastime.

A serious drawback in the student life is the self-consciousness, bred of too close a devotion to books. A man gets shy. “dysopic,” as old Timothy Bright calls it, and shuns the looks of men, and blushes like a girl. The strength of a student of men is to travel—to study men, their habits, character, mode of life, their behavior under varied conditions, their vices, virtues and peculiarities. Begin with a careful observation of your fellow-students and of your teachers; then, every patient you see is a lesson in much more than the malady with which he suffers. Mix as much as you possibly can with the outside world, and learn its ways. The student societies, the students’ union, the gymnasium, and the outside social circle should be cultivated systematically to enable you to conquer the diffidence which goes with bookishness and which will

prove a very serious drawback in after-life. I cannot too earnestly impress upon the earnest and attentive men among you the necessity of overcoming this unfortunate failing in your student days. It is not easy for every one to reach a happy medium, and the distinction between a proper self-confidence and "cheek," particularly in junior students, is not always to be made. The latter is met with chiefly among the student pilgrims who, in travelling down the Delectable mountains, have gone astray and have passed to the left hand, where lieth the country of Conceit, the country in which you remember the brisk lad Ignorance met Christian. I wish we could encourage on this continent the habit of wandering among our best students. I do not know that we are quite prepared for it, as there is still great diversity in the curricula, even among the leading schools, but it is undoubtedly a great advantage to study under different teachers, as the mental horizon is widened and the sympathies enlarged. The practice would do much to lessen that narrow "I am of Paul and I am of Apollos" spirit which is hostile to the best interests of the profession.

There is much that I would like to say on the question of work, but I can only spare a few moments for a word or two. Who will venture to settle upon so simple a matter as the best time for work? One will tell us there is no best time; all are equally good; and truly, all times are the same to a man whose soul is absorbed in some great problem. The other day I asked Edward Martin, the well-known story writer, what time he found best for work. "Not in the evening, and never between meals!" was his answer, which may appeal to some of my hearers. One works best at night; another, in the morning; a majority of the students of the past favor the latter. Erasmus, the great exemplar, says, "Never work at night; it dulls the brain and hurts the health." One day, going with George Ross through Bedlam, Dr. Savage, at that time the physician in charge, remarked upon two great groups of patients—those who were depressed in the morning and those who were cheerful, and he suggested that the spirits rose and fell with the bodily temperature—those with very low morning temperatures were depressed, and vice versa. This, I believe, expresses a truth which may explain the extraordinary difference in the habits of students in this matter of the time at which the best work can be done. Outside of the asylum there are also the two great types, the student-lark who loves to see the sun rise, who comes to breakfast with a cheerful morning face, never so "fit" as at 6 a.m. We all know the type. What a contrast to the student-owl with his saturnine morning face, thoroughly unhappy, cheated by the wretched breakfast bell of the two best hours of the day for sleep, no appetite, and permeated with an unspeakable hostility to his *vis-à-vis*, whose morning garrulity and good humor are equally of-

sensitive. Only gradually, as the day wears on and his temperature rises, does he become endurable to himself and to others. But see him really awake at 10 p.m. ! While the plethoric lark is in hopeless coma over his books, from which it is hard to rouse him sufficiently to get his boots off for bed, our lean owl-friend, Saturn no longer in the ascendant, with bright eyes and cheery face, is ready for four hours of anything you wish—deep study, or

“Heart affluence is discursive talk,”

and by 2 a.m. he will undertake to unsphere the Spirit of Plato. In neither a virtue, in neither a fault; we must recognize these two types of students, differently constituted and owing possibly—though I have but little evidence for the belief—to thermal peculiarities.

In the days of probation the student life may be lived by each one of you in its fulness and its joys, but the difficulties arise in the break which follows departure from college and the entrance upon new duties. Much will now depend on the attitude of mind which has been encouraged. If the work has been for your degree, if the diploma has been its sole aim and object, you will rejoice in a freedom from exacting and possibly unpleasant studies, and with your books you will throw away all thoughts of further systematic work. On the other hand, with good habits of observation you may have got deep enough into the subject to feel that there is still much to be learned, and if you have had ground into you the lesson that the collegiate period is only the beginning of the student life, there is a hope that you may enter upon the useful career of the *student-practitioner*. Five years, at least, of trial await the man after parting from his teachers, and entering upon an independent course, years upon which his future depends and from which his horoscope may be cast with certainty. It is all the same whether he settles in a country village, or goes on with hospital and laboratory work; whether he takes a prolonged trip abroad, or whether he settles down in practice, with a father or a friend,—these five waiting years fix his fate so far as the student life is concerned. Without and strong natural propensity to study, he may feel such a relief after graduation that the effort to take to books is beyond his mental strength, and a weekly journal with an occasional text-book furnish pabulum enough, at least; to keep his mind hibernating. But ten years later he is dead mentally, past any possible hope of galvanizing into life as a student, fit to do a routine practice, often a capable, resourceful man, but without any deep convictions, and probably more interested in stocks or in horses than in diagnosis or therapeutics. But this is not always the fate of the student who finishes his work on Commencement day. There are men full of zeal in practice, and who give good service to their fellow creatures, who have not the capacity or the energy to keep up with the

times. While they have lost interest in science, they are loyal members of the profession, and appreciate their responsibilities as such. That fateful first lustrum ruins some of our most likely material. Nothing is more trying to the soldier than inaction, to mark time while the battle is raging all about him; and waiting for practice is a serious strain under which many yield. In the cities it is not so hard to keep up; there is work in the dispensaries and colleges, and the stimulus of the medical societies; but in smaller towns and in the country it takes a strong man to live through the years of waiting without some deterioration. I wish the custom of taking junior men as partners and assistants would grow on this continent. It has become a necessity, and no man in large general practice can do his work efficiently without skilled help. How incalculably better for the seniors; how beneficial to the patients; how helpful in every way if each one of you, for the first five or ten years, associated with a senior practitioner, doing his night work, his laboratory work, his chores of all sorts. You would, in this way, escape the chilling and killing isolation of the early years, and amid congenial surroundings you could, in time, develop into that flower of our calling—the cultivated general practitioner. May this be the destiny of a large majority of you! Have no higher ambition! You cannot reach any better position in a community; the family doctor is the man behind the gun, who does our effective work. That his life is hard and exacting; that he is underpaid and overworked; that he has but little time for study and less for recreation—these are the blows that may give finer temper to his steel, and bring out the nobler elements in his character. What lot or portion has the general practitioner in the student life? Not, perhaps, the fruitful heritage of Judah or Benjamin, but he may make of it the goodly portion of Ephraim. A man with powers of observation, well trained in the wards, and with the strong natural propensity to which I have so often referred, may live the ideal student life, and even reach the higher levels of scholarship. Adams, of Ban-chory (a little Aberdeenshire village), was not only a good practitioner and a skilful operator, but he was an excellent naturalist. This is by no means an unusual or remarkable combination, but Adams became, in addition, one of the great scholars of the profession. He had a perfect passion for the classics, and amid a very exacting practice found time to read “almost every Greek work which has come down to us from antiquity, except the ecclesiastical writers.” He translated the works of Paulus Ægineta, the works of Hippocrates, and the works of Aretæus, all of which are in the Sydenham Society’s publications, monuments of the patient skill and erudition of a Scottish village doctor, an incentive to every one of us to make better use of our precious time.

Given the sacred hunger and proper preliminary training, the student-practitioner requires at least three things with which to stimulate

and maintain his education, a note-book, a library and a quinquennial brain dusting. I wish I had time to speak of the value of note-taking. You can do nothing as a student in practice without it. Carry a small note-book which will fit into your waistcoat pocket, and never ask a new patient a question without note-book and pencil in hand. After the examination of a pneumonia case two minutes will suffice to record the essentials in the daily progress. Routine and system, when once made a habit, facilitate work, and the busier you are the more time you will have to make observations after examining a patient. Jot a comment at the end of the notes; "clear case," "case illustrating obscurity of symptoms," "error in diagnosis," etc. The making of observations may become the exercise of a jackdaw-like trick, like the craze which so many of us have to collect articles of all sorts. The study of the cases, the relation they bear to each other and to the cases in literature—here comes in the difficulty. Begin early to make a threefold category—clear cases, doubtful cases, mistakes. And learn to play the game fair, no self-deception, no shrinking from the truth; mercy and consideration for the other man, but none for yourself, upon whom you have to keep an incessant watch. You remember Lincoln's famous *mot* about the impossibility of fooling all of the people all of the time. It does not hold good for the individual who can fool himself to his heart's content all of the time. If necessary, be cruel; use the knife and the cautery to cure the intumescence and moral necrosis which you will feel in the posterior parietal region, in Gall and Spurzheims center of self-esteem, and where you will find a sore spot after you have made a mistake in diagnosis. It is only by getting your cases grouped in this way that you can make any real progress in your post-graduate education; only in this way can you gain wisdom with experience. It is a common error to think that the more a doctor sees the greater his experience and the more he knows. No one ever drew a more skilful distinction than Cowper in his oft-quoted lines, which I am never tired of repeating in a medical audience :

" Knowledge and wisdom, far from being one,
 Have oftimes no connection. Knowledge dwells
 In heads replete with thoughts of other men;
 Wisdom in minds attentive to their own.
 Knowledge is proud that he has learned so much;
 Wisdom is humble th. he knows no more."

What we call sense or wisdom is knowledge, ready for use, made effective, and bears the same relation to knowledge itself that bread does to wheat. The full knowledge of the parts of a steam engine and the theory of its action may be possessed by a man who could not be trusted to pull the string to its throttle. It is only by collecting data and using them that you can get sense. One of the most delightful

sayings of antiquity is the remark of Heraclitus upon his predecessors—that they had much knowledge, but no sense, which indicates that the noble old Ephesian had a keen appreciation of their difference; and the distinction, too, is well drawn by Tennyson in the oft-quoted line:

“Knowledge comes, but Wisdom lingers.”

Of the three well-stocked rooms which it should be the ambition of every young doctor to have in his house, the library, the laboratory and the nursery—books, balances and bairns—as he may not achieve all three, I would urge him to start at any rate with the books and the balances. A good weekly and a good monthly journal to begin with, and read them. Then, for a systematic course of study, supplement your college text-books with the larger systems—Allbutt or Nothnagel—a system of surgery, and, as your practice increases, make a habit of buying a few special monographs every year. Read with two objects; first, to acquaint yourself with the current knowledge on a subject and the steps by which it has been reached, and secondly, and more important, read to understand and analyse your cases. To this line of work we should direct the attention of the student before he leaves the medical school, pointing in specific cases just where the best articles are to be found, sending him to the index catalogue—that marvellous storehouse, every page of which is interesting and the very titles instructive. Early learn to appreciate the differences between the descriptions of disease and the manifestations of that disease in an individual—the difference between the composite portrait and one of the component pictures. By exercise of a little judgment you can collect at moderate cost a good working library. Try, in the waiting years, to get a clear idea of the history of medicine. Read Foster's Lectures on the History of Physiology, Baas' History of Medicine. Get the Masters of Medicine series, and subscribe to the *Library and Historical Journal*.*

Every day do some reading or work apart from your profession. I fully realize, no one more so, how absorbing is the profession of medicine; how applicable to it is what Michelangelo says, “There are sciences which demand the whole of a man, without leaving the least portion of his spirit free for other distractions”; but you will be a better man and not a worse practitioner for an avocation. I care not what it may be, gardening or farming, literature or history or bibliography, any one of which will bring you in contact with books. (I wish that time permitted me to speak of the other two rooms which are really of equal importance with the library, but which are more difficult to equip, though of coordinate value in the education of

* Brooklyn. Price, \$2 per annum.

his head, his heart and his hand.) The third essential for the practitioner as a student is the quinquennial brain dusting, and this will often seem to him the hardest task to carry out. Every fifth year, back to the hospital, back to the laboratory, for renovation, rehabilitation, rejuvenation, reintegration, resuscitation, etc. Do not forget to take the note-books with you, or the sheets, in three separate bundles, to work over. From the very start begin to save for the trip. Deny yourself all luxuries for it; shut up the room you meant for the nursery,—have the definite determination to get your education thoroughly well started; if you are successful you may, perhaps, have enough saved at the end of three years to spend six weeks in special study; or in five years you may be able to spend six months. Harken not to the voice of old "Dr. Hayseed" who tells you it will ruin your prospects, and that he "never heard of such a thing" as a young man, not yet five years in practice, taking three months' hol'day. To him it seems preposterous. Watch his wince when you say it is a speculation in the only gold mine in which the physician should invest—*Gray Cortex!* What about the wife and babies if you have them—leave them! Heavy as are your responsibilities to those nearest and dearest, they are outweighed by the responsibilities to yourself, to the profession and to the public. Like Isaphaena, the story of whose husband—ardent, earnest soul, peace to his ashes!—I have told in the little sketch of "An Alabama Student," your wife will be glad to bear her share in the sacrifice you make.

With good health and good habits the end of the second lustrum should find you thoroughly established—all three rooms well furnished, a good stable, a good garden, no mining stock, but a life insurance and, perhaps, a mortgage or two on neighboring farms. Year by year you have dealt honestly with yourself; you have put faithfully the notes of each case into its proper place, and you will be gratified to find that, though the doubtful cases and mistakes still make a rather formidable pile, it has grown relatively smaller. You literally "own" the countryside, as the expression is. All the serious and dubious cases come to you, and you have been so honest in the frank acknowledgment of your mistakes, and so charitable in the contemplation of theirs, that neighboring doctors, old and young, are glad to seek your advice. The work which has been very heavy is now lightened by a good assistant, one of your own students, who becomes in a year or so your partner. This is not an overdrawn picture, and it is one which may be seen in many places, except, I am sorry to say, in the particular as to the partners. This is the type of man we need in the country districts and the smaller towns. He is not a whit too good to look after the sick, not a whit too highly educated—impossible! And with an optimistic temperament and a good digestion he is the very best product of our profession, and may

do more to stop quackery and humbuggery, inside and outside of the ranks, than could a dozen prosecuting county attorneys. Nay, more! such a doctor may be a daily benediction in the community—a strong, sensible, whole-souled man, living a life often of great self-denial, always of tender sympathy, worried neither by the vagaries of the well nor the testy waywardness of the sick, and to him, if any, may come (even when he knows it not) the true spiritual blessing—that “blessing which maketh rich and addeth no sorrow.”

The danger in such a man's life comes with prosperity. He is safe in the hard-working day, when he is climbing the hill, but once success is reached, with it comes the temptations to which many succumb. Politics have been the ruin of many country doctors, and often of the very best, of just such a good fellow of whom I have been speaking. He is popular; he has a little money; and he, if anybody, can save the seat for the party! When the committee leaves you, take the offer under consideration, and if the ten or twelve years you have kept on intimate terms with those friends of your student days, Montaigne and Plutarch, you will know what answer to return. If you live in a large town, resist the temptation to open a sanatorium. It is not the work for a general practitioner, and there are risks that you may sacrifice your independence and much else besides. And, thirdly, resist the temptation to move into a larger place. In a good agricultural district, or in a small town, if you handle your resources aright, taking good care of your education, of your habits and of your money, and devoting part of your energies to the support of the societies, etc., you may reach a position in the community, of which any man may be proud. There are country practitioners among my friends with whom I would rather change places than with any in our ranks, men whose stability of character and devotion to duty make one proud of the profession.

Curiously enough, the student practitioner may find studiousness to be a stumbling-block in his career. A bookish man may never succeed; deep-versed in books, he may not be able to use his knowledge to practical effect; or, more likely, his failure is not because he has studied books much, but because he has not studied men more. He has never got over that shyness, that diffidence against which I have warned you. I have known instances in which this malady was incurable; in others I have known a cure effected not by the public, but by the man's professional brethren, who, appreciating his work, have insisted upon utilizing his mental treasures. It is very hard to carry student habits into a large city practice; only zeal, a fiery passion, keeps the flame alive, smothered as it is so apt to be by the dust and ashes of the daily routine. A man may be a good student who reads only the

book of nature. Such an one* I remember in the early days of my residence in Montreal—a man whose devotion to patients and whose kindness and skill quickly brought him an enormous practice. Reading in his carriage and by lamplight at Lucina's bedside, he was able to keep well informed; but he had an insatiable desire to know the true inwardness of a disease, and it was in this way I came into contact with him. Hard pushed day and night, yet he was never too busy to spend a couple of hours with me searching for data which had not been forthcoming during life, or helping to unravel the mysteries of a new disease, such as pernicious anemia.

The *student specialist* has to walk warily, as with two advantages there are two great dangers against which he has constantly to be on guard. In the bewildering complexity of modern medicine it is a relief to limit the work of a life to a comparative narrow field which can be thoroughly tilled. To many men there is a feeling of great satisfaction in the mastery of a small department, particularly one in which technical skill is required. How much we have benefited from this concentration of effort in dermatology, laryngology, ophthalmology, and in gynecology! Then, as a rule, the specialist is a freeman, with leisure or, at any rate, with some leisure; not the slave of the public, with the incessant demands upon him of the general practitioner. He may live a more rational life, and has time to cultivate his mind, and he is able to devote himself to public interests and to the welfare of his professional brethren, on whose suffrages he so largely depends. How much we are indebted in the larger cities to the disinterested labors of this favored class, the records of our libraries and medical societies bear witness. The dangers do not come to the strong man in a specialty, but to the weak brother who seeks in it an easier field in which specious garrulity and mechanical dexterity take the place of solid knowledge. All goes well when the man is larger than his specialty and controls it, but when the specialty runs away with the man there is disaster, and a topsy-turvy condition which, in every branch, has done incalculable injury. Next to the danger from small men is the serious risk of the loss of perspective in prolonged and concentrated effort in a narrow field. Against this there is but one safeguard—the cultivation of the sciences upon which the specialty is based. The student specialist may have a wide vision—no student wider—if he gets away from the mechanical side of the art, and keeps in touch with the physiology and pathology upon which his art depends. More than any other of us, he needs the lessons of the laboratory, and wide contact with men in other departments may serve to correct the inevitable tendency to a narrow and perverted vision, in which the life of the ant-hill is mistaken for the world at large.

*The late John Bell.

Of the *student-teacher* every faculty affords examples in varying degrees. It goes without saying that no man can teach successfully, who is not at the same time a student. Routine, killing routine, saps the vitality of many who start with high aims, and who, for years, strive with all their energies against the degeneration which it is so prone to entail. In the smaller schools isolation, the absence of congenial spirits working at the same subject, favors stagnation, and after a few years the fires of early enthusiasm no longer glow in the perfunctory lectures. In many teachers the ever-increasing demands of practice leave less and less time for study, and a first-class man may lose touch with his subject through no fault of his own, but through an entanglement in outside affairs which he cannot control, yet deeply regrets. To his five natural senses the student teacher must add two more—the sense of responsibility and the sense of proportion. Most of us start with a highly developed sense of the importance of the work and with a desire to live up to the responsibilities intrusted to us. Punctuality, the class first, always and at all times, the best that a man has in him, nothing less; the best the profession has on the subject, nothing less; fresh energies and enthusiasm in dealing with dry details; animated, unselfish devotion to all alike; tender consideration for his assistants—these are some of the fruits of a keen sense of responsibility in a good teacher. The sense of proportion is not so easy to acquire, and much depends on the training and on the natural disposition. There are men who never possess it; to others it seems to come naturally. In the most careful ones it needs constant cultivation—*nothing over much* should be the motto of every teacher. In my early days I came under the influence of an ideal student teacher, the late Palmer Howard, of Montreal. If you ask what manner of man he was, read Matthew Arnold's noble tribute to his father in his well-known poem, *Rugby Chapel*. When young Dr. Howard had chosen a path—"path to a clear-purposed goal," and he pursued it with unswerving devotion. With him the study and the teaching of medicine were an absorbing passion, the ardor of which neither the incessant and ever-increasing demands upon his time nor the growing years could quench. When I first, as a senior student, came into intimate contact with him in the summer of 1871, the problem of tuberculosis was under discussion, stirred up by the epoch-making work of Villemin and the radical views of Niemeyer. Every lung lesion at the Montreal General Hospital had to be shown to him, and I got my first-hand introduction to Laennec, to Graves and to Stokes, and became familiar with their works. No matter what the hour, and it usually was after 10 p.m., I was welcome with my bag, and if Wilks and Moxon, Virchow, or Rokitanski, gave us no help, there were the Transactions of the Pathological Society and the big

Dictionnaire of Dechambre. An ideal teacher because a student, ever alert to the new problems, an indomitable energy enabled him in the midst of an exacting practice to maintain an ardent enthusiasm, still to keep bright the fires which he had lighted in his youth. Since those days I have seen many teachers and I have had many colleagues, but I have never known one in whom were more happily combined a stern sense of duty with the mental freshness of youth.

But as I speak from out the memory of the past, there rises before me a shadowy group, a long line of students whom I have taught and loved, and who have died prematurely—mentally, morally, or bodily. To the successful we are all willing and anxious to bring the tribute of praise, but none so poor to give recognition to the failures. From one cause or another, perhaps because, when not absorbed in the present, my thoughts are chiefly in the past, I have cherished the memory of many young men whom I have loved and lost. *Io victis!* let us sometimes sing of the vanquished. Let us sometimes think of those who have fallen in the battle of life, who have striven and failed, who have failed even without the strife. How many have I lost from the student band by mental death, and from so many causes—some still-born from college, others dead within the first year of infantile marasmus, while mental rickets, teething, tabes and fits have carried off many of the most promising minds! From improper feeding within the first five fateful years scurvy and rickets head the mental mortality bills of students. To the teacher-nurse it is a sore disappointment to find at the end of ten years so few minds with the full stature, of which the early days gave promise. Still, so wide-spread is mental death that we scarcely comment upon it in our friends. The real tragedy is the moral death, which in different forms, overtakes so many good fellows who fall away from the pure, honorable and righteous service of Minerva into the idolatry of Bacchus, of Venus or of Circe. Against the background of the past these tragedies stand out, lurid and dark, and as the names and faces of my old boys recur (some of them my special pride), I shudder to think of the blighted hopes and wrecked lives, and I force my memory back to those happy days when they were as you are now, joyous and free from care, and I think of them on the benches, in the laboratories and in the wards—and there I leave them. Less painful to dwell upon, though associated with a more poignant grief, is the fate of those whom physical death has snatched away in the bud or blossom of the student life. These are among the tender memories of the teacher's life, of which he does not often care to speak, feeling with Longfellow that the surest pledge of their remembrance is "the silent homage of thoughts unspoken." As I look back it seems now as if the best of us had died, that the brightest and the keenest had been

taken, and the more commonplace among us had been spared. An old mother, a devoted sister, a loving brother, in some cases a broken-hearted wife, still pay the tribute of tears for the untimely ending of their high hopes, and in loving remembrance I would mingle mine with theirs. What a loss to our profession have been the deaths of such true disciples as Zimmerman, of Toronto; of Jack Cline and of R. L. MacDonnell, of Montreal; of Fred. Packard and of Kirkbride, of Philadelphia; of Oppenheimer and of Oehner, in Baltimore—cut off with their leaves still in the green, to the inconsolable grief of their friends!

To each one of you the practice of medicine will be very much as you make it—to one a worry, a care, a perpetual annoyance; to another, a daily joy and a life of as much happiness and usefulness as can well fall to the lot of man. In the student spirit you can best fulfil the high mission of our noble calling—in his *humility*, conscious of weakness, while seeking strength; in his *confidence*, knowing the power, while recognizing the limitations of his art; in his *pride* in the gloriouse heritage from which the greatest gifts to man have been derived; and in his sure and certain hope that the future holds for us still richer blessings than the past.

SMALLPOX AND ITS TREATMENT.*

By A. LEITCH, M.D., St. Thomas.

I SHALL offer no apology for this paper, but will at once proceed with the subject under consideration. I may say that I have attended smallpox on several occasions, beginning with the severe epidemic in St. Catharines in 1876, and have treated ninety-two cases, with two deaths, nearly half of the number being negroes, or partly of that nationality, and the two deaths were colored; one over eighty years of age and bedridden for six months previous to the attack, the other at the time of contracting the disease suffering from delirium tremens, so that I do not feel myself responsible for their non-recovery. The stages of smallpox are, as you are all aware, incubation, primary fever, eruption, secondary fever, and desquamation. The period of incubation lasts in genuine smallpox about twelve days, in varioloid and discrete cases a somewhat shorter period, and may in some cases be shortened by the influence by vaccination, more particularly should it take place in the first or second days of incubation. I have seen the disease cut short in that manner, aborting at the macular and papular stage and modified in the vesicular stage. The symptoms at first being languor, headache, vomiting, severe pain in the back, moderately rapid pulse and

*Read at meeting of Ontario Medical Association.

temperature, the temperature not being so high as in scarlet fever, and falling upon the appearance of the rash, distinguishing it from scarlet fever, as in the latter the temperature remains higher, even in many cases raises after the rash appears. On the third day you have the rash, appearing at first macular, small and reddish in color, first appearing upon the face, then on the wrists, neck, arms, trunk and lower limbs, most frequently first appearing upon the forehead and lips and then upon the wrists. The rash is more easily seen upon the throat and roof of mouth, and may even appear on throat before it appears upon face. It now changes to the papular form and can easily be felt under the skin like small shot and should at all times confirm the diagnosis from either scarlet fever, measles, or varicella. The throat rash is now very marked, more especially upon the soft palate, and is distinct from the red rash of scarlet fever. Now they become vesicles, and may in discrete cases be mistaken for varicella, but the cells are multiple and not single as in varicella, and a careful examination and puncture would prevent mistaken diagnosis. The vesicles now become pustular and then umbilicated; the disease has now advanced about nine days since eruption began. The pustules now flatten and scab, which stage is followed by desquamation in from five to nine days, which process is generally complete in about six or seven days. In diagnosis, you have as a rule, only to consider scarlet fever, measles and varicella. Only confluent or semi-confluent variety should be mistaken for scarlet fever or measles, and the discrete or varioloid for varicella.

From scarlet fever you have more pain in the back, and the fall in the temperature when the rash appears; also the deeper red of the rash, not crimson, as in scarlet fever, the macular and papular form of the rash. The marking upon the soft palate, and in second day the defined strawberry tongue of scarlet fever, and it is in this stage that the error in diagnosis should be avoided.

From measles the peculiar rash and absence of coryza and cough should confirm your diagnosis.

From varicella in the confluent and semi-confluent variety a mistake should never be made, as the extensive rash and its history and peculiar macular and papular form should be ample for a differential diagnosis; but in discrete or varioloid a mistake might occur unless care be exercised in history of case and a careful examination of the vesicles, for it is at this stage that errors make their appearance. The careful examination of the vesicles, whether single or multiple celled, would confirm diagnosis. Also in varicella your crop of vesicles appear as such, and do not appear as maculæ and papulæ before becoming vesicles, and are as a rule pustular immediately upon coming on, and are seldom umbilicated.

As to Cuban itch, I never saw a case, and have noticed that all such cases proved to be smallpox, and have caused an immense amount of trouble by the erroneous diagnosis.

Treatment.—From the first support your patient by a liberal diet, keeping the secretions active, remembering that the skin is unable to perform its part, therefore the bowels and kidney must be active. I at once, after caring for the secretions, begin with calcium sulphide, $\frac{1}{4}$ gr. every three hours; also ferri et quin. citratis, 5 grs. every four or six hours; and by so doing have been enabled to secure perfect success with my seventeen patients treated under that manner. Should eyes become affected, look sharply after them; also examine the lungs for bronchitis and pneumonia, remembering the tendency to such trouble in all exanthemata. I also use a solution of flexible collodion upon the face and exposed parts; also a red blind upon the windows.

I may say that previous to the use of calcium sulphide I had good success in saving the lives of my patients, but never succeeded in preventing pitting until I employed it in 1903.

I watched its action carefully in 1903 and 1904, and found that it cut short the disease, modified the eruption by preventing the formation of pus in the vesicles, and thereby prevented pitting, which I contend is the greatest blessing of the present day in the treatment of smallpox.

I first used it in the epidemic of 1903, which was a severe type. Coming from Cleveland to Galt, and from Galt to St. Thomas, I had eleven patients; one confluent, four semi-confluent, and the others discrete, three being badly marked all over the face, head and body, yet not a single mark remains upon any of the eleven treated by me. In 1904 I treated six, all discrete cases, with the same results—no marking. We all know the effect of the remedy in boils and carbuncles, and here it seems to be a specific.

I may say that in 1904 a mother and daughter, nine years old, were vaccinated by the Medical Health Officer, and did not take. Two weeks subsequently I vaccinated them with perfect success. You will notice they were immune to smallpox, yet not to vaccination, although exposed at all times for over two weeks. Also this woman and another girl who had a good attack of smallpox, were both pregnant four and five months, yet carried to full term and had healthy, unmarked children.

The authorities of the Homewood Retreat at Guelph are going on with the erection of two handsome additions to the institution.

RADIUM: ITS VALUE IN MEDICINE.

By BYRON METZENBAUM, B.S., M.D., Cleveland, Ohio.

THE following serves to explain the accompanying photographs of cases treated by the aid of radium. The paper is virtually an abstract of a chapter contributed to the "International Clinics," Vol. IV., Series XIV., published by Lippincott & Co., Philadelphia.

When radium of at least 7,000 activity, contained in hermetically sealed tube, is placed on the unbroken skin for a period of at least three hours, it may produce an irritation which may finally result in ulceration of the skin.

When tubes containing radium of 15 grains each of from 40 to 100 activity, and tubes of 20 milligrams of 7,000 activity are placed on ulcerated areas, they produce sensations not unlike the feeling one experiences in a burn when standing near a hot stove. The radium also causes a peculiar pink injection of the ulcerated and surrounding tissues, which may last for a few hours to as long as twenty-four hours.

From very careful observations no difference could be noticed in the physical or therapeutic results, when using radium of 100 activity or 7,000 activity.

REPORT OF CASES.

In all cases the tubes containing radium were placed directly on the area to be treated and held in place by strips of adhesive plaster. The tubes of radium varied from 40 activity to 7,000. A treatment was given every three or four days and for thirty-five to forty-five minutes each time. No internal treatment was given, and excepting the application of hot water to the parts no local treatment whatsoever was used.

CASE 1.—Rodent ulcer in a woman, aged 57, extending from the middle of the right supra-orbital ridge to within two and one-half centimetres of the ear and well down on the cheek, causing a loss of the eye. X-ray treatment had been applied for a period of eight months, but the ulcer continued to spread. Applied tubes of radium of low activity on April 14th, 1904; after fifteen days the ulcerated surface had healed over. The photograph, taken after forty days, shows entire ulcerated surface replaced by fine white scar tissue. This case has remained well for more than one year.

CASE 2. Male, aged 27. Four years ago a lupoid patch developed to the right of the chin, covering an area of one and one-half inches in width, three inches in length. The ulcerated area was dissected out and followed by a course of x-ray treatment. The surface healed, leaving a scar of very firm fibrous tissue, which drew down the angle of the mouth, causing an impediment in his speech. February, 1904, an ulcer the size of a quarter developed on the right side of the scrotum.

This did not heal under various methods of treatment for a period of three months. May 23rd, 1904, applied radium of low activity to the ulcerated area, and, after three applications, the same healed, and has remained healed ever since. To the old scar on the face radium of low activity was applied at four different times. This caused the firm, fibrous scar to become soft and pliable, so that the angle of the mouth is no longer drawn down to the same degree, nor is it apparent as before.

CASE 3. A young lady, aged 22, had a large lupoid patch on her right cheek, of five centimetres in length, two and one-half centimetres in width, which has healed after twelve different cauterizations, leaving a rather rough and firm scar. Around this healed area was a rim, one centimetre in width, which was red; in many places there were denuded areas; in all there were fifteen applications of the tubes of radium, which caused the red rim to disappear and the small ulcerated areas to heal; also the firm and somewhat rough old scar became soft and pliable, so that it is but slightly noticeable.

CASE 4. Woman, aged 71, developed a small epithelioma on her right cheek, measuring one and one-half centimetres in diameter. The glands of the neck were not infiltrated. The radium was applied nine different times and caused the depression to fill in and heal over. One year has elapsed since the last treatment, and excepting for a slight redness of the area, nothing is noticeable.

CASE 5.—Woman, aged 40, had a mole above the right supra-orbital ridge. She persistently picked at this until she says she pulled it out clear from the roots. Two and one-half months from this time I saw her. There was a deep hole where the mole had been with a diameter of two centimetres, extending down to the periosteum of the bone. The edges were highly inflamed, as well as the surrounding tissue, and there was a discharge of blood and serum. This is undoubtedly an epithelioma developed by irritating the mole. During November she received eight applications of the radium, and the deep, ulcerated surface has filled in and healed over so as to be barely noticeable. At the present time this case seems perfectly well.

CASE 6.—Woman, aged 32, has very extensive lupus vulgaris extending over the entire right side of her face, from the ear up into the scalp, down to the cheek, and back to the angle of the jaw and around to the chin. Various methods of treatment had been tried during many years. In all, she has had fourteen applications of radium, and great numbers of the elevated areas have smoothed down, and there is a great amount of new intervening scar tissue which is soft and pliable. Due to illness, no further applications have been made, and all the healed areas have remained well, so this case gives fair promise of becoming entirely well.

CONCLUSIONS.

From these cases the following inferences may be drawn, namely :

1. That the rays coming from radium, when the same is contained in hermetically sealed tubes placed directly on an ulcerated area, that a slight sensation will be felt in from seven to eight minutes, but when the skin is unbroken, no sensation is felt, even if the tubes of radium remain on for a period of thirty-five minutes.

2. If these tubes of radium are kept on an ulcerated area for a period of thirty-five minutes they produce an increased redness of the diseased part and cause an erythema of the surrounding tissue which may last for several hours or as long as twenty-four hours.

3. That radium rays have caused an ulcerated lupoid area in three cases, an ulcerated area of a rodent ulcer, and two small epitheliomata to heal over, and that these former ulcerated areas have become firm, white scar tissue, which gives them every appearance as though they were healed, and in one case of very extensive lupus vulgaris it has produced such marked improvement that the case may reasonably be considered as healed.

4. That the rays of radium have caused the firm, rough scar tissue in two cases of old lupoid areas to become soft and pliable, and therefore are not as disfiguring.

5. These effects of radium have been very rapid, considering the usual intractability of this class of diseases, and considering that in all cases various therapeutic measures and means have been tried repeatedly with little or no effect.

6. What is of very great practical value, if radium has a therapeutic use, namely, these results have been obtained with tubes of radium of low activity, costing but a few dollars, while it is supposed that only radium of high or very high activity, costing several hundred dollars a tube, possessed any therapeutic properties.

7. The treatment in none of these cases commenced longer than a year and a half ago, and while four of these cases have remained healed for a period of over one year, yet many years must elapse to see whether the disease will not reassert itself again before the same can be pronounced as cured. And if, after a lapse of several years, cases of lupus, rodent ulcer or epithelioma, treated by the aid of radium, remain cured, then radium is only to be classed with the Finsen light and the x-rays of surgery, as one of the methods in the treatment of small epithelioma and rodent ulcers.

8. In the two figures of the false joint of the ulna is seen a very good example of the comparative value of radium and x-rays in the examination of bones directly. The x-ray is a three-minute exposure,

while the radium picture is a one-week exposure, from which can be concluded that the x-rays show far greater differentiation between the bone and connective tissue than does radium, and since it requires at least several hours for the radium rays to penetrate the flesh it would, therefore, be impracticable to use radium for making skiagraphs.

9. The conclusions drawn from nearly one hundred experiments give positive proof that while suspending tubes of radium of various strengths for long periods in various solutions and various powders, that neither these solutions nor the powders are capable of affecting photographic plates, and are, therefore, not rendered radio-active and can in no way affect the metabolism or pathology of living organisms.

Monographs on the therapeutic and physical properties of radium will be cheerfully sent to any who may desire the same.

1220 Wilson Ave., Cleveland, Ohio.

THE CARE OF THE INSANE.

Every lover of humanity loves the name of John Conolly. His was a great work and it was done at an opportune time. Seventy-five years ago the asylums in Britain were in a bad condition and cruelty was the order of the day in far too many instances.

But knowledge brings power. It has been discovered that the insane may be treated on gentler plans than of yore, and with better results. But as we advance, we find that many cases of mental derangement are temporary, and, if well managed at the commencement, are curable. This view is leading up to the establishment of hospital wards for such cases where cases may be placed on probation for a time. In many instances they will never require to be sent further.

But we are marching on in another line. Preventive medicine, which has done so much in other fields, is holding out the anchor of hope here also. Alcohol, heredity and syphilis are responsible for most of the insanity that curses modern civilization. Two of these causes are to a great extent preventable, and, with their prevention, heredity would assume a more normal average. Steps should be taken to restrain the marriage of physical and mental degenerates.

We congratulate the Hon. Mr. Hanna on the part taken by him in the calling of the recent meeting of asylum physicians, and also upon the success of the same. Let us have more of such gatherings. Good seed in good soil and well watered is sure to bring forth an abundant and good crop.

QUEBEC MEDICAL NEWS

Conducted by MALCOLM MACKAY, B.A., M.D., Windsor Mills.

The prospects for a successful years' work at McGill University are particularly bright. The amalgamation with Bishop's College has had a stimulating effect and the co-operation of the new element, both in the staff and the undergraduate body, will tend to promote the best interests of the faculty. Already numerous applications for admission have been received and it is expected that the former students of Bishop's will not only come in a body but will bring a large number of new men with them who would otherwise have sought admission elsewhere.

A few men spent a great part of their holidays about the hospitals, and their number was increased to fifty or sixty some three weeks before the session opened in order that they might become more familiar with the practical work of their course. The majority attend the Montreal General Hospital or the Royal Victoria. In the latter institution the students have found some startling changes.

On the surgical side the new operating theatre is finished and presents a magnificent appearance. The whole room is lined with marble throughout, even the swinging doors being composed of solid blocks and the glazed tiling is the very best obtainable. Distilled water only is used for washing up and the mechanism of the sterilizers, basins, etc., is of the latest and best description. Many hospitals in Europe and America have been visited with the purpose of introducing every feature which has proved to be of use, and no expense has been spared to render the theatre the most complete of its kind. The old operating room has been torn down and in its place there has been erected another exactly similar to the new one. On the medical side the activity has been no less marked, for a complete hydrotherapeutic department has been built with a diet kitchen on the upper story. The main cooking department, while being on the same flat, is separate from this kitchen, and it also has been remodelled and finished in glazed tiles, making a truly magnificent apartment.

Between the east (medical) wing and the pathological department, the old medical theatre has been removed and a new building put up which is to contain, besides a theatre, new wards exclusively for typhoid patients, and on the top story a large sun parlor enclosed with glass for the use of convalescents both in winter and summer.

One of the most important additions will be the nurses' home, which has been started upon the west side of the hospital. Lately, owing to the rapid growth of the hospital, accommodation for the nursing staff has become inadequate and the need for such a building

has been felt for some time. At the General Hospital the interest of the students is centered chiefly in the new neurological outdoor department. This has been completed according to the ideas of the neurologist and is in every way most adequate and will be a great addition to the therapeutic needs of the cases requiring electrical treatment.

The student will find few marked changes in the college itself, although there will be a few additions to the faculty. The library has had substantial additions and is still the largest special collection of medical works in connection with any college on the continent. The librarians have been endeavoring to increase the circulation of books among practitioners outside of the city. At the present time the medical men of Montreal make full use of their opportunities for consulting books of reference, but few of the graduates realize that they can obtain any of the books in the library, no matter where they may live, by simply sending a request to the librarian and paying the express charges. It is hoped that in a short time this branch of the work may be greatly increased and that a sum of money may be granted for the purpose of paying charges for the delivery of the books at a distance.

There was a large attendance of students and medical men at Dr. Jacobi's opening lecture on Sept. 19th. McGill University has been fortunate in its selection of eminent men for this function and this year was no exception to the rule. Dr. Jacobi was splendidly received by the students and spoke for more than an hour, at the conclusion he said "perhaps you may think I have kept you rather a long time, but you must remember that I have been waiting seventy-five years for this opportunity! The remark was received with applause, which showed that there was no need for any apology.

Dr. Jacobi pointed out to the students that in their four years' course they were expected to assimilate the results of the studies of hundreds of years, and it was but fitting that they should occasionally call to mind the names of some of the great men whose work and whose discoveries had so advanced the profession.

He proceeded to pass in review the lives of many of the men whose memories he considered should be preserved. Many of these men he himself had been acquainted with, and the lecturer provoked many a hearty laugh with some of his anecdotes.

He impressed upon the students the importance and value of experience as general practitioners, and warned them against limiting themselves to 'the narrow horizon, amounting almost to blindness', of the specialist.

In conclusion he urged them to preserve their ideals to the end, and to remember that, while being citizens in their profession, it was highly important that they should be citizens also in the community.

CURRENT CANADIAN MEDICAL LITERATURE.

The Canadian Practitioner, September, 1905.

RESECTION OF THE SPLENIC FLEXURE OF THE COLON FOR MALIGNANT DISEASE.

Dr. Ingersoll Olmstead, of Hamilton, read this paper and exhibited the patient at the Ontario Medical Association. The doctor saw the patient along with Dr. Arnott in March, 1904, and was informed that the patient had suffered for several days from obstinate constipation and a good deal of cramps and vomiting. There was some fever and the pulse was increased in frequency. Her first attack was in January, 1902, when she was awakened with pains and vomiting. When the bowels acted there was some blood in the motion. During the next two years she had frequent attacks of his sort, which would last from a few hours to a few days. As soon as the bowels moved she would obtain relief, and usually there was some blood in the stools. It was always very difficult to get the bowels to move in these attacks. During one of these attacks a lump about the size of a walnut was found in the left side, between the last rib and the ilium. The diagnosis of cancer was made.

She was operated upon on 12th March, 1904, under ether. An oblique incision was made following the course of the external oblique muscle to the inner side of the tumor. On opening the abdomen the tumor was found in the upper portion of the descending colon and attached to the transverse colon, but the splenic flexure as free. It was also attached to the omentum. No glandular involvement could be made out.

The distal end of the transverse colon, the splenic flexure and the upper end of the descending colon were freed from their attachments, clamped with Kocher's clamps, and removed. An end-to-end anastomosis was made by means of sutures over a large Robson's bone bobbin. The bowel walls were hypertrophied and three rows of sutures were inserted of fine black silk. The omentum was also stitched to the junction line. She made a good recovery. The lumen of the bowel was almost closed by the tumor, only a small opening being left in the centre. The upper portion was ulcerated. In the bowel was a plum stone, which acted like a valve and might close the opening.

The patient had suffered with asthma prior to the commencement of the growth. During its presence she was free from the asthma, but after its removal the asthma again returned.

TREATMENT OF TUBERCULAR DISEASES OF THE BONES
AND JOINTS.

Dr. W. E. Gallie gives in this paper a few useful suggestions on the treatment of these diseases in the children's hospital.

He contends the utmost attention should be paid the hygienic management of such cases. Arrangements should be made to keep the patient in the fresh air practically all the time. He recommends that such patients should sleep on verandahs day and night, with awnings arranged to shut off the sun in the hot part of the day and to protect the bed in windy weather. In other words, these cases should get a maximum of oxygen, as we try to secure for patients with pulmonary tuberculosis.

With regard to exercise in tuberculosis of the knee, hip and spine, a period of rest is enjoined, varying from four to six months, and then by means of some fixation apparatus the patients are allowed a judicious amount of outdoor exercise. He refers to the practice in New York of allowing them to take exercise from the commencement of the treatment as a means of overcoming the bad surroundings in many cases. Although they are kept in bed for some months, they are allowed a certain amount of exercise of their arms. Breathing exercises are also taught, as a means of increasing the vital capacity. Massage is also useful.

The diet should be of a nutritious and digestible character. Eggs and rare meats are valuable among the solids and milk among the liquids. The stuffing of these cases with fats is condemned, as it only increases the auto-intoxication present.

Not much can be expected from drugs, and they should never be given so as to derange the digestion. Iron may be useful for the anaemia, but it is apt to disagree with the stomach. Cod liver oil and hypophosphites do not receive much praise. The final word is, that the vitality cannot be raised by means of drugs.

The Dominion Medical Monthly, August, 1905.

THE SELECTION OF CASES FOR THE MUSKOKA HOSPITAL
FOR CONSUMPTIVES.

Dr. C. D. Parfitt contributes a lengthy article upon this subject. He points out that an institution with about seventy-five beds and only fifty to sixty available for patients, on account of lack in maintenance funds, must limit its work to incipient cases, as it cannot be expected

to become merely a home for the consumptives of the province, with a total of perhaps 10,000 cases in all stages. He admits that a few advanced cases have found admittance into the Muskoka Free Hospital for Consumptives, because it was filled when it was opened by cases in various stages, and since an advanced case occasionally finds admittance through the facts of the case not being correctly stated in the application. The claim is made that in carefully selected cases good results are obtained by the hospital treatment which is limited to four months.

With regard to classification, the writer of the paper adopts that of the National Association for the Prevention of Tuberculosis, as follows:—

1. *Incipient or favorable*.—Slight initial lesion in the form of infiltration limited to the apex or a small portion of one lobe, no tuberculous complications, slight or no constitutional symptoms, slight or no elevation of temperature or acceleration of pulse, expectoration usually small in amount with or without bacilli.

2. *Moderately Advanced*.—No marked impairment of function, either local or constitutional, localized consolidation moderate in extent with little or no evidence of destruction of tissue, or disseminated fibroid deposits, or serious complications.

3. *Far Advanced*.—Marked impairment of local and constitutional function, localized consolidation intense, or areas of softening, or serious complications.

4. *Acute Miliary Tuberculosis*.

With regard to the physical condition of the lungs, the following classes are recognized:—

1. Slight lesion extending at most to the volume of one lobe or two half lobes.

2. Slight lesion extending further than one, but at most to the volume of two lobes, or severe lesion extending at most to the volume of one lobe.

3. All lesions which in extent of the parts affected exceed two.

Slight lesions are defined as those with disseminated centres of disease which manifest themselves by slight dulness, by harsh, feeble or broncho-vesicular breathing and by râles. Severe lesions are those with consolidation and excavation, as shown by marked dulness, tympanitic sounds, very feeble broncho-vesicular, bronchial or amphoric breathing, and by râles. But the consideration of the local conditions must not blind one to the other factors which may make a case favorable or the reverse. Among these factors may be mentioned family history, present condition, mode of onset, symptoms, and complications.

history, previous history, present condition, mode of onset, symptoms, and complications.

The article concludes with a well-merited attack upon doctors who fail to recognize tuberculosis in its early stage, and only begin to give their cases attention when all hope is gone.

TWO HUNDRED AND SEVENTY LAPAROTOMIES.

Dr. T. K. Holmes, of Chatham, read this paper at the Ontario Medical Association. His cases were appendisectomies, 111; suspension of uterus, 38; herniotomies, 22; ovariectomies, 30; hysterectomies, 14; extrauterine pregnancies, 7; suppurative tumors, 4; suppurating ovary, 1; exploratory operations, 10; myomectomies, 5; pelvic abscess, 9; pyosalpinx, 7; tubercular peritonitis, 4; procidentia uteri, 3; gall stones, 4, and nephrectomy, 1. The deaths were six in number and as follows: appendisectomies, 2; ovariectomy, 1; hysterectomy, 1; myomectomy, 1, and pyosalpinx, 1.

Except in emergency cases the patient's digestive organs are got into as satisfactory a condition as possible. About thirty-six hours before the operation the bowels are moved by a brisk purgative. The evening before the field of the operation is shaved, washed with soap and water, then with a saturated solution of permanganate of potash, and then by a solution of oxalic acid. A gauze compress wrung out of 1-2,000 bichloride solution is then applied. When the patient is under the anaesthetic this is removed and the part washed with soap and water followed by alcohol, ether or bichloride.

All parts of the body are warmly clad. The assistants wear sterilized suits and have their hands and arms carefully prepared. Sponges, are passed by means of forceps. Those handling sponges and instruments wear gloves, while those intimately connected with the operation wear gauze masks and caps.

The avoidance of shock is of the utmost importance and for this end attention is given to keep the patient warm, to operate rapidly, to control hæmorrhage, to cover the exposed bowels with towels wrung out of warm salt solution, and the avoidance of handling the viscera. When the transfusion of salt solution is likely to be required it is resorted to before shock comes on. Adrenalin is used to raise arterial tension. Lavage of the stomach lessens vomiting. Drainage is only employed in infected cases.

Some of the cases were of a very serious character, such as a ruptured appendix in a pregnant woman, two myomectomies in pregnant women, five ruptured extra-uterine pregnancies, and one myoma where a portion of the intestine had to be resected.

BURNS FROM LIVE WIRES.

Dr. H. H. Oldright, of St. Catharines, reviews the literature upon the subject and reports two cases. In these burns there is a destruction of tissue, somewhat resembling x-ray burns, which makes them slow to heal. As large areas of skin may be destroyed, skin grafting may become useful. The electric fluid is more penetrating than caustics, steam, fire, or hot water, and consequently destroys much tissue.

The Montreal Medical Journal, August, 1905.

MEDICAL MEMOIRS OF BYTOWN.

Such is the title of Dr. H. Beaumont Small's article. He speaks of the period from 1826 to 1854, when the present city of Ottawa was called Bytown. In the year 1826, Col. By commenced the construction of the Rideau Canal. That was a period of the old school, heroic methods and heroic men.

In these early days there was a large swamp where Ottawa now stands, and ague was very common and often very severe, a condition which continued to some extent to the sixties.

In 1832 Bytown suffered from a severe epidemic of Asiatic cholera. On 3rd June, 1832, a vessel arrived at Grosse Isle with cholera on board. The passengers scattered to Quebec, Montreal, Toronto and Bytown, and thus spread the disease. The mortality was very high. In 1847, Bytown suffered from a severe outbreak of typhoid fever, when there were 314 deaths. The immigrants were in a most deplorable condition and had to endure great hardships throughout this epidemic. Nothing was then known regarding the nature of the disease nor its method of spread. In Bytown there were 314 deaths, while at Grosse Isle there were 4,532, and at Montreal about 6,000.

On the arrival of Colonel By, in 1826, with his troops he established a hospital of 20 beds, which continued in use so long as British troops were stationed in the town. In 1845, a number of grey nuns, from the Hotel Dieu, Montreal, established the General Hospital. In 1847, when the epidemic of typhoid fever broke out, the hospital was removed to its present site on Water street, being greatly enlarged. The building was a frame one and has been replaced by the present stone edifice. The first regular staff was organized about 1854. The epidemic of 1847 so over-taxed the hospital accommodation that a number of persons, set on foot a movement for further hospital facilities. The outcome of this was the establishment of the County of Carleton General Protestant Hospital. Its earliest staff contained the names of Drs. Hill, Van Courtlandt, Sewell, and Dr., now Sir, James Grant.

An interesting account is given of the practitioners of that period. The first to come was Dr. Alexander James Christie, who arrived in 1826. The names of Drs. James Stewart, Tuthill, John E. Rankin, J. D. Gillie, Thomas F. McQueen, Edward Van Courtlandt, Hamnett Hill, Samuel J. Stratford, Alfred Morson, Frederick Morson, Stephen C. Sewell and others are mentioned as men who did much for the place during its early days. "They were not inferior men, not wastrels driven from large centres. They were, for the most part, men of culture and education, men brought up in the old land under the most favorable surroundings, men of marked individuality and force of character, who came to share in the future of the new land."

PUERPERAL INFECTION WITH REPORT OF SIX CASES.

Dr. Ellice McDonald discusses the various forms of puerperal fever. He remarks that, in spite of our knowledge of prophylaxis, this disease still causes the majority of deaths among the recently confined.

It should be borne in mind that the genital organs after labor are in an altered condition with vascular changes that favor the entry or spread of infection, much as trauma does. Infection may be conveyed to the genitalia from without, or from some other part of the patient's body, or it may exist in the genital organs prior to delivery. It is possible thus to have an auto-infection. In dealing with this subject a distinction should be made between septicæmia and toxæmia.

The local symptoms may vary considerably, being an abscess, a urethritis, an endometritis, etc. The local lesions are due to toxins formed by the micro-organisms at the point of entry. These toxins enter the general circulation and cause a toxæmia. It is only when the organisms enter the blood stream that the term septicæmia should be applied. A diagnosis can only be made, during life, between these two conditions by blood cultures. When, with a septicæmia, abscesses form, the condition is called pyæmia. These abscesses must not be confounded with those of a merely local character due to extension by contiguity.

By sapræmia has generally been understood the fever, rapid pulse, etc., resulting from the poisons caused by the decomposition of the products of conception. But as the science of bacteriology advances, it is found that the so-called sapræmic decomposition is due to the presence of infective germs. It would seem that the old term sapræmia should be abandoned, and group these cases with those of toxæmia from some form of bacterial infection.

In one case there was streptococci endometritis and bacillus aerogenes capsulatus infection. In another there was staphylococcus

pyogenes aureus infection and septicæmia. In a third there was streptococcal infection with secondary infection in the lungs, the brain, and around the uterus. In a fourth case the streptococcus, the gonococcus and the colon bacillus were present and general suppurative peritonitis. The fifth case was of pneumococcal origin, there being pyæmia and suppurative endometritis. The sixth case was one of staphylococcus pyogenes aureus with pyæmia, septic pneumonia, and suppurative peritonitis.

These cases show that several germs may give rise to severe infection in the puerperal patient. It must also be admitted that auto-intoxication may arise from previous infection of any organ of her body, though generally from the genitalia. Puerperal infection should be broadened to include infection in other parts of the body than in the genital organs.

It is clear, therefore, that in most cases curettage is harmful and hysterectomy must yield a high mortality as the condition is often general and not local, or from some other portion of the body.

TRANSPOSITION OF THE VISCERA.

Dr. John McCrae reports a case of this character in a child nine days old. "The condition was one of complete transposition. The left lung had three lobes, the right two. There were three pulmonary veins on the left, two on the right. The heart lay to the right. There was a large patency of 8mm. diameter in the interauricular septum, and one of 6mm. in the undefined space of the interventricular septum. The heart chambers were completely transposed; the aorta lay to the front, and gave off the innominate artery and the left carotid and subclavian in the normal way. The aorta ran down the left side as usual. The stomach, spleen and pancreas lay to the right, the larger lobe of the liver and the gall bladder to the left, and the colon and appendix to the left; the right kidney was higher than the left and the rectum lay in detroposition."

THE IMPORTANCE OF CHEMISTRY IN MEDICINE.

J. C. L. Wolf, of Cornell University College, New York, contributes a lengthy article on the relationship and importance of chemistry to medicine. The article is both historical and scientific. He points out that thirty years ago very little attention was given to the study of chemistry in medical colleges but gradually it came to receive its proper place in the medical curriculum, especially laboratory work. He quotes from Dr. Osler to the effect that medical chemistry should be made an important branch of study.

He discusses at length the discoveries of Pasteur and shows how his investigations in chemistry led to many great advances in medicine and surgery. Pasteur pointed out that all fermentation was due to the presence of bacteria of some kind, and Lister applied this knowledge to show that fermentation in wounds was due to these organisms. Pasteur's discoveries were largely due to his studies on crystals and the effects that moulds had in modifying the process of crystallization. These studies laid the foundation for his researches in anthrax, rabies, etc.

Pasteur also proved that life in some forms may be maintained without organic matter or the presence of oxygen, and he completely disproved the old belief in spontaneous generation.

Among his many studies in chemistry it should be mentioned that none are of greater importance than those on the question of immunity. When some poisons, such as morphine, strychnine, and the active principle of the castor bean are given in increasing doses, there is established in the system a tolerance for them. This is akin, he said, to what takes place in certain diseases, and so concluded that both must be chemical processes. He found that when an animal is given increasing doses of castor bean poison it becomes immune to it; but, further, its blood injected into another animal renders it also immune. This is similar to what takes place in diphtheria antitoxine. It thus appeared to him that the animal produced a neutralizer to the poison, a position which he held with regard to such diseases as anthrax and hydrophobia. The action of toxins and antitoxines on each other is purely chemical, in the same way that acids and alkalies neutralize each other and prevent their action upon a third element, which may be regarded for the purpose of illustration, as the cell, in the case of toxins and antitoxines. The great point of importance being to secure the union of the antitoxine with the toxine before the latter unites with the cell.

The study of chemistry is of much importance in cultivating the habit of observation so useful in every medical practitioner. Of all departments of chemistry there is none of greater moment than that of physiological chemistry.

A FAMILY HISTORY OF EPILEPSY.

The family tendency in epilepsy is well shown by a short contribution from Dr. C. A. Peters. The patient's mother had fits till she was 21 years of age. A maternal uncle died at 35 of epilepsy. One maternal aunt's two children had attacks, and the daughter of the other

maternal aunt. There was no evidence of the disease on the paternal side. There is no instance of insanity or other nervous disease in the family history.

The Maritime Medical News, August, 1905.

PRESIDENTIAL ADDRESS N. B. MEDICAL SOCIETY.

Dr. A. R. Myers in his address remarked that the society was now twenty-five years old, and that Dr. Bayard, the first president, was present with them. He referred to the great advances made in surgery and gave as the reasons for this advance the following: (1) an improved knowledge of anatomy and pathology, (2) improved methods of arresting hæmorrhage, (3) the discovery of anæsthetics, and (4) the introduction of antiseptic and aseptic measures.

In the early part of last century but little attention was paid to anatomy, and the knowledge of pathology was very crude. But this became gradually changed. The arrest of hæmorrhage was one of the dreads of the older surgeon; now, however, it causes little anxiety. The modern perfect forcep, the aseptic and absorbable ligature, the electro-cautery, etc., have rendered this part of the surgeon's work easy. The important places filled in surgery by the discovery of anæsthetics and the antiseptics is well known. Surgeons do not now regard "laudable pus" as an evidence of good healing.

CONSERVATIVE SURGERY.

Dr. J. G. Nugent, in his paper, makes a strong plea for conservatism in surgery, using the term in the sense of trying to save as much brilliant operations. "The ideal surgeon will not from choice resort to drastic measures when healing may be had by touching the hem of his garment." He cites a number of cases.

DERMOID CYSTS OF THE OVARY.

In this paper Dr. A. B. Atherton reports two cases of dermoid cysts of the ovary. One case was that of a woman, aged 39, and the mother of eight children. She never had any symptoms of tumor until a recent date, when she began to suffer with pain. A tumor then began and caused obstruction of the bowels. There was a good deal of pain. The tumor was removed and the patient made a good recovery. The second case was a woman of 37 years, and the mother of one child. A tumor was detected and removed, the patient making a good recovery. Previous to the removal of the dermoid cyst she had suffered much pain.

The writer of the paper takes the accepted view as correct that

dermoid cysts are due to the inclusion of the skin in the ovary during foetal development. From this skin the growth of the tumor results. Some remarks are offered on the diagnosis of an ovarian tumor with twisted pedicle and other conditions, such as a ruptured extra-uterine pregnancy, a tumor complicated by pregnancy, or a fulminating attack of appendicitis. But a careful study of the symptoms and history of each will likely enable one to determine which condition is present. In extra-uterine pregnancy there is likely the history of missed periods, and there will be the collapse from hæmorrhage. In an attack of appendicitis there is usually vomiting, a rise of temperature and local conditions that aid in the diagnosis.

TREATMENT OF FRACTURED PATELLA AND CLAVICLE.

In this article, Dr. W. H. Irvine reports a case of fractured patella treated as follows:—"The hair was shaven from well above and below the knee and the skin cleansed, after which two pieces of adhesive plaster were cut five inches wide by twelve inches long, and a U-shaped piece three inches wide and seven inches long was cut from one end of each piece. The fractured surfaces were then brought into apposition and the concave inner end of the U-shaped adhesive plaster was made to closely encircle the circumference of the upper segment of the patella, the sides or strips of the U-shaped piece being brought down the sides of the leg. The upper end of the plaster was five by five inches in area, and adherent to the anterior and lower aspect of the thigh. The other piece of adhesive plaster was made to surround the lower segment in a similar way, its sides or strips extending up on either side, and adhering to the thigh and over-lapping the upper end of the first mentioned piece of plaster. The circumference of the bone was thus entirely surrounded, and the segments securely held in apposition. The leg was dressed in complete extension and a figure of 8 flannel bandage was applied, leaving the top of the knee exposed, over which an ice bag was placed. These pieces of adhesive plaster were reinforced above and below the knee by strips placed around the limb, after which the leg was slightly flexed at the knee for the comfort of the patient and to approximate the parts still closer by tightening the strapping. A pad was placed in the popliteal space."

The method of treating fractured clavicle by suturing is described. The portions of the bone were brought together by means of a wire suture. About four weeks later the wire was removed through a small skin incision. The patient was able to do the heaviest kind of work in a lumber camp and on a lumber drive. This plan of treatment is recommended by the writer of the paper.

MEDICAL SOCIETIES AND GATHERINGS

THE CANADIAN MEDICAL ASSOCIATION.

The thirty-eighth annual meeting of the Canadian Medical Association was held in Halifax, N. S., from August 22nd to 25th. The attendance was large, there being 230 members present. The profession of the Maritime provinces, and especially those located in and around Halifax, spared no pains to make the meeting successful. This was the third time the Association had met in Halifax, the first meeting in that city having been held in 1875, with an attendance of 53, and the second time in 1881.

Addresses of Welcome.--In the afternoon of the 22nd, Dr. Stewart, the president, introduced Lieut.-Governor Jones. The Lieutenant-Governor on rising to speak, received a splendid ovation from the gathering. He was in splendid voice, and showed much of his old time vigor in his eloquent speech, which was most appropriate for the occasion. As Governor of the Province of Nova Scotia, he was pleased to welcome to Halifax the Canadian medical men, and it also gave him an added pleasure to welcome the eminent medical men from across the border who had come to participate in the convention. He said that for many years the medical profession had had within its ranks, men of the most eminent character, especially so in the Province of Nova Scotia, and on passing away they had left behind them only the most kindly of remembrances. All the delegates would find a warm and hearty welcome in the City of Halifax. The object of the medical men is one that appeals to all. It is not a selfish one.

A doctor must sacrifice much time, and endure much anxiety in the practice of his profession. They have charge of a large number of people, and necessarily a large responsibility rests upon their shoulders. Where suffering existed they always were present, and by their kindly ministrations, coupled with their skill, endeavored to allay the pain of the sufferer, and comfort the heart of the relatives. The world, he thought, was indebted to the medical man. He was glad that they had come at this time of the year, when the weather conditions were so propitious, and they could see Halifax at its best. In conclusion, he hoped that much good would result from their deliberations; that on their return to their respective homes, they could say that although Halifax was a small community, yet it was a most hospitable one. His Honor was loudly applauded on resuming his seat.

Mayor Robert T. MacIlreith on rising was received with applause. He spoke briefly, and to the point. He wished to extend the heartiest welcome to all the members of the Association, and to those who came from the United States. He was pleased to be present on such an occasion. He fully appreciated the nature of the work that the medical men were doing; the many sacrifices they were making in the interest of science; and the rapid advance that had been made in medical science in a few years. Halifax, he said, was always glad to welcome the meeting of organizations of all kinds, but they were particularly pleased to have in their midst such an organization as the medical men. His Worship concluded by expressing the hope that the delegates would enjoy themselves, and that as the result of their deliberations, much good would accrue to humanity in general.

Entertainments.—Apart from the business proper of the convention there were a number of social functions for the entertainment of the visitors to Halifax. Chief among these was a reception in the Legislative Council Chamber on Tuesday evening when the Nova Scotia Medical Society were the hosts. On Wednesday afternoon the visitors were entertained by Senator and Mrs. MacKeen at a lawn party at Maplewood. On Thursday evening they were the guests of the Northwest Arm Boat Club at a concert, and on the same evening there was a smoker at the Armories. Excursions around the harbor filled in the afternoons for which some special event had not been arranged.

The reception held by the Medical Society of Nova Scotia at the Provincial Building was a brilliant affair. The time set down for the reception was during 8.30 till 10.30, and during that time a very large number visited the Council Chamber. The arrangements were perfect. There was a profusion of bunting at the entrance. The reception was held in the Legislative Council Chamber. The room was prettily decorated with bunting and the floral effects were most tastefully arranged. The room off the Legislative Council Chamber was occupied by the band of the 5th Royal Garrison Regiment, which played a choice programme of select music. Mrs. (Dr.) G. Carlton Jones received the guests as they came into the room.

General Secretary's Report.—Two hundred and sixty-seven names were inscribed on the treasurer's register at the thirty-seventh annual meeting of the Canadian Medical Association, held in Vancouver, B.C., from the 22nd to the 25th of August, 1904. It was the third largest meeting in the history of the association. Of this number sixty-one were guests, several distinguished members of the profession being present from Great Britain and the United States. Two hundred and six were from the Dominion of Canada; and the fact bears some significance,

that our guests at that meeting numbered nearly one-third of the attendance from our own profession in Canada. In detail the attendance may be grouped as follows: Vancouver, 40; Victoria and the province, 40; Ontario, 56; Quebec, 21; N.W.T., 19; Manitoba, 18; New Brunswick, 3; Nova Scotia, 6; P.E.I., 3; England, 3; Scotland, 1; United States, 55; R.M.S. *Athenian*, 1; *Empress of China S. S.*, 1. One hundred and one new members were added to our lists, that number having been elected to membership; and there were present forty-three members of the profession from Canada who did not seek membership in our association, which number was about one-half of the previous year. Amongst this number were some who took a prominent part in the proceedings of the meeting, such as delivering addresses of welcome, acting on the Nominating Committee, etc. This seems rather anomalous, and I respectfully call your attention to it. I call your attention to a notice of motion handed in by Dr. H. B. Small, Ottawa, at the last meeting: "That the members from each province, present at an annual meeting, elect for themselves three representative members, who, together with the President, Secretary and Treasurer, shall constitute the Executive Council of the Association." This is a radical step towards amending the Constitution, appears like the thin edge of the wedge towards reorganization, and is deserving of your most careful and serious consideration. It is with sorrow that I report the death of one of our past-Presidents, Dr. James Thorburn, Toronto, since our last meeting. Dr. Thorburn filled the office of President in 1895-6.

Report of Special Committee on Public Health.—As convener of your sub-committee in *re* the creation of a Department of Public Health as a Dominion measure, I have the honor to report that practically no advance has been made since we first presented your views to the Federal Government on this important question three years ago. Strong resolutions have been passed by your Association containing the views of the profession on this matter, year after year, and they have been duly forwarded to the proper authorities at Ottawa, to say nothing of the personal representations of your sub-committee, conveyed to the Government by way of deputation and personal interview. On the last occasion on which I waited upon the Hon. the Minister of Agriculture, he pointed out to me that he was familiar with the views of our Association as contained in the several resolutions referred to above, and that it appeared to him to be unnecessary to call the committee to Ottawa to reiterate what we had so clearly laid before him. He assured me that the whole question had his entire sympathy and that he trusted to see such a scheme as had been outlined to him brought into operation. And he further said that it was his intention

to bring the matter again to the attention of the Prime Minister, he hoped at a date sufficiently early to enable him to give something rather definite for our meeting at Halifax. Your committee feel that they have done what they could to induce the Government at Ottawa to create a Department of Public Health, under one of the existing ministers, in order to place this important branch of the public service on the same footing as it stands in nearly all progressive countries. We regret, however, to be obliged to report that so far our efforts have been unavailing, and as we believe that a more powerful and influential committee is needed from this Association to more seriously impress the Government with the great importance of this question, we respectfully ask to be discharged.—R. W. POWELL, *Convener*.

Resolution re Public Health.—That a committee be appointed from this Association to wait upon the Dominion Government and lay before them the several resolutions now on the books of this Association in reference to the creation of a Department of Public Health, consisting of: Dr. E. P. Lachapelle (convener), Montreal; Dr. R. W. Powell, Ottawa; Dr. Daniel, M.P., St. John; Lt.-Col. Carleton Jones, Halifax; Dr. H. A. Bruce, Toronto; Dr. H. H. Chown, Winnipeg; with power to add to their number.—Carried.

Reorganization of the Association—One of the most important of the many topics discussed was that of a reorganization of the Association, looking towards the formation of provincial and county branches. This is the plan that has worked so well in the case of the British Medical Association and the American Medical Association.

Report of Nominating Committee.—Place of meeting in 1906: Toronto, at same time as British Medical Association meeting. President, Dr. Alexander McPhedran, Toronto; General Secretary, Dr. George Elliott, 203 Beverley street, Toronto; Treasurer, Dr. H. B. Small, Ottawa. Vice-Presidents, Dr. H. D. Johnson, Charlottetown, P.E.I.; Dr. G. Carleton Jones, Halifax, N.S.; Dr. Emery, St. John, N.B.; Dr. H. S. Birkett, Montreal, Que.; Dr. J. D. Courteney, Ottawa, Ont.; Dr. S. P. Prowse, Winnipeg, Man.; Dr. H. G. McKid, Sr., Calgary, N.W.T.; Dr. R. E. McKechnie, Vancouver, B.C.. Local Secretaries: Dr. Simpson, New Glasgow, P.E.I.; Dr. J. R. Corston, Halifax, N. S.; Dr. J. A. Seammell, St. John, N. B.; Dr. Ridley McKenzie, Montreal, Que.; Dr. Harold Parsons, Toronto, Ont.; Dr. J. R. Davidson, Winnipeg, Man.; Dr. J. Hislop, Edmonton, N.W.T.; Dr. W. H. Sutherland, Revelstoke, B. C. Executive Council: Dr. W. P. Caven, Toronto; Dr. A. A. Macdonald, Toronto; Dr. F. LeM. Grasett, Toronto.

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EDITORIAL.

THE MEDICAL STUDENT.

Who ever heard of a student becoming rich! He has not got time to acquire wealth. Compared with other callings in the industrial and commercial world, medicine is poorly paid. An architect will design a house and get a fee of \$500 for his work and looking after its erection; a doctor will guide a man through a severe attack of typhoid fever and get nothing, or \$50, or more, according to circumstances. But the point is that the medical profession is not paid fees commensurate with the services it renders the community.

Why, then, does a young man become a medical student? First of all it is an honorable profession and carries respectability with it. The profession of medicine furnishes an entry into all grades of society; for *mors pallida* knocks at the door of the cottage and the palace alike. Then, again, there is the feeling that, if it does not open the way to great wealth, it does so to a comfortable living; and, perhaps, without the many risks of the financial troubles of the business man. But a more important reason may be found in the pleasure to be derived from the study of nature, normal and morbid, as revealed by medical science. There is an intense interest in knowing all that affects the human being both for good and ill. To not a few there may be a still higher, nobler, reason in the thought that in the practice of the healing art they may be of some service, some help, to their fellow men. In the language of Carlyle, "We might not doff our hats to a mitred bishop, but would to such as these."

The life of the medical practitioner is no downy bed. He must expect to meet his reverses, experience some keen disappointments, and be called upon to bear with extreme instances of ingratitude. There is scarcely anything that patients may not do. For twenty long years one may give the best that is in him to the service of a family to find that on some occasion when he calls to see his patient they "had to send for another doctor," and that the said "another doctor" had no compunctions about taking the case. Or, a doctor may save the life of his patient to be paid with ingratitude, or the criticism that it was because of his attendance that the recovery was not quicker. Doctors' sins against doctors lie at the bottom of much of these difficulties.

Surely any doctor can live without resorting to the so-called stealing of patients. In the end it does not pay.

But putting these things aside there are many features in the practice of medicine that leave behind them green memories. The real gratitude of some patients is worth more than the fees of others. Some patients will cheerfully pay their fees and tender their warmest thanks as well. So it comes to this that it takes all sorts of people to make up the world. Do not expect too much and you will not be overly disappointed.

If the study of medicine is a strenuous life, the practice is still more strenuous. It is no resting but a moving, as the eminent Goethe once said. It should be the object of every disciple of Æsculapius to play his part in this strenuous struggle so as to come through it all with honor.

Spirits of old that bore me
 And set me, meek of mind,
 Between great deeds before me,
 And deeds as great behind.
 Knowing Humanity, my star,
 As forth of old I stride,
 O, help me wear with every scar,
 Honor at eventide.

Sir William Gull once said the greatest mistakes of doctors were caused by their not observing, rather than by their not knowing. Hippocrates taught that "Art is long, life is short, opportunity is fleeting, experience is fallacious and judgment difficult." Such being the case the need for a strenuous life and one of constant observation becomes apparent. An old Roman writer tells us that "the way is long and tedious by precept, but brief and effectual by example." Study, therefore, as much as possible by concrete example and along the inductive method.

Professor William Osler has seen much of student life, and has acquired a wide knowledge of men and doctors and study. A few sayings from him may here be quoted.

"To no man is it given to know the truth, the whole truth, and nothing but the truth. But what is a student but a lover courting its fickle systems? The truth is the best you can get with your best endeavor."

"Keep your heart whole and be always a student. You and your professors are all students together. The education you are getting is not merely a college or medical one, but a life course, ending only with death. You may die in training from lack of food—worse, you may be mentally still-born—but what you become depends upon whether you

starve your brain or not after you leave college. This latter study is hard. There is too much wayside fruit in our educational market. With Chrysostom I would say 'depart from the highway, for it is hard for a tree that grows by the wayside to keep its fruit until it be ripe'."

"The true student is a citizen of the world whose soul is too precious to be restricted to any one country."

"You must not confine yourselves to book knowledge, study men. That will order experience and give certainties instead of surmises, and enable every man to judge his own line of work."

"Your study is human life, its orders and disorders, and you are to put it to rights."

"There are three things a practitioner needs—a note book, a library, and a quinquennial brain dusting."

"The practice of medicine was pretty much what doctors made it and was either a perpetual pride and joy, or a perpetual nuisance; and it could be made the former by a perpetuation of the student spirit."

Robert Louis Stevenson writes: "There are men and classes of men that stand above the common herd: the soldier, the sailor, and the shepherd not infrequently; the artist rarely, rarer still the clergyman, the physician almost as a rule. He is the flower—such as it is—of our civilization; and when that stage of man is done with, and only remembered to be marvelled at in history, he will be thought to have shared as little as any in the defects of the period, and most notably exhibited the virtues of the race. Generosity he has such as is possible to those who practice an art, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and, what are more important, Heracleian cheerfulness and courage. So it is that he brings air and cheer into the sick room, and often enough, though not so often as he wishes, brings healing."

The work of the medical student is the solution of the problems of life and death, growth and decay, evolution and involution. Sydney Lannier, seeing a mocking bird catch and devour a grasshopper, exclaimed,—

"Solve me this problem, ye scientists:
How is the death of that dull insect
Become the life and song of yon trim
Shakespeare on the tree?"

So there are problems yet unsolved, there is work yet to be done. We know much but there is much more beyond the horizon of our vision. We have an antitoxine for diphtheria but not for tuberculosis; a specific for ague but none for typhoid fever. In the words of one of the world's master minds: "We bid you be of good cheer; work and despair not, for there is a reward for you."

A DOMINION MEDICAL COUNCIL.

“The question of the establishment of a Medical Council for Canada, as outlined in Dr. Roddick’s Bill, is still in doubt. The McGill medical students, being unanimously in favor of this bill, drafted a letter setting forth briefly the advantages of a central medical council, and sent a copy to every member of the Provincial Legislature of New Brunswick, also those of British Columbia and Ontario. In order that this bill may become operative the Provincial Assemblies must pass concurrent legislation. This has already been done in Nova Scotia, Prince Edward Island, Manitoba and the North West Territories. It was asked that the New Brunswick council should bring forth the necessary legislation at the last session of the Legislature.

“This bill (popularly known as the Roddick Bill) providing for the establishment of a Medical Council for Canada, was passed in the Dominion House of Commons in 1902. In order to become operative, it must receive the sanction of the various provincial legislatures.

“The great purpose of a Dominion Medical Council would be the establishing of a qualification for medical men which would be acknowledged and accepted in all parts of the Dominion. Should this be accomplished, a doctor who had passed the examination of the Medical Council of Canada would be exempt from any provincial examination, and on payment of the provincial registration fee would at once be permitted to practise. Such an arrangement would in no wise interfere with the provincial autonomy in medical affairs; provincial councils must necessarily exist for the purpose of taxation and discipline, and would still retain their examining boards for the purpose of examining and licensing men who wished to practise only in that particular province. At present there are no fewer than eight examining and licensing medical bodies in Canada. Barriers have been placed about these eight districts so that it is practically impossible for a medical man to receive a qualification to practise medicine in more than one province. Frequently medical men have been fined, and, in cases where the fine has not been paid, imprisonment has been threatened for crossing the boundary line between two provinces in order to save the lives of our own Canadian citizens. It is asked if such a condition does not demand a remedy. In this respect New Brunswick differs from some of the other provinces, as non-residents living on the border are allowed to register.

“The British Medical Council will not now recognize the examinations of any provincial medical board, but positive assurance has been given that as soon as we have a central examining board in the Dominion, the British Medical Council will at once accept the licenses from that board and immediately allow our men to register in Great Britain

or any part of the Empire over which the British Medical Council has control. This means that our young Canadian doctors would have open to them appointments under the British Board of Trade. Likewise a large and lucrative field of service would be opened up in the army and navy of Great Britain, and in appointments to colonial positions.

"The New Brunswick Medical Council replied to the communication of the McGill Medical Students, stating that the New Brunswick Medical Act provides for the adoption of such a bill as that of Dr. Roddick, and that no further legislation is required, and that the council is prepared to act upon its provisions at any time that a Central Medical Council is established."

With the above from our esteemed contemporary, the *Maritime Medical News*, we heartily concur. Even though the Province of Quebec may stand back for some time, we think the other provinces should go ahead. We urge upon the legislatures of Ontario and British Columbia to pass an Act approving of the Roddick Bill. This would bring every province into line except Quebec. We believe it would also adopt the same course.

THE RETIREMENT OF DR. DANIEL CLARK.

Dr. Daniel Clark, who has been superintendent of the Toronto Insane Asylum on Queen street west since 1875, has retired.

Dr. Clark, who is seventy years of age, enjoys a more than continental reputation as an authority and expert on the treatment of the insane. He was born in Inverness-shire and came to this country with his parents in 1841. After receiving the degree of M.D. at the University of Toronto he walked the hospitals of Europe, and returning to Canada in 1859 commenced practice in Princeton, Ont. Before the close of the American civil war he joined the Federal army of the Potomac under General Grant as a volunteer surgeon and acquired considerable experience in that capacity. He was twice elected President of the College of Physicians and Surgeons of Ontario and has held many important positions in connection with medical work. He has frequently contributed to periodical literature, both medical and general. In December, 1875, as Morgan says, "in accordance with the general desire of the medical profession as expressed by the Medical Council and other organizations representing that body, he was appointed superintendent of the Provincial Lunatic Asylum, Toronto." He has been frequently called upon to give expert testimony in courts of law, and his evidencie was always received with the deference due to his profound investigation and matured and experienced judgment. In the retirement

of Dr. Clark the Province loses one of its most valued and distinguished servants, and many regrets will be felt that Dr. Daniel Clark has retired.

When Dr. Clark assumed charge of the asylum, he came after a man whose fame, as an alienist, was as wide as the continent, and no greater compliment could be paid him than to say that he was a worthy successor to Dr. Workman.

He was reared on a bush farm, and owes the position he attained in after life solely to his inborn ability and energy. While still in his teens he joined the rush of gold-seekers to California, and one of the best sketches in "Pen Photographs" subsequently written by him is an account of his journey across the Isthmus to the land of gold and the state of things he found in San Francisco at that early period of its history.

The result of these most varied experiences was to make Dr. Clark a broad-minded man and a widely experienced physician. He has enjoyed all the honors which his profession could confer, and in 1875 he was appointed superintendent of the asylum, in accordance with the formally expressed desire of his brother physicians in the Province. Thirty years have shown how well they estimated his possession of the qualifications requisite for the able, wise, and humanitarian discharge of the duties.

Dr. Clark had a decided bent towards literature, in which he would undoubtedly have made his mark if he had been able to give it more of his time. "Pen Photographs" has already been mentioned, and he subsequently published "Josiah Garth," a novel; "An Animated Molecule and its Nearest Relations," "The Public and the Doctors in Relation to the Dipsomaniac," and "Mental Diseases." The good wishes of the profession will accompany the doctor into his retirement.

DR. CHARLES K. CLARKE'S PROMOTION.

When it became known that Dr. Daniel Clark had resigned his position as medical superintendent of the Toronto Asylum for the Insane, a position which he had held for thirty years, the medical profession learned with much pleasure that the Government had decided to appoint Dr. Charles Kirk Clarke, Superintendent of the Rockwood Insane Asylum, Kingston, to the position. The appointment, it is stated, is in accordance with a desire to follow a policy of promotion, Dr. Clarke being senior in the Province in that respect. He is a son of the Clerk of the Legislative Assembly, Lieut.-Col. Charles Clarke.

Dr. Clarke was born at Elora, February 16, 1857, and was educated at the high school there and at Toronto University, where he graduated M.B. in 1878, and M.D. in the following year. He had served in 1874 as clinical assistant to Dr. Joseph Workman in the Toronto Asylum, and subsequently became assistant physician. During the next ten years he was Assistant Medical Superintendent at Hamilton and Assistant Superintendent at Rockwood Asylums. In 1885 he became Medical Superintendent, and has so continued till the present. Dr. Clarke is professor of mental diseases in Queen's University, and held a high reputation as an authority on mental diseases.

It is with more than ordinary satisfaction that we notice the desire to recognize long and efficient service in the making of appointments and promotions. Dr. C. K. Clarke has rendered excellent service to the Province, and we feel sure that he will prove himself adequate to the additional responsibilities and opportunities of the new position he is called upon to fill. To be able to mention Dr. Joseph Workman, Dr. Daniel Clark and Dr. C. K. Clarke, as holding in succession the position of Medical Superintendent of the Toronto Asylum for the Insane, is to say much for the wisdom with which the appointments have been made.

While we commend the promotion of Dr. C. K. Clarke, we fail to see why Dr. Mitchell has been overlooked in adjusting these appointments. We were of the opinion that he had fitted himself in a very special way for promotion to one of the very best positions in the gift of the Government in the administration of our asylums. We hope to be able at an early date to chronicle the fact that due consideration has been given to the claims of Dr. Mitchell to one of the most responsible positions in the care of the insane.

THE BRITISH MEDICAL ASSOCIATION.

A general meeting of the medical profession of Toronto was held on the 19th September to make preliminary arrangements regarding the meeting of the British Medical Association to be held in Toronto next year. A Committee of Arrangement was appointed as follows:—

Those who were appointed on the committee were as follows: President of the Canadian Medical Association, president of the Ontario Medical Association, president of the Ontario Medical Council, Hon. Dr. R. A. Pyne, presidents of the Toronto Medical, Clinical and Pathological Societies, the secretaries of each of the medical colleges of the province, ex-Dean Temple, of Trinity Medical College, one representative from the staffs of Toronto General Hospital, Sick Children's

Hospital, St. Michael's Hospital, Grace Hospital and Western Hospital, and five others to be chosen later by President Reeve.

At a meeting of the Toronto branch of the Association immediately afterwards, the committee, as agreed upon at the general meeting, was approved of.

It was unanimously agreed that Dr. R. A. Reeve, the Dean of the Medical Faculty of the University of Toronto, be the president elect of the next meeting. Dr. Reeve very feelingly thanked his medical friends for the great honor they had conferred upon him. The recommendation will be sent on to the executive of the British Medical Association for confirmation.

It was decided that there should be twelve sections, namely, medicine, surgery, state medicine, hygiene, laryngology, otology, and rhinology, army and navy, obstetrics and gynaecology, ophthalmology, psychology, pathology, tropical diseases, and pediatrics. Preliminary arrangements were made towards the organization of these sections.

The meeting of the British Medical Association in any place is no ordinary event. It has met once before in Canada, when in 1897 it visited Montreal. The meeting on that occasion was a very successful one; and it is to be sincerely hoped that the Toronto meeting will be equally so.

At the two organization meetings held so far there was evinced a very fine spirit from all quarters. There was an entire absence of any narrow disposition, and desire was shown to have all the leading interests, such as the medical colleges, the larger cities, the principal medical societies, and a number of the hospitals represented upon the Committee of Arrangements.

To carry out the arrangements in a manner becoming the occasion, the country, the province, the city, a large amount of money will be required. When the Association met in Montreal, eight years ago, the Federal Government was generous enough to make a grant of \$10,000 towards the expenses of the meeting. It is quite reasonable to expect equally generous treatment on this occasion. The Province of Quebec gave \$2,500; but the wealthy Province of Ontario may confidently be expected to do even better than this. Indeed, it would not be asking too much to bespeak for at least \$5,000. Then the city can easily afford to give, and ought to give, towards such an event another \$5,000. This would place in the hands of the Committee of Arrangements \$20,000. This, with what wealthy and generous citizens will no doubt do by donations, or in the form of entertainments, would render the affair an assured success, and have all things carried out so as to reflect credit upon all concerned.

Nothing but this must be the aim of all; and if the aim of all, and faithfully persevered in, it will be also the realization of all. Let there be no one found wanting at his post; but let all unite from now on, and until the meeting of 1906 is a thing of the past with the historic record—The greatest that has been.

THE BUSINESS SIDE OF THE MEDICAL PROFESSION.

If one turns around and surveys the world of business, trade and labor at the present moment, the first thing that attracts the attention is the state of organization that exists. Builders in all the large centres of population are joined together in a builders' exchange, for the purpose of regulating prices. The manufacturers are associated into a manufacturers' society, for the purpose of controlling the output of goods, directing the Government in the matter of the tariff, or determining in some way the laws of labor and the pay for the laborer. The banks form a bankers' association to regulate to some extent the questions of interest, discount, accommodation to customers, the opening of new accounts, clearing-house rules, etc. The working classes are joined in their various unions, and these again into national and international labor organizations, with the view of fixing hours, wages, and conditions of dismissal, etc. The great coal kings have an understanding that they will only raise each year a given amount of coal, and in this way keep the market on short supply and the prices high.

Now, in all this, where does the medical profession come in? Simply, nowhere. It is true there are gatherings of a local, provincial, national and international character, but these gathers are for the purpose of education, for the exchange of views on the treatment and prevention of disease, for the finding of ways and means to lessen the total suffering in the community, and, to that extent, lessen their own incomes. There are organizations, such as the medical councils in the province, but these do not concern themselves with the business side of the profession, but with its educational interests. If a medical practitioner makes a discovery, he does not patent it and make money thereby, but gives it at once to his fellow-doctors and so to the public. When a business man, a manufacturer, or a railway constructor invents some device he carefully keeps it to himself, and so tries to enhance his gains. Not so with the doctor. True to the oath of Hippocrates, he gives it to the world; but the world is none too prompt to reward him.

The lawyers have means by which they fix their fees; the doctors have not. Why? The one class is organized and the other is not.

Doctors, for business purposes, are a rope of sand. There is no cohesion. Doctors are disposed to segregate themselves too much, and not to aggregate themselves enough. There should be a better understanding among them. It is quite true that there are some members of the profession who cast aside every rule of ethical conduct, and will, therefore, cut fees, steal patients, slander a brother practitioner, and such things, but they are not numerous and may be neglected in the general conclusions as to what is best to be done.

Doctors should get together and arrange a business basis for their profession. Among the many things that come up for consideration, we would mention the following:—

1. There should be more of the good methods of collecting accounts. Bankers will not have over-due paper and over-drawn accounts. Doctors can do much in this matter. The amount of money doctors lose by not collecting their accounts is enormous, and it is bad for the people, as it educates them to be slow and poor pay, so far as the medical profession is concerned. There is no reason why the doctors should not have a sort of Bradstreet or Dunn system for the collection of accounts and the reporting of bad pay.

2. The second matter that suggests itself for consideration is that of lodge, club, or contract practice. No doctor is justified in doing his work in such a way as to rob himself or his brother practitioners of their proper fees. The objections to this form of practice have been often and ably set forth, and do not now need elaboration further than to state that it lowers the profession, lessens its income, and is the cause of much misunderstanding. All this class of work should be done on the basis of pay for the services rendered. Just think for a moment how absurd it appears that a doctor should agree to attend a lodge of 200 men for \$1.25 per year and supply the medicine! We do not hesitate to say that he would be better off by declining the \$250 and take what he can get in the ordinary way. Experience has proven this to be a sound view.

3. The regulation of fees is another matter of no small moment. Other bodies of men have found the value of such a system. But the old question comes up, who is to do it? The doctors are not organized, but that could be said of all other classes at some time in their histories. It is never too late to mend. In this matter the medical profession owes a great duty to itself, and it is not too much to hope that ere long a move will be made along this line. At the meeting of the Council of the Ontario College of Physicians and Surgeons, a scale of fees was adopted as advisory. Of course, the Council has no power to fix a tariff of fees, but the profession as a united whole could pretty well settle the matter if it so decided.

4. One more matter that requires attention at the hands of the medical men of this province, indeed of all Canada, is the large one of the abuse of hospital charity. This is particularly the case where there is an urgent need for clinical material. Much as the students' side of the case has to be considered, the side of the general practitioner must not be overlooked. He was once a student, and therefore not unreasonable; but he is now a qualified practitioner, and must make a living. It is quite plain that the more the public is pauperized to the advantage of the student of medicine, the worse will it be for him when he passes from the college halls and hospital wards into the realities of his professional life. Whether for clinical material or for any other reason, no hospital has the right to do anything that would cheat a member of the profession out of a fee. The law society gives no legal advice, nor are there any law hospitals. The only persons who should receive free attendance are those who can establish their claim to be ranked as paupers, and can show that they are unable to pay for medical attendance. The test should in no case be the fact that he selects a public ward, and is willing to become the subject of clinical study as a means of obtaining free medical or surgical advice. The length to which this pauperizing process is being carried on in the large cities where there are medical colleges is alarming. But it is felt throughout the entire country. People of means are leaving their own localities constantly and betaking themselves to the large cities where they can secure cheap hospital rates, and free attendance. We think the time is not far off when the profession will take some action in this matter. The profession can be protected, and, yet, the interests of the medical colleges not be made to suffer in the least.

“More might be said hereof to make a proof;
But more to say were more than is enough.”

THE COST AND ADVANTAGES OF A MEDICAL EDUCATION.

The British Medical Journal of 2nd September, makes the statement that the cost of a medical education in Britain varies from \$3,000 to \$5,000, according to the school attended and the habits of the student. This does not take into account the time lost in the pursuit of a medical course.

In this country it may be stated that the fees, board, clothing, books and lost time are easily equal to \$1,000 to \$1,200 a year; or, for the five years, \$5,000 to \$6,000 for the complete medical course and the right to practise. This would yield for the rest of life about \$300 a year in interest, as a fixed income.

By the time a young man is through his medical course, he should be commanding a salary in other callings, ranging from \$500 to \$1,000 a year, with the chance of advancement. This salary, together with the interest on the capital expended, should make his future a fairly comfortable one.

When he graduates in medicine, his earning capacity is very low. No matter where he locates, whether in country, town or city, it will require some years before his income has reached the above level of say \$800 to \$1,300 a year. In addition, his general expenses in the practice of medicine will run higher than in the quieter life of filling a paid position.

On the other hand, there are the possibilities of ultimately making a larger income by the practice of medicine than by following some commercial or industrial calling. To some, the social side of medicine has attractions, and the possibility of attaining to positions of public note enter into the count with some young men in choosing medicine as a calling.

Now, it is a debatable question whether the average income of the doctors is better than that of an equal number of bright men who betake themselves to other walks in life. Every occupation will bring its share of public fame if it be honestly prosecuted. It does not appear that doctors are more successful than other educated, industrial, technical, and financial classes in securing the so-called plums of public office or appointment.

It is not an uncommon thing to hear medical practitioners, who have been twenty-five and more years in harness, make the remark that if they had given the same care and attention to some other pursuit they would be further ahead, and have had an easier time of it.

Of course, it is easy to speculate in such a manner as the above. If there be no great prizes in medicine, as in the commercial, industrial and financial world, there is also few of their great disasters. The doctor who minds his business and exercises ordinary judgment is sure of a comfortable living and enough for his old age. The honest doctor, by the time he reaches the retiring age, can look back and claim that his life has been more useful and helpful to many than most of his acquaintances who followed the guide of other stars than that of the healing art.

MEDICAL EDUCATION.

The subject of medical education is an ever-present one, and it is also an extremely important one. The question of how to secure the best results have engaged the best thought of the leading medical col-

leges all over the world. Great improvements have been the result, but there is room for still further advance in the right direction. One of the most recent as well as most authoritative statements upon the subject is to be found in Mr. Franklin's presidential address to the British Medical Association two months ago. After pointing out some of the faults in the present medical curriculum he goes on to state as follows, with regard to the future:—

"If there be more subjects to be studied, or subjects to be more thoroughly studied, how in the world is the time to be found? I have alluded to the tremendous amount of work the student has to get through, particularly in his last three years; is it right that it should be so, and is it possible that he can leave out some of the prescribed work and give more time to other subjects so as to learn them more thoroughly? The histology of to-day, together with physiology, so elaborated that its study must take up a much larger proportion of time than formerly, are subjects necessary enough, but are they not being pushed too far? The future practitioner is not expected to be a professor of physiology any more than every student can be a scientific physiologist.

"Just so with regard to bacteriology, which has become so much of a science that it might well in itself constitute a study for a lifetime. It must be studied, but its teaching, like that of histology and physiology, should be adapted more precisely to the actual needs of the practical physician or surgeon of to-morrow."

These are the weighty words of an experienced, practical physician, and delivered from the presidential chair of the most influential medical association in the Empire. These views have met with the favorable criticism of the leading medical journals in Britain. Do they not commend themselves to the judgment of ninety-nine per cent. of all medical practitioners? We do not under-rate the value of a thorough training in the scientific and primary branches of a medical education, but we do think that for some time past there has been a tendency to consume too much of the student's time on histology, physiology, chemistry (especially non-medical) and bacteriology.

The Medical Council of Ontario is the body that must really set the pace for the medical curriculum. To it we would commend the good old Latin saying, *ne quid nimis*—not even too much of a good thing.

DR. THOMAS JOHN BARNARDO.

Dr. Barnardo is dead, but these great men never die; and as Kingdom Clifford said, "They are as immortal as the race." The late

Dr. Barnardo stands in a unique class—a class that contains such men as Howard Wilberforce, Garrison; and to be in such a class is to be

One of the few and immortal names
That are not born to die.

Dr. Barnardo had a true passion for his work; and this passion was founded and rooted in an all consuming passion for good in the fullest sense of the word. This passion continued to burn with undimmed brightness until its possessor's life went out. This type of over-soul has made the enthusiasts that have moulded and altered the world.

He had intended to go to China as a medical missionary; but while a student in London he began working among the "waifs and strays." One night a little boy, Jim Jervis, begged him to be allowed to sleep in the place used as a simple mission room. Dr. Barnardo accompanied Jim to where he and other boys slept, and there was created in his breast a desire to furnish for such boys a shelter.

The great and good Lord Shaftesbury came to his assistance and others followed. His life's work was the means of rescuing some 55,000 waifs. What an amount of misery, suffering and crime he was instrumental in preventing no man can tell! But his work will still go on. The death of Howard did not bring back the prison dungeon, nor that of Wilberforce slavery. Once Dr. Conolly had taught humane methods of treating the insane, the lash, the dark room, and the straight jacket became things of the past. The good that is in Dr. Barnardo's work will remain with us; and there will be found an Elisha to bear the mantle of Elijah.

To the medical profession it must ever remain as an abiding pleasure to know that some of the world's greatest heroes, reformers, missionaries, explorers, humanitarians—true prophets—have been of their number.

Sunshine was he in the winter's day;
And in the midsummer coolness and shade.

With these words of the Arabian poet we leave the subject of these remarks, feeling that his real reputation will grow with time.

DR. OSLER'S FAREWELL ADDRESS ON STUDENT LIFE.

To few men has it been given to know the student as Dr. Osler knows him. First of all a student himself, he knows the trials, the longings, the disappointments of the class to whom he sets for himself the task of saying farewell—fare ye well, prosperity be unto ye—no easy task by any means. Dr. Osler rises to the occasion. His address is a classic, and stands with Froude's "On Education," Maurice's "On

the Friendship of Books," Carlyle's "To the Edinburgh Students," Brougham's "Rectorial at Glasgow," or Emerson's "The Scholar."

Read what Dr. Osler has to say on Truth, Education, Books and Men, Work, The Probation Period, The Student-Practitioner, The Library, The Laboratory, Investments, Prosperity, The Student-Specialist, The Student-Teacher, and *Io Victis*.

To the courtesy of Dr. Osler and *The Medical News* it is that we are able to thus early give our readers the benefit of this address, so appropriate at the time when the Colleges and the Students are once again at work.

Go, speed the stars of Thought,
On to their shining goals,—
The sower scatter's broad his seed,
The wheat thou s'trow'st be souls.

PERSONAL AND NEWS ITEMS.

Dr. Kippen has located in Shoal Lake.

Dr. Nelson P. Grant, formerly superintendent of the General Hospital in St. John, has located in Woodstock, N.B.

Dr. F. E. C. Butler, of Toronto, was married to Miss Florence Bawden, of the same place, on 22nd August.

Dr. MacKay, of Hague, Sask., has decided to make Vonda, Sask., his home.

Dr. Ed. Ryan, of Kingston, has been appointed Medical Superintendent of the Rockwood Asylum.

Dr. G. L. Palmer, of Toronto, who had a very enjoyable trip to California for six weeks, has recently returned home.

Dr. M. A. V. Armstrong, of Fordwich, has sold his practice and will settle in the West. He will locate in Edmonton.

Dr. Allan Cunningham, of Dartmouth, N.S., has gone to the Northwest. He will practice in Edmonton.

Dr. Lederman, of Milverton, has been ill with an attack of appendicitis, but has again recovered.

Dr. D. W. Wylie has removed to Brantford and located on Colborne street.

Dr. Leeson, of Brandon, has completely recovered from his severe illness and is back to practice again.

The marriage of Dr. Thornton Bowles and Miss Grace Haanel took place at Ottawa lately.

Dr. Leonard Vaux, of Ottawa, was married on 28th August to Miss Sparks, a daughter of the late Captain Sparks.

Dr. Henry O. Howett, of Guelph, has gone to Britain where he will spend a year in hospital work.

Dr. T. Staton has entered into a partnership with Dr. R. S. Broad, of Barrie.

Dr. T. W. Griffin has settled in Woodstock and has taken the residence and practice of Dr. Rankin.

Dr. D. M. Fraser, of Stratford, had a pleasant trip to England and has returned feeling well.

Dr. John Williams, of Lisle, has been chosen as the Medical Superintendent of the Asylum for Epileptics at Woodstock.

Dr. T. Chisholm, who practised for many years in Wingham, has gone to Saskatoon, where he will no doubt soon establish a good practice.

Dr. C. K. Clarke, of Rockwood Asylum, Kingston, has been promoted to the position of Superintendent of the Toronto Asylum, vice Dr. D. Clark, resigned.

Dr. Charles E. Hickey, of Morrisburg, has received the appointment of Medical Superintendent of Cobourg Asylum, vice Dr. E. McNicholl.

Dr. R. D. Forbes, who recently completed his second year in the Montreal General Hospital, has gone to England and Germany for post graduate study.

Dr. Anderson, of Hamilton, has gone to Britain for special courses of study at the Great Ormond, Brompton, and National Hospitals of London.

Dr. Fred Bayfield, who has been resident physician in the St. John Hospital, has gone to Vancouver, B.C., to enter into partnership with his brother, Dr. Geoffrey Bayfield.

Dr. E. L. Roberts, of Langton, has returned to Simcoe. He has entered into partnership with Dr. Bowlby, and in future these two physicians will practise their profession in combination.

It is with much regret that we announce the serious illness of Dr. M. Wallace, of Toronto. His condition is quite critical, but it is hoped that he may improve soon.

The Toronto Western Hospital has made the purchase of property and houses on Roseberry avenue. The grounds of the hospital now extend from Nassau street to Roseberry avenue, with a frontage of 550 feet on Bathurst street. The site contains over four acres. The hospital can now accommodate 140 patients.

Dr. Allan H. Adams, Superintendent of the Toronto Free Hospital for Consumptive Poor, Weston, Ont., has been appointed a member of the staff of house physicians of the Toronto General Hospital, Toronto, to take the place of Dr. Allan Kinghorn, upon whom was recently conferred the honor of Johnston Colonial Scholarship in the University of Liverpool. Dr. Adams was graduated in arts in the department of natural science at the University of Toronto in 1901 and in medicine in 1904, having taken a highly creditable stand.

OBITUARY.**CHARLES EDGAR BONNELL, M.D.**

Dr. Bonnell, of Bobcaygeon, probably the oldest practitioner in that part of the country, died on 11th August from lock-jaw. The circumstances connected with his death are very sad. It appears that a couple of weeks prior he stepped on a rusty nail, which penetrated his foot. He had suffered to a certain extent from the injury during the interval, but it was not considered serious until two days before his death, when it suddenly developed into a serious trouble, and lock-jaw was the result.

The late Dr. Bonnell had been practising his profession in Bobcaygeon for 38 years, and was one of the best known men in that vicinity.

S. H. FEE, M.D.

On the afternoon of August 21st, Dr. S. H. Fee, Kingston's Medical Health Officer, fatally shot himself. For over a year past Dr. Fee had been troubled with a serious complaint of the eyes, causing blindness in one, and his act was the result of melancholia. Drs. Campbell and Williamson were summoned and did all they could, but Dr. Fee passed away a little after 2 o'clock. He never regained consciousness.

Deceased was born in the County of Armagh, Ireland, in 1840, the youngest of a family of eight children. Soon after the parents came out to Canada and located in Kingston. He matriculated and went to the Royal Medical College, graduating in the class of 1862. During the American Civil War he did professional duty, and afterwards commenced practice in Kingston. He served as alderman in 1878, 1879 and 1880. In 1886 he was appointed Health Officer, and proved himself most honest, faithful and energetic. He was known throughout the city for his kindness of heart and the time and service he gave to the sick poor. Dr. Fee was always deeply interested in school affairs. He entered the board in 1872, and was a member ever since.

T. W. POOLE, M.D.

Thomas W. Poole, M.D., the oldest physician in Lindsay, died 28th August at his residence, William street, after a lingering illness. He was 74 years of age, and had been unable to practise his profession for some time. Some years ago he was mayor of Lindsay, and was among the founders of the Lindsay Curling Club.

BOOK REVIEWS.

THE DIAGNOSTICS OF INTERNAL MEDICINE.

A Clinical Treatise upon the Recognized principles of Medical Diagnosis, prepared for the use of Students and Practitioners, by Glentworth Reeve Butler, Sc.D., M.D., Chief of the second Medical Division, Methodist Episcopal Hospital; Attending Physician to the Brooklyn Hospital; Consulting Physician to the Bushwick Central Hospital; Formley Associate Physician, Department of Diseases of the Chest and Diseases of Children, St. Mary's Hospital, Brooklyn, N. Y.; Fellow of the New York Academy of Medicine; Member of the Medical Society of the County of Kings; Fellow of the Society of Science, Letters and Art, Lond., etc. With five colored plates and two hundred and eighty-eight illustrations and charts in the text. Second Revised Edition. New York and London: D. Appleton and Company; Toronto: N. Mcraug and Company. Price, \$6, cloth.

This is a large work of nearly 1,200 pages. Internal medicine, however, is a long story to tell, and requires a large book to tell it fully. This work tells that aspect of diagnosis very fully. The work is divided into two parts—the evidences of disease, and diagnosis, direct and differential. The first section deals with clinical anatomy and physiology, methods of examination, signs and symptoms, and the significance of each symptom. The second part discusses the descriptions of recognized diseases and their symptoms, and direct and differential diagnosis. These various sections and aspects of the subject are handled in a very lucid and erudite manner.

It would be quite impossible to examine such a work in detail. One feature, however, of it that impresses itself upon the reader, is the free use made of illustrations, which are as excellent as they are numerous. It has rarely been our lot to review a work where the illustrations were more perfectly executed or more judiciously chosen. Many of the figures and illustrations are in colors and of a most interesting schematic character.

The first portion of the work treats of the general principles of diagnosis. It is well written and thoroughly scientific. This portion of the book lays a sound foundation for the second part in which individual diseases are discussed. Taken as a whole, this work ranks with the very highest authorities upon the subject of diagnosis.

 INTESTINAL SURGERY.

A Handbook of Intestinal Surgery by Leonard A. Bidwell, F.R.C.S., Surgeon West London Hospital; Lecturer on Intestinal Surgery, and Dean of the Post Graduate College; Consulting Surgeon to the Blackmeath and Charlton and Diss Hospitals, etc. London: Bailliere, Tindall and Co., 8 Henrietta St., Covent Garden. Canadian Agents: J. A. Carveth and Co., 434 Yonge St., Toronto; and Chandler and Massey, Toronto, Montreal and Winnipeg. Price, 6s. net. 1905

This is a first-class work. It is not large, but is very well arranged. There are some general considerations at the beginning of the book.

These are followed by the special operations on the various portions of the intestinal canal. The technique is good, the descriptions clear, and the illustrations all that could be desired. In addition to the methods of operating and the various forms of operation, there is an excellent statement on the preparation of the patient for abdominal operations and the requisite care after the operation. A good deal of attention is devoted to the best places and methods of making and closing abdominal wounds with a view to avoid post-operative hernia. This is one of the most important of the many questions that can engage the attention of the surgeon, and the suggestions in the present work are reliable and timely. We can recommend this book with much confidence.

DISEASES OF THE EYE.

A Manual of the Diseases of the Eye for Students and General Practitioners by Charles H. May, M.D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, New York City, 1890-1903; Ophthalmic Surgeon to the City Hospitals, Randall's Island, New York; Consulting Ophthalmologist to the French Hospital and the Red Cross Hospital, New York; Adjunct Ophthalmic Surgeon to Mount Sinai Hospital, New York, etc. Fourth Edition, Revised, with 360 Original Illustrations, including 21 plates, with 66 Colored Figures. New York: William Wood and Company, 1905. Price, \$2 net.

In a little less than 400 pages, the author succeeds in giving a very good general account of diseases of the eye. The work has been translated into the German and Italian languages, and a British edition has also appeared. There are few more competent to speak with authority on diseases of the eye than Dr. May. Although the work is not large, the entire field of ophthalmology is fully covered. The publishers merit praise for the manner in which the work is got out, in the matter of paper, binding, typography and illustrations. This book cannot but prove useful and a copy should find its way into the hands of every general practitioner who has so often to deal first with the diseases of the eye.

NEW JERSEY BOARD OF HEALTH.

The Twenty-Eighth Annual Report of the Board of Health of the State of New Jersey and the Report of the Bureau of Vital Statistics, 1904. News Printing Company, Paterson, New Jersey.

This annual report contains much valuable information on sanitary matters and preventive medicine. An interesting statement is made that prior to the use of diphtheria antitoxine the death rate was 10.4 in the State, but since its general use the death rate is only 4.2 in every 10,000 of the population.

A TEXT-BOOK OF DISEASES OF WOMEN.

By Barton Cooke Hirst, M.D., Professor of Obstetrics, University of Pennsylvania. Second edition, revised and enlarged. Octavo of 741 pages, with 701 original illustrations, many in colors. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, \$5.00 net; sheep or half morocco, \$6.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

Dr. Hirst may well be congratulated upon the publication of such a work as this, a second edition of which has just appeared. Written on the same lines as his "Text-book of Obstetrics," to which it may be called a companion volume, it gives every promise of attaining a similar success. The palliative treatment of diseases of women and such curative treatment as can be carried out by the general practitioner have been given special attention, enabling physicians to treat many of their patients without referring them to a specialist. Indeed, throughout the book great stress has been laid upon diagnosis and treatment, and the section devoted to a detailed description of modern gynecic operations is without doubt the most clear and concise we have yet read. In this second edition the revision has been thorough, introducing, however, only such matter that promises or has been demonstrated to be of permanent value. Forty-seven new illustrations have been added and thirty of the old ones replaced, the work now containing a collection of seven hundred and one beautiful original illustrations, many of them in colors. We take much pleasure in recommending Dr. Hirst's work to the medical profession generally.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE.

By James M. Anders, M.D., Ph.D., LL.D., Professor of Medicine and of Clinical Medicine at the Medico Chirurgical College, Philadelphia. Seventh edition, revised and enlarged. Octavo of 1,297 pages, fully illustrated. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, \$5.50 net; sheep or half morocco, \$6.50 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

A sale of over 22,000 copies and the attainment of a seventh edition seems sufficient recommendation for any book; in fact, Anders' Practice does not now need any recommendation—it is too well known. As in the former editions, particular attention is bestowed upon inductive diagnosis, differential diagnosis, and treatment. Regarding differential diagnosis, we notice with much satisfaction that the many diagnostic tables of simulating diseases have been retained. The clinical value of these tabulated points of distinction is beyond cavil. Numerous new subjects have been introduced, among which are Rocky Mountain Spotted Fever, Examination of Patients for Diagnosis of Diseases of the Stomach, Splanchnoptosis, Cammidge's Test for Glycerose in the Urine, and

Myasthenia Gravis. Certain other individual affections have been entirely rewritten and important additions have been made to the diseases which prevail principally in tropical and subtropical regions. The seventh edition of Dr. Ander's Practice maintains the reputation of the work as the best practice before the profession to-day.

SAUNDER'S MEDICAL HAND-ATLASES.

Atlas and Epitome of Diseases of the Skin. By Professor Dr. Franz Mrazek, of Vienna. Edited, with additions, by Henry W. Stelwagon, M.D., Professor of Dermatology, Jefferson Medical College, Philadelphia. Second edition, revised, enlarged, and entirely reset. With 77 colored lithographic plates, 50 half-tone illustrations, and 272 pages of text. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, \$4 net. Canadian Agents: J. A. Carveth & Co., 434 Yonge St., Toronto.

It is with much pleasure that we review the second edition of Professor Mrazek's admirable hand-atlas. That the work is a success and of practical usefulness needs no further proof than the demand for a second edition, not only in America but also in Germany. The author has added some twenty-six new plates, fifteen of them colored lithographs, and all of exceptional merit. The text he has thoroughly revised to include the most recent dermatological advances, especially along the line of histopathology. As in the first edition, there is evidence of the conscientious editorial work of Dr. Stelwagon, many additions being interspersed throughout the text.

ABDOMINAL OPERATIONS.

By B. G. A. Moynihan, M.S. (London), F.R.C.S., Senior Assistant Surgeon to Leeds General Infirmary, England. Octavo of 695 pages, with 250 original illustrations. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, \$7.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

It has been truly said of Mr. Moynihan that in describing details of operations he is at his best. This, his latest work, therefore, will be widely welcomed by the medical profession generally, giving as it does in most clear and exact language the preliminary technic of preparation and sterilization, as well as the actual *modus operandi* of the various abdominal operations. Mr. Moynihan's reputation in this field is international, and this work, stamped with the authority of a rare experience, is undoubtedly to become the recognized standard. Peritonitis and appendicitis, the latter of such present importance, have been accorded unusual space in a work of this kind; and the subject of chronic gastric ulcers is also excellently detailed. Throughout the entire book numerous cases have been quoted from both the author's own

practice and those of other distinguished surgeons. The beautiful illustrations are all new and have been drawn especially for Mr. Moynihan's work under his personal supervision. The book is a valuable production and adds greatly to the reputation of its eminent author.

CLEFT PALATE AND HARE LIP.

By W. Arbuthnot Lane, M.S., F.R.C.S., Surgeon to Guy's Hospital, and Senior Surgeon to the Hospital for Sick Children, Great Ormond Street. London: The Medical Publishing Company, 1905. Price, 5s net.

This is a large folio edition, containing 63 pages and 51 figures, and gives an excellent resumé of Mr. Lane's method of operating for the above conditions. Mr. Lane contends that the best time to operate is just after birth, even the day after. A flap is raised from side of the roof of the mouth, consisting of the mucous membrane, submucous tissue and periosteum. This flap is fastened on the opposite side beneath the raised muco-periosteum. Mr. Lane has practised his method for many years and has contributed a number of articles upon it. The present brochure is very welcome as a carefully prepared statement of his views, and we congratulate the author and publishers on its merits.

HANDBOOK OF PHYSIOLOGY.

For Students and Practitioners of Medicine, by Austin Flint, M.D., LL.D., Professor of Physiology in the Cornell University Medical College; Consulting Physician to the Bellevue Hospital; President of the Consulting Board of the Manhattan State Hospital for the Insane, etc., etc., with 247 illustrations, including four in colors, and an atlas of sixteen colored plates, containing 47 original figures taken from stained microscopical preparations. New York: The MacMillan Company; London: MacMillan & Co., 1905. Price, \$5.00 net.

Professor Flint needs no introduction, for he has a world-wide reputation as a physiologist. He is not only a physiologist, in the scientific sense, but he is a physiologist from the practitioner's standpoint. Further, he possesses an excellent style of expression, which adds much to the pleasure of reading his book. No where, perhaps, in the English language could a more authoritative work upon human physiology be found than this one by Professor Flint. The present handbook is an entirely new work. The last edition of the author's text-book of physiology appeared in 1888. The author felt that a new work was necessary to express his views properly, and hence this volume. We feel confident that both teachers and students will hail with delight this volume. The illustrations are superior in every way, and the atlas at the end contains a very fine collection of figures of distinct merit. We bespeak for this work a very large sale.

A MANUAL OF THE PRACTICE OF MEDICINE.

By A. A. Stevens, A.M., M.D., Professor of Pathology in the Woman's Medical College of Pennsylvania, and Lecturer on Physical Diagnosis at the University of Pennsylvania. Seventh edition, revised. 12mo of 556 pages, illustrated. Philadelphia and London: W. B. Saunders & Company, 1905. Flexible leather, \$2.50 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

We know of no work on practice of the same size containing so much practical information concisely stated, as this handy little book by Dr. Stevens. The author's epigrammatic style is no doubt the result of his extensive experience in the lecture room, enabling him to group allied symptoms in such a manner that they can be easily retained in the mind of the student. By a judicious elimination of theories and redundant explanations he has brought within a small compass a complete outline of practice of inestimable value. Indeed, for the student, the practitioner, and the nurse as well, we know of none better.

A TEXT-BOOK OF CLINICAL DIAGNOSIS.

By Laboratory Methods. For the use of Students, Practitioners, and Laboratory Workers. By L. Napoleon Boston, A.M., M.D., Associate in Medicine and Director of the Clinical Laboratories at the Medico-Chirurgical College, Philadelphia. Second edition, revised and enlarged. Octavo of 563 pages, with 330 illustrations, including 34 plates, many in colors. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, \$4.00 net; sheep or half morocco, \$5.00 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

It must, indeed, be a great gratification to an author when two editions of his work are required in one year. From such a reception it is evident that Dr. Boston's *Clinical Diagnosis* fills a demand. In this new second edition many new subjects have been added, including Biff's New Hemogelometer, Ficker's Reaction, an illustrated description of the Leishman-Donovan Bodies, Ravold's Test for Albumin, Cammidge's Test for Glycerin, and Cipollino's Test. The subjects of cystodiagnosis and inoscopy are given more extended consideration, the practical usefulness of these methods having been clearly demonstrated. Throughout the text it has evidently been Dr. Boston's aim to emphasize, in progressive steps the various procedures of clinical technic, illustrating such steps whenever possible. An unusual amount of space is given to the consideration of animal parasites, malarial and other blood parasites, skin diseases, transudates and exudates, and the secretions of the eyes and of the ears.

LECTURES UPON THE PRINCIPLES OF SURGERY.

With an appendix containing a resume of the principal views held concerning inflammation. By Charles B. Nancrede, M.D., LL.D., Professor of Surgery and of Clinical Surgery, University of Michigan, Ann Arbor. Second edition, thoroughly revised. Octavo of 407 pages, illustrated. Philadelphia and London: W. B. Saunders & Company, 1905. Cloth, \$2.50 net. Canadian Agents: J. A. Carveth & Co., Limited, 434 Yonge St., Toronto.

The difficulty with the great majority of works purporting to treat of the principles of surgery is that they attempt to be too comprehensive, so marring their usefulness to the undergraduate. Dr. Nancrede, whose work is now before us, has studiously aimed to overcome this objection, and has met with unqualified success. His work is not a new one, but for some years has held a place of first importance amongst medical text-books. The appearance of this new second edition, therefore, will be a source of much gratification to those who have found the work so valuable. Much has been added regarding the significance of leucocytosis, the treatment of sepsis and of tetanus, and the after-effects of general anesthesia and spinal anesthesia. By rewriting some portions and by greatly modifying others, Dr. Nancrede has brought his excellent work to a degree of perfection only attainable by the careful observation and study of a rich clinical experience.

MECHANOTHERAPY AND PHYSICAL EDUCATION.

Being Vol. VII of a System of Physiologic Therapeutics, edited by Solomon Solis Cohen, A.M., M.D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College, etc., etc. Present volume by John K. Mitchell, M.D., Fellow of the College of Physicians of Philadelphia, Physician to the Philadelphia Orthopedic Hospital for Nervous Diseases, Assistant Neurologist to the Presbyterian Hospital of Philadelphia, etc., and Luther Halsey Gulick, M.D., Director of the Physical Training in the Public Schools of Greater New York, President of the American Physical Education Association, etc. With 229 illustrations. Philadelphia: P. Blackiston's Sons and Co., 1012 Walnut Street.

This splendid series of eleven volumes is nearing completion. It has been a great pleasure to have reviewed the volumes that have appeared, as they have all merited the best that could be said. The present volume deals with two very important subjects, namely, Mechanotherapy and Physical Education. The authors have spared no labor to produce a good book, and their efforts have been abundantly rewarded. There are three special addenda to the book. One of these is on Orthopedic Apparatus by James K. Young, M.D., the second is on the Lorenz Method by H. A. Wilson, M.D., and the third on Physical Methods in Ophthalmic Therapeutics by Walter L. Pyle, M.D. The book is got up like the other volumes of the series, in a handsome and attractive form. So far as the binding, paper, type and pictures are concerned, the publishers are entitled to words of high praise. These volumes make a set of great value.

OSLER'S PRACTICE OF MEDICINE.

The Principles and Practice of Medicine designed for the use of Practitioners and Students of Medicine by William Osler, M.D., Fellow of the Royal Society; Fellow of the Royal College of Physicians, London; Regius Professor of Medicine, Oxford University; Honorary Professor of Medicine Johns Hopkins University, Baltimore; Formerly Professor of the Institutes of Medicine, McGill University, Montreal; and Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia. Sixth edition, thoroughly revised from new plates. New York and London: D. Appleton and Company, 1905; Toronto: N. Morang & Company. Price, \$5.50.

The late Professor Sir Granger Stewart, of Edinburgh, said at the dinner of the British Medical Association when it met in that city some years ago, in proposing the toast of the guests, of whom Osler was one, that before he addressed his classes he always looked up Osler's Practice of Medicine to find out what it had to say on the subject of his lecture. These were words of high praise, especially if one recalls the high standing of the speaker and the occasion on which he spoke. To quote the above would be to review the work as well as it is possible to review it; for there is no need for criticism, and the above is the strongest commendation.

We wish, however, to say a few words on this standard work; and the first one will be that it is the work of an experienced teacher and the arrangement the very best possible for the student's use. Everything is mentioned in its proper place, and the classification is simple and scientific. The principle affections are discussed under the headings of definition, historical note, etiology, morbid anatomy, symptoms, diagnosis, prognosis and treatment. Such topics as prophylaxis and the association of one disease with another also come in for attention when required.

Another feature of Dr. Osler's Practice of Medicine lies in the excellency of its literary style. In this respect it stands abreast of the classic lectures of Sir Thomas Watson on the Principles and Practice of Physic, to read which is a pleasure never to be forgotten.

But the final word which we wish to say about Dr. Osler's work is on its subject matter; and what can we say but that it is a guide which can at all times be trusted. Equal confidence—and that the fullest—can be placed upon what is said of the cause, diagnosis, pathology, prognosis and treatment of any disease. Complaint has been made that the treatment is too brief; but then it is the best, and why give more? If it is not now, it ought to be in the possession of every practitioner and student of medicine.

MISCELLANEOUS.

AMENORRHEA.

Where the suppression is the result of sudden mental or physical shock, exposure to excessive cold or dampness, change of climate, etc., the function can be restored with absolute certainty and celerity by the administration of a few capsules of Ergoapiol (Smith).

DYSMENORRHEA.

Whether neuralgia, membranous, congestive, inflammatory, obstructive or ovarian in character, responds readily to the pain-relieving and flow-augmenting influences of this product. Ergoapiol (Smith) causes the menstrual flow to occur without discomfort and brings the volume and duration to normal limits.

ROYAL SANMETTO, A REMEDY THAT WILL LIVE, BECAUSE HONEST AND SQUARE.

I have been prescribing Royal Sanmetto for suffering mortality for years. Indeed, ever since its entrance upon its high career and since it has vindicated its right to recognition, and to be held and regarded as the unrivalled and peerless remedy for bladder aggravations. This formula has won the confidence of physicians everywhere, and the remedy the gratitude of suffering thousands. Sanmetto without exaggeration is Royal—the Prince Imperial—whose fame is destined to live as long as it continues honest and square, and in the way that gave it its high reputation.

ANDREW JAMES PARK, M.D.

Chicago, Ills.

CIGARETTE SMOKING IN CANADA.

The increase in cigarette smoking which is noticeable in Canada is being paralleled in other parts of the world. In the British army, the cigarette is the popular smoke of all ranks, and a recent census taken in a line regiment showed that 74 per cent. of the men were cigarette smokers.

So far as Canada is concerned the reason for the increase is traceable to the fact that the "Sweet Caporal" cigarette, which is the most popular of all, satisfies the requirements of the smoker. When indulged in moderation, it is the healthiest form of smoke.

DRINKING IN LONDON.

Col, Henry Watterson writing recently on "Modern London," in the Louisville *Courier-Journal*, said, "In nothing have the habits of gentlemen more changed than in the use of wine. Time was when each plate and table was enfiladed, almost surrounded, by an escort of wine glasses, ranging from sherry to champagne, and tapering thence to Madeira and brandy-port, claret, Burgundy, the red alternating with the white—and he was no good man and true who did not go through the list and survive it. To-day at the great houses you may have what you want but rarely more than three glasses are visible, for white wine, for red wine and for champagne. Apollinaris is largely in evidence. The fine old English gentleman who made it a merit to get drunk on port and to sober up on claret has disappeared."

 MODERN THERAPEUTICS AND PHARMACY.*

By FREDERICK HADRA, M.D., of San Antonio, Texas.

In speaking of ethical proprietaries, he says: "I should be sorry, indeed, if the prejudices of any member of this society should so far overcome his better judgment as to banish all or most of these drugs from his practice without investigating their merits. So, if we desire a local antiphlogistic effect, and have to choose between the ancient, unsightly, unhygienic and troublesome flax-seed poultice and the newer proprietary article called Antiphlogistine, a physician must needs be prejudiced, indeed, who will prefer the former. . . . It may be a matter of theoretical indifference what preparation we prescribe, but it may be quite a different matter with the patient who has to use it for long periods."

"Does it not strike you as somewhat incongruous that we alone of all professions and trades should rise up in arms against a co-ordinate branch which is continually striving to assist us in improving our therapeutic weapons? If we would take advantage of the opportunity offered to make intelligent selection of such preparations of drugs of reliable concerns as appeal to reason and common sense, those of us who do so will certainly have an advantage over those who do not."

As regards the refilling by the druggists of prescriptions of proprietary remedies, he says: "If I am called to treat a sprain of the ankle, and find it necessary to order an antiphlogistic application, it would be just as easy for the patient to send to his druggist daily for more flax-seed meal or iodine, as it would be for him to order more cans of the

* Extracts from an article in the *Texas Medical Journal* for March, 1905.

more cleanly proprietary preparation, Antiphlogistine. A tonic or cough medicine, quinine mixture or capsule would share the same fate whether proprietary or extemporaneous." . . .

"If the intelligent use of the drugs mentioned in not injurious *per se*, why should we protect the laity against their use any more than against the employment of any other drugs? Would the committee advocate the abandonment of calomel castor oil, mag. sulph., quinine, flax-seed meal, paregoric, laudanum or carbolic acid because the laity can also get to the drug store and purchase these just as they can Cascara preparations, Phenacetin, Listerine, Antiphlogistine, etc?"

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An exhaustive series of experiments has clearly proven that the Stearns Serums when kept under ordinary conditions retain their potency for three to five years. Even at five years the antitoxic strength was shown to have decreased at most only 33 1-3 per cent. The U. S. laws demand that the date of expiration be clearly shown on the package and for that reason we now mark our serum one and a half years on the safe side and mark the date of expiration eighteen months after manufacture.

One great feature of the cost of marketing serum has been the unnecessary expense incurred by the return of large quantities of serum which have been held until expiration, where there was no warrant for holding excessive stocks.

For this reason we have established a depot for our serum at convenient points from Halifax to Vancouver, where the Stearns Serums can be procured on the shortest notice.

With a period of eighteen months guaranteed potency and another eighteen months assured potency there is no good reason for the continuance of the exchange privilege.

This arrangement permits us to reduce the price as per list and discounts shown on enclosed card.

	New list price.	Net to physicians.	Old price.
1. 1,000 units (immunizing)	\$1.75	\$1.32	\$2.00
2. 2,000 units (immunizing)	3.00	2.25	3.50
3. 3,000 units (immunizing)	4.00	3.00	5.00

The Stearns Antitoxin has demonstrated its claim to your confidence, by its absolute reliability, truth to labelled antitoxic strength, and great superiority of the simplex syringe as an injecting device.

The Stearns Streptolytic serum is the acknowledged superior of all antistreptococcic serum by its effectiveness in combatting all forms of streptococcal invasion. The 25 per cent. discount to physicians taken with the reduction in list figures is worthy of prompt recognition.

Order through your usual source of supply and Stearns' Serums can be supplied promptly.

We are carrying stocks of our serums in the following cities: Halifax, N.S., St. John, N.B., Montreal, Que., Ottawa, Ont., Toronto, Ont., Hamilton, Ont., Winnipeg, Man., Regina, Sask., Calgary, Alta., and Vancouver, B.C.

FREDERICK STEARNS & CO.,
Manufacturing Biologists,
Windsor, Ont., Detroit, Mich.

IRON THERAPY, WITH REPORT OF CASES.

W. C. WILLITS, M.D., Kansas City, Mo.

WHILE volumes have been written on chalybeate therapy and there has been much controversy upon the absorbability of different forms of iron, much that has been written is purely theoretical. It is from the practical demonstration of things that we get the surest and safest information. It has been repeatedly demonstrated that the tincture of the chloride or iron constipates our patients and in many other ways is an undesirable agent as a routine practice; although if these undesirable after-effects could be eliminated, the therapeutic effects of the tincture are reasonably satisfactory. Many organic preparations have been upon the market, and, without any desire to underrate the efficiency of any product, we desire to cite a few cases showing that in our hands Pepto-Mangan (Gude) has almost invariably proved to be all that could be desired in treating secondary anæmia. A very important point in selecting a remedy is to choose one which will not produce after-effects more serious than the original trouble, and by reference to the cases cited, it will be seen that in some of them iron in any form would seem to be contra-indicated on account of the great constipation. In none of the cases were there any bad after-effects. These cases are taken from those occurring in a general practice and are not selected with any special reference to this remedy.

Pepto-Mangan is palatable, it is easily absorbed, in no case was there any injury to the teeth, it did not produce nausea; and constipation was not produced in a single case. While these few cases might not in themselves be sufficient upon which to base an opinion as to the value of Pepto-Mangan in secondary anæmia, yet much valuable in-

formation can be gained by physicians reporting their successes and failures. However, after having used it quite extensively, I am convinced that it is a reliable blood remedy to use in general practice.

Case I.—A boy 8 years old. His father died of pulmonary tuberculosis; otherwise his family history was good. Two years ago he began to get sick at the stomach in the morning and vomited. He was sleepless and coughed considerably. Temperature, 99.5°; ankles were slightly edematous. Upon examination it developed that he had a heart murmur systolic in time, but not transmitted. His blood examination showed 3,500,000 red cells, hæmoglobin, 50 per cent. There were no physical signs of lung consolidation. No tubercular bacilli found in the sputum. The patient was placed in bed, and a nutritious diet ordered. He was also given Pepto-Mangan (Gude), a teaspoonful four times a day. In a very few days his symptoms began to improve. Although he was nauseated and vomited frequently when I first saw him, this trouble was not increased by the medicine and in a very few days his nausea stopped and did not return. At the end of ten days the heart murmur could not be heard. His color cleared up and he is now well, to all outward appearances. A second blood count was not made, but from his appearance it is evident that the hæmoglobin is near the normal.

Case II.—Miss M., age 19. Family history negative, except that one brother died of pulmonary tuberculosis at 22 years of age. She had been healthy until December, 1903, when she caught cold and coughed considerably. She was relieved of the cold, but the cough continued. Expectorates considerably. Normal weight, 105 pounds; now weighs 97 pounds. Temperature is usually normal, but thinks she has some fever in the evenings, but not every evening. Two or three times she sweat at night, but has not done so regularly. Never expectorated any blood. Is restless at night. Appetite poor; constipated; looks very anæmic. Pulse, 90 lying down, 96 sitting, and 100 standing. No signs of consolidation or cavities in the lungs. There are a few râles present, but the expiratory effort is normal. Has a chest expansion of 2½ inches. Blood count showed red cells, 3,040,000; white cells, 4,600; hæmoglobin, 60 per cent. While this looked some like tuberculosis, the sputum, on repeated examination, showed no bacilli. She was told to stay in the open air as much as possible, sleep with the windows open, and eat plenty of good nutritious food. She was also placed upon table-spoonful doses of Pepto-Mangan (Gude) four times a day, with marvellous results. In five weeks her blood count showed red cells, 4,200,000; hæmoglobin, 85 per cent. The general symptoms were very greatly improved. She went West, but has continued the treatment and an occasional letter informs me that she is now absolutely well, and has greatly improved in weight.

Case III.—Mrs. S., age 35, married. Has had four children in six years. She complained of headache, backache, and constipation. Was very much run down. Since her menstrual flow had been established after her last child, she has been suffering considerably at her monthly periods. The flow was scant and only lasted a day or two, whereas in the past she had flowed four and five days. Her mental and nervous symptoms were very bad. Upon several occasions she nearly collapsed mentally. She had anesthasias and hyperesthesia; her memory was very poor, making it altogether a very pitiable case. She was advised to take to her bed. Was later given graduated exercise and placed on tablespoonful doses of Pepto-Mangan (Gude) four times a day. There was at no time any ill-effects of the medicine noticed. The constipation was released in spite of the medicine. Her progress was slow, but she gained in weight, her menstrual flow became normal and her nervous and mental symptoms vanished, and her color became much better. While the rest and the exercise must be given some credit in this case, we are inclined to give Pepto-Mangan the greatest amount of consideration in relieving the symptoms.

Case IV.—Miss C., aged 14. Family history negative. Suffering with chorea. She was placed on Fowler's solution and Blaud's pills. Improvement began soon, but owing to the constipating effects of the Blaud's pills, Pepto-Mangan (Gude) was used instead. The improvement was more rapid and she was not troubled with the constipation afterward. This case is briefly cited to show the advantage of Pepto-Mangan over Blaud's pills.

Case V.—Miss C., aged 20. Came for examination. The history showed that she had been treated for several different conditions by various physicians, but her chief difficulty was that she would fall asleep at any time of the day or night. There were no premonitory symptoms, but she would be sitting talking to a person and would go to sleep. As soon as she would wake up she would be normal again. At night she would sleep all night, but would toss about the bed, talk and laugh in her sleep, but wake in the morning not knowing that she had done any of these things. She was easily irritated, and her memory was very poor. She had been suffering in this way since she was 12 or 13 years old. Her menstrual flow was very irregular, sometimes missing two or three months. Her blood showed hæmoglobin, 65 per cent.; red cells, 3,600,000; white cells, 4,000. She was given advice as to diet, exercise, rest, etc., and placed on Fowler's solution and Pepto-Mangan (Gude), the latter one tablespoonful four times a day. Her progress was very slow indeed. At the end of six months her blood showed hæmoglobin, 90 per cent.; red cells, 4,500,000; white cells, 4,000. She did not sleep nearly as much, her menstrual flow was regular, and she

slept more quietly at night. However, she was not entirely well. She left the city and I lost sight of her.—*Reprinted from The Kansas City Medical Index-Lancet, May, 1905.*

THE STAGE OF EXHAUSTION.

In the treatment of alcoholism and dipsomania, the physician is called to the case at the stage of exhaustion or prostration and a general derangement of nearly every function. Neurosis, cerebral congestion, cardiac acceleration, gastric and mesentric disturbance, nausea, retching, intolerance of food, intense irritation, insomnia and an endless variety of morbid sequelae, require prompt attention.

It will be found that antikamnia in combination with codeia will give a most prompt and satisfactory response in relieving all the array of symptoms so distressing and usually so obstinate as to defy all ordinary therapeutical interference. The best method is to administer one Antikamnia and Codeine Tablet (antikamnia gr. $4\frac{3}{4}$, codeine gr. $\frac{1}{4}$) every fifteen minutes to a half hour, until three are taken, then widen the interval to one and a half to two hours, according to the urgency of the symptoms. Under this treatment the circulation will modify, the cardiac pains subside, the tremor, anxiety and morbid vigilance will give way to rest, quiet, calm and peaceful sleep. The nausea and vomiting, together with the irritable coughs which so frequently characterize these cases, will also disappear.

The superior results obtained with "Antikamnia & Codeine Tablets" are due, in a great measure, to the fact that the manufacturers refine and purify all of the codeia which enters into these tablets, and this prevents the constipation, depression and habit which frequently follow the administration of preparations containing ordinary commercial codeia.

BATTLE AND COMPANY'S PLATES.

This company has been issuing for some time a series of very handsome illustrations of the intestinal parasites. The seventh of the series is just to hand. The plate contains twelve figures of the *ascaris lumbricoides*. These beautiful illustrations will be sent any physician desiring them by the publishers, Messrs. Battle and Company, Chemists, St. Louis, Mo.