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PRESIDENTIAL ADDRESS AT THIRTY-SECOND ANNUAL MEETING OF CANADIAN MEDICAL ASSOCIATION, TORONTO, 1899.

BY IRVING H. CAMERON, M.B.

GENTLEMEN OF THE CANADIAN MEDICAL ASSOCIATION,—My first duty is the pleasant one of welcoming you all to the Queen City of the West, and to express the hope that your sojourn here may prove at once pleasant and profitable.

My next duty is to express to you my full appreciation of the good-will and lenient judgment which prompted you to place me in the position of undeserved eminence, which, by your suffrage, I

occupy to-day.

"Some men are born great, some achieve greatness, and some have greatness thrust upon them." In the position of the last named I stand at present quite unwillingly; and had it not happened that on the occasion of your last meeting I was absent in England, I should have presumed to correct your judgment, and have pointed out my lack of fitness for the post. Under the circumstances, therefore, it is not too much to ask of you to cast that mantle of charitable consideration with which one so naturally envelopes one's own mistakes over my shortcomings and defects.

It is the fashion on occasions like the present to raise the pean of *Io triumphe*! and to recount the gains and the achievements of the year, or of the decade; but this is done on every hand much better than I could do it, and if the less skilful hand be set to point

out some defects the less occasion for complaint will the auditors

possess.

If, indeed, my screed turn out to be a jeremiad, the proneness of the Keltic mind to such indulgence must plead my excuse en atavistic grounds; and the increasing tendency of one's second quarter of a century in the practice of physic to recognize much merit in the men and methods of the past will add its suit in my defence.

The burden of my lament to-day is the overcrowding of our ranks, and the decadence of scholarship in the profession; and I shall best requite your courtesy and confidence in giving me this opportunity to inflict my views upon you by the briefest possible presentation of my subject.

I should do this in any case, however, recognizing to the full

the truth of the ancient adage, Verbum sapientibus sat.

The fact of overcrowding in the profession is sufficiently obvious to enable me to dispense with a demonstration, and is as well known to all of you as to myself. The same thing is equally true of the other professions which, like our own, are still by courtesy called learned.

The church and the bar suffer from the same plethora as ourselves, and in their case the remedy will perhaps be more difficult of application, and equally drastic in action. Your courtesy will doubtless allow me, however, to cite one or two instances in unnecessary substantiation of the proposition. And I need go no further afield than the city in which we meet to look for an illustration.

It used to be considered that a population of 1,000 souls afforded a sufficient clientéle to keep one medical man in reasonable occupation and affluence. But what do we find here? A city of 200,000 inhabitants and 400 physicians! Under the circumstances, these are naturally not of "Toronto's 400." A census of other cities, and of rural districts, will reveal a like condition of affairs; and some three years ago Sir William Mitchell Banks, in his presidential address to the Lancashire and Cheshire branch of the British Medical Association, discoursed upon the same state of the professions at home in England. This year, in France, too, the same subject has been the theme of more than one discourse.

The overcrowded state of the profession being granted, then,

what are the evils which flow therefrom?

I make no apology, for none is needed, for answering this ques-

tion by a long quotation from Mitchell Banks.

Those of you who know the man, or who had the privilege of listening to him in Montreal two years ago, will welcome again the *ipsissima verba* of the master, while they will regretfully miss his inimitable delivery; and those who have not the pleasure of his acquaintance will gladly gather some impression of the man from my selections, while I willingly confess my inability to say what I wish to say with anything like the same felicity:

"At many meetings held during the past year, I could not help

being painfully struck with the often-repeated mention of the very small fees which, in certain of its departments—notably that of midwifery—many members of our profession were forced to accept. It is not that there is anything dishonorable in accepting a small Why, the very smallest fee honorably carned from and gratefully paid by the poorest working-man is a king's ransom, in moral value, compared with the great sums extorted by that prince of quacks, the fashionable London specialist. But what one could not help feeling was, that the physical labor, the mental fatigue, and the harassment and anxiety expended by many of our brethren upon their cases were utterly disproportionate to the value of the fees supposed to remunerate them. Can it be that the mercantile price of medical skill is depreciating in money value? This is not possible. The article, if one may so term it, is of far better quality than ever it was as regards intrinsic worth. Is it the general bad times? No doubt this accounts for a good deal, but the difficulty of making a living in medicine has been steadily getting greater in the large cities and in the manufacturing districts for the last twenty-five years. Are we, as a body, falling in the estimation of the public, who are ceasing to respect us, and who think our skill no longer worth paying for? Quite the contrary. As an honorable profession, medicine never took so high a rank in all its history as it does to-day. What, then, is the cause of this bitter cry from many of the rank and file of our profession, that they can only make their bread by miserable fees, earned by intolerably hard work? Gentlemen, it requires no royal commission to find this The simple fact is that, with us as with many other businesses and trades, there are too many of us for it. That is the sum and substance of the whole thing.

"Many circumstances have contributed to this overcrowding. In former days a man of good family and social rank, but whose fortune was not very great, while his children were numerous, could often find places for a son or two in the church or in the army, through the influence of powerful friends. But the days of interest are gone, and these avenues are closed now. As for the bar, the number of the briefless seems ever on the increase, while legal proceedings are actually diminishing in number. ness the quiet old trading days are gone, and there is nothing but hurry and conflict, and cheating, and risk. So that the merchant sees in medicine a comfortable sphere of life, where a living can usually be made by any sober and industrious man. Thus the great medical schools have been pouring out a deluge of young practitioners, which has overwhelmed the land. One remembers the story of Abernethy's celebrated address to an audience of newfledged doctors, which began with, 'Good heavens! gentlemen, what is to become of you all?' It is a good thing for him that he did not live to see the present state of things. It is curious to note, moreover, how we doctors are unknowingly compelled to follow the stream of popular prejudice. At the present day the desire

is for life in towns where there is activity, and energy, and rivalry, and companionship. A quiet life in the country is not in accord with the temper of the times, and men fly to the haunts of men.

"I confess that there is no profession which has such a good excuse for so doing as ours. To make the spark, steel must rub against steel; in order to progress, brain must struggle against brain. But, as a result, the overcrowding of our towns has only become all the more marked. There used to be many quiet old villages in England, where the doctors succeeded each other from father to son for three and four generations, and where the inhabitants did not believe there could be any doctors worth talking about except those who had supported their fathers' and mothers' heads as they lay a-dying, and who had brought them into the world; but those days are gone, and our business is not to lament

the past, but to do the best for the present.

"Being, then, face to face with the facts that there are so many doctors in our cities and manufacturing towns that a man must live a life of incessant labor and turmoil even to exist, and that in many cases he cannot even do that. What is the disadvantage to the public in this? For it is right to take note of them as well as of ourselves. I have heard it argued by business men that there cannot be any harm in this, seeing that competition has compelled men to exercise every mental gift they possess, so as to excel each other in manufacturing things at a cheap rate, by which means the public have been great gainers. This, I admit, is perfectly true, but, as it happens, there is an immeasurable gulf fixed between the capacity of the ordinary man or woman to judge of the value of articles of commerce, and their capacity to judge of the value of medical skill. Every man who has long taught students becomes sententious; he invents proverbs. I have long ago invented one to the effect that in religion and medicine the public like being quacked; they deliberately prefer it. Just look round the circle of your acquaintances. They understand a business bargain. You can't take them over in buying a house or a piece of land. They appreciate to a penny the wares of the green-grocer or the milliner. But you have only to take a bread pill and "bill" the intervening space from the pyramids of Egypt to the cañons of the Rocky Mountains with posters, which announce that it will cure every disease from chicken-pox to cancer, and you will make a huge fortune, which you will, no doubt, bequeath to charities when you die, as a kind of quid pro quo for having robbed your fellowmen during a long lifetime. A man comes to consult you whose ailment is clearly due to his manner of living. You give him honest advice about this, show him how he must alter his habits, and tell him he doesn't require physic. He has no sooner got onto your doorstep than he proclaims you a fool, and proceeds to dose himself with Elliman's Little Kidney Pills, or Beecham's Embrocation, or Siegel's Gore Mixture. Both in his religion and in his medicine the average man doesn't want to hear common sense; he

wants to have something that will cure his soul or his body at once by some supernatural means; and if you can lie hardily enough to him he will swallow any dogma or any pill you like to stuff down his throat, and pay handsomely for it, too. I cannot be accused of exaggerating when one considers the vast numbers of persons who have voluntarily paid for Harness' electric belts and Count Mattei's cure for cancer. But the result of all this to us, as a profession, is very serious, for it is a direct inducement to us to prey upon the credulity of our patients, and I do not believe there is another body of men to be found anywhere which makes such strenuous efforts to be honest as we do, in spite of very great temptations to the contrary. If any man among us chooses to cut himself clean adrift from the society of his honest brethren, and to set up as an out-and-out daring charlatan, he is at any rate sure of making plenty of money if only he will take for his motto, 'L'audace, toujours l'audace.' Let us pursue the argument a stage Let us suppose a condition where, owing to there being more men than there is work for them to do, a certain number see no prospect of earning a decent living before them. they to do? It is all very well for Monsieur Talleyrand to tell the poor devil who said that he had to live, that he saw no necessity for The poor devils insist upon living in spite of Monsieur Talleyrand, and if they cannot live honestly, well, then they will live the other way. Go down any big street in the north end of Liverpool, and before you have gone far you will come on a shabby-looking shop, which has evidently remained empty for a long time till occupied by the present tenants. The window is blackened, but its dulness is relieved by gold letters which inform you that this is a dispensary; that Dr. Dosem, physician, surgeon, and accoucheur is in attendance from 9 a.m. to 9 p.m.; that medicine and advice are given for the moderate sum of sixpence, or even threepence, and that vaccination is performed at a phenomenally low figure. If you come back in a month or two you will find that the dispensary has been let to a green-grocer, but Dr. Dosem has transferred his large and lucrative practice to another shop in a back slum of Manchester. Many of you are medical officers to clubs, and have been waited upon by the representatives of these clubs to know what is the very lowest figure at which you will take In the course of a week you learn that a neighboring practitioner, two streets off, has been entertaining these gentlemen to pipes and whiskey and water in his best sitting-room, and that he has agreed to take them at sixpence a head less than you had announced as your minimum. Others of you having gathered around you a comfortable practice can remember how a practitioner from a neighboring village planted in a house close to you one of those wretched Helots of medicine, known as unqualified assistants, to whom he acted as 'cover,' while his slave sweated in the pleasant task of undermining your practice by under-selling you. Thank God! the medical Council has pretty well succeeded in

stamping out such proceedings, well stigmatized by them 'infamous' from a professional point of view. And still there is a lower depth, for in every big city you will find qualified men sitting in shops of, and openly abetting, those pests of society, the dealers in mysterious remedies for venereal diseases, whose advertisements, with singular appropriateness, adorn the walls of the public urinals.

"If you ask, gentlemen, how these miserable things can be done by educated gentlemen, the members of a liberal profession, I reply that these are not educated gentlemen. They are men who should never have been in the ranks of our profession at all. They are, I admit, sorely tempted. Mostly they have wives and children depending on them, and clamoring for bread. Practice does not seem to come their way, and still the butcher and the baker must be paid; and so they naturally say to themselves, if we cannot live honestly, we must live as best we can. I am charitable enough to believe that this is the case in the majority of instances, but there are not a few men who have simply the instincts of small shopkeepers. Their point of view of practice is identical with the point of view of a small grocer or third-rate chemist as regards his 'takings.' They adopt, positively by choice, the mean and sordid part of their profession. One of these men frankly told me, some years ago, that he did not care a fig for his profession, nor for the respect of his professional brethren. He wanted to get hold of money, and money he would have however he got it.

"I need not dwell further upon this very painful side of pro-

fessional life. You are all too well acquainted with it."

Another evil of this overcrowding to which, however, Mitchell Banks does not allude, is an undue growth of specialists. Young men entering the profession-oftentimes men of enterprise and ability-finding the general-practice avenues to employment and emolument thronged by a jostling crowd, seek by-paths to the attainment of their goal and speedily blossom out into full-grown specialists, whose opportunities of attracting attention (not to say advertisement) are so much greater, whose fees are so much larger, and whose lives are made up of so much less laborious days and nights of uninterrupted ease and enjoyment. The temptation, indeed, is great!

But I would not be misunderstood as decrying a proper special-

ism in practice. When cases of a certain kind accumulate in sufficient number to confer upon an individual special skill and experience in their management, it is highly proper for him to devote himself to their treatment, and much to the advantage of all concerned, for he will bring to bear upon his special work a mind well developed by general experience and well stored with the facts of general pathology. The mutual inter-dependence of all parts of the animal economy renders it imperative, in my mind, that the specialist should grow out of the general practitioner, or else be prepared for his special work by long residence on all sides of a general hospital (including the pathological department).

Otherwise he may possess consummate technical skill, but ninetithes of time his knowledge will be as nothing to that of the family physician, who adds to a liberal stock of general information an acquaintance with disease in general, and a knowledge of his patient, root and branch.

But the good old-fashioned practitioner is dying out, and my jeremiad would be incomplete indeed if it did not bemoan the passing of the family doctor, and, in the day of automobiles, that other

noble and useful animal, the doctor's horse.

Of the other branch of my subject, "The Decadence of Scholar-

ship in the Profession," I have but scant time to speak.

That the literary side of the preliminary preparation for a medical education is nowadays too much neglected, and that a low level of scholarship obtains and is accepted is abundantly evidenced by the characters of the answers given to examination questions, and by the questions themselves, by the applications and and petitions of medical students to the various governing bodies, and by the formal announcements and kalendars of the medical colleges themselves.

A comparison of the literary style of the medical text books of to-day with that of the past generation enforces the same conclu-

sion.

Now, this defect of scholarship is associated with, and to my mind, too oft begets defect of manners; and the courtesy and old time courtliness of professional intercourse is rapidly disappearing.

The pupil no longer greets his master with the outward evidences of profound respect, but commonly meets him on terms of equality. The practitioners of our art no longer manifest in their public intercourse and private conversation that deference which characterized the gentlemen of the old school. Nor is this decline of manners restricted to the lower walks of the profession—the student and the practitioner—but it has invaded with no less subtlety and certainty the higher ranks of the consultant. The time was when the consultant did not seek to glorify himself at the expense of the family doctor, and when the welfare of the patient was their united, single aim. Then, after consultation, the family doctor expressed to the patient and his friends the result of the deliberations and the plan of campaign jointly proposed. Nothing was said of differences, for these had been talked over and effaced, and no statements or suggestions were offered tending to exaggerate the lay estimate of the importance of the wide experience and profound learning of the consultant or so-called specialist. During the consultation in the endeavor to arrive at a unanimous conclusion, sight was never lost of the deference due to the family physician who had a special knowledge of the patient and his heredity, widely cultivated powers of observation, and a mind wellpracticed in the weighing of evidence. In the case of palpable or established error on the part of the practitioner, the educated consultant, quickly responsive to the dictates of the instincts of a gentleman, remembered the adage so well expressed by Pope:

"Men must be taught as though you taught them not, And things unknown proposed as things forgot."

In brief, the golden rule was the rule of conduct in consultations. In those good old days the crowning disgrace of latter day consultations was utterly impossible. A man who then proposed in consultation (as has been openly advocated in a journal published in St. Louis, Mo., in the interest of the most absurd and irrational of all so called specialties, Abdominal Surgery and Gynecology, and as has been done, I am told, by at least two practitioners in our midst) that an operation should be performed by the consultant and a commission be extracted from the patient for the benefit of the practitioner referring the patient, would undoubtedly have been arraigned before a competent tribunal on a charge of conduct infamous in a professional respect; yet this line of conduct is now openly urged on the plea of equity and justice to the family physician. Truly the commercial spirit, the instinct of the tradesman has infected a once noble and honorable profession with a destructive, nay, a fatal virus.

Now I venture to group these two crying evils of our time—the overcrowding of the profession and its decadence in scholarship—together, because I believe the remedy for both is one and the same. Hear again what Mitchell Banks says upon the subject:

After referring to the failure of attempts to suppress quackery and illicit practice by legal process owing to technical quibbles and the sympathy of juries stimulated by the cry of oppression, and the inability of the General Medical Council to put down all the rascals in the profession, even if they sat all year round, he urged upon the attention of his hearers the expensiveness of the process, citing one case in which the attempt to secure legal conviction cost the profession £600 and accomplished nothing. He then directs his attention to the suggestion that the severity of the professional examinations should be increased, and on this point he says: "I can confidently affirm (from my experience in the General Medical Council and in the College of Surgeons) that it is not possible at present to add to the burden of examinations which the medical student has to bear without doing more harm than good. You can go on, no doubt, adding subject to subject, and examination to examination, but by doing so you only drive the student into further and further cramming. His serious defect at present is that, owing to the eternal cramming to which he is compelled to have recourse in order to master his subjects he loses all power of thinking or reasoning for himself. He is being reduced to a mere grinding machine, which has to be stoked up with scientific pabulum.

"Well then, you ask, what is my remedy? My remedy consists simply in stiffening up the entrance examination. I hold that there ought to be a rough sieve applied at the very beginning, and that all who cannot get through this sieve should be cast on one side. As things stand at present any man who gets through an

entrance examination will ultimately get a qualification of some kind which will enable him to put "Doctor" on his door plate with just as much effect as a graduate in honors of the London Univer-Your cannot hinder him from this by any amount of scientific or professional examinations. He will rub through these bit by bit. Any teacher of experience will tell you how futile it is to attempt to turn back a man who has once passed an entrance examination, if that man is determined to go on. Besides it seems to me unfair to allow an inferior man to enter upon a course of professional studies for which he is obviously unfitted. He ought not to be allowed to get so far. He should be turned back at the very commencement, and not encouraged to throw away years of unavailing work. It has been said that if only those who have had a really good preliminary education are to be allowed to enter the profession, you may keep back many poor but struggling geniuses, who might afterwards make great names for themselves. Well, there would be reason in this argument if we were in want of men to join our ranks, but when our object is to keep out applicants, the persons to be kept out are the badly educated, underbred ones. They will be far happier as decent tradesmen, in positions where their manners and their ways of thinking will not be out of place. When admitted among us they simply hold us down, and the few heaven-born geniuses among them would never be missed." secure uniformity Mr. Banks thinks the entrance examination should be under the control or inspection of the General Medical

And, if we are to have a General Medical Council of education, examination, and registration for the Dominion—a consummation devoutly to be wished, and which your deliberations and endeavors at this session may almost make an accomplished fact—which Dr. Roddick's strenuous efforts and untiring zeal have brought so nearly to an accomplishment, an achievement upon which I now offer both you and him my warmest and most sincere congratulations—if such a body, I say, be now happily about to be constituted, then, following the suggestion offered by Sir Wm. Banks, this most important duty of regulating the standard of entrance might well be entrusted to it.

But it is upon the character and quality of this entrance examination that I feel most strongly, and the strength of my feelings forces me to the imprudence of trespassing further upon your patience.

Dr. MacNeill, of Stanleybridge, P. E. I., presented this matter most forcefully and skilfully to the Maritime Medical Association, at its meeting last month, and I heartily commend his address to your perusal as a most powerful argument in support of my position. *Maritime Medical News*, August, 1899.

I am not of those who think that a degree in science alone is the proper and essential precursor of entrance upon medical studies, but I hold strongly to my ancient faith in the *litera humaniores*— the basis of what was called in my younger days "The education of an English gentleman"—as the proper substratum and foundation work upon which to build the superstructure of a professional education. Such a course is particularly suited for the medical practitioner, doing away largely with the evils above complained of, by exacting a higher degree of culture and refinement, thus diminishing the internal pressure of numbers, and, by the establishment of a higher sense of professional character and conduct, effacing many of the crudities and barbarities which now obtain, for, as Ovid long ago averred, " Emollit mores nec sinit esse feros."

That nothing short of the highest and best preparation will do for the medical profession you, of course, will all readily admit, but it is a peculiar source of gratification and encouragement of high ideals to find a man of so much eminence, of such genuine refinement, and of such a wide experience of men and manners as Lord Roseberry, affirming, as he did on last Prize Day at Epsom College (July 29th), the association of which with the profession is peculiarly close, that "The medical profession in its science contained perhaps the most supreme elements of manhood of all the professions"; and in the development of this "manhood" the headmaster (the Rev. T. N. Hart-Smith) on the same occasion said "Their aim at Epsom College was to train the boys on sound principles, so that they might have a good general education—and by sound principles he meant classics and mathematics—and to turn out, not necessarily scholars and prize winners, but boys of the right stamp who were able to set an example in whatever situation they might be placed." Such boys are doubtless the fathers of the right stamp of men.

But not only for the vocation of medicine, amongst scientific pursuits, is literary culture valued, for we find Sir J. Norman Lockyer, in the address which he delivered a year ago at the Royal College of Science on the "History of Scientific Instruction," concluding thus: "I have referred previously to the questions of secondary education and of a true London University, soon, let us hope, to be realized. Our college will be the first institution to gain from a proper system of secondary education, for the reason that scientific studies gain enormously by the results of literary culture, without which we can neither learn so thoroughly nor teach so effectively as one could wish."

Let me not be misunderstood, however. I have no desire to force all our students to become "Grammarians," to be able to "settle Hoti's business, properly base 'Oun,' or give us the doctrine of the enclitic 'De,'" but I would have them realize to the full the truth of the remark made by Dr. John Brown in the post preface

to his "Horæ Subsecivæ," now forty years ago:

"Latin and Greek are not dead—in one sense they are happily immortal, but the present age is doing its worst to kill them, and much of their own best good and pleasure."

I feel no keener sense of gratitude to any man than I owe to

the memory of the late Dr. Morden, of Brockville, who gave me my first copy of Dr. Brown's "Spare Hours," a few years after they were published, and from which I learned the wisdom which

that quoted sentence inculcates.

The preparation, then, which I would require all candidates in the medical faculty to have undergone in their own best interest. as well as in that of the profession, would be such a literary training as is involved in what we call in the University of Toronto "the general course," and which comprises inter alia, the subjects of Latin and Greek, French and German, astronomy and physics. biology and geology, philosophy, history, and political economy. Having graduated in this course, after three or four years of study. I would have them then proceed to the faculty of medicine, and devote the first two or three years therein to those branches of science which are immediately ancillary to medical knowledge. viz., biology (including physiology), human and comparative anatomy, chemistry and materia medica; and the final three years should be spent in the clinical laboratory, the hospital and the postmortem room, on the walls of which should always be inscribed, as it was over the door of the mortuary of the old Hotel Dieu in Paris. " Hic locus est quo mors yaudet succurrere vitae."

Having completed such a course with diligence and honesty, the new-born physician would enter upon his career of honorable usefulness with commingled modesty and confidence, and the evils which I have bemoaned at such length would cease in the land.

One other, and a painful duty remains to me before I close. It is to make mention of the diminution of our numbers by the inevitable emigration to "the great majority." Were the roll to be called to-day of those who were active in the Association's work when I joined the ranks five-and-twenty years ago, scarce a corporal's guard would answer to their names. Of the rest it would have to be recorded "abiverunt ad plures" or "emigraverunt." And of the corporal himself, then secretary of the mess (Osler), it would have to be told that though happily still present in the spirit the absent flesh had sought "fresh woods and pastures new." How well for us if he could only have deferred it until "to-morrow."

My coranach to-day is "but an echo of the moan for these" and the names I mention, with averted head and the hand thrice filled with dust, are H. H. Wright, of Toronto; Charles Robinson, of Brampton, original members of the Association; and J. H. Mullin, of Hamilton; H. P. Wright, of Ottawa, and J. E. Graham, of Toronto, who were contemporaries with myself in 1874. Only three of these, Dr. Mullin, Dr. H. P. Wright, and Dr. Graham took a continuously active part in the work of the Association, and the memory of their service demands a word of acknowledgment. Of these three Dr. Mullin alone had passed the meridian of life, and with him the shadows had scarcely begun perceptibly to lengthen until a year before his death. The last occasion on which I remember to have seen him in Toronto was at the meeting convened by

Dr. Roddick to discuss the question of interprovincial registration. But then the shadow of the shadow that waits for men was creep-

ing on apace.

Throughout his professional career of forty years, Dr. Mullin wore in simplicity and modesty, "the white flower of a blameless life." Of his many private virtues I shall not speak. Of his professional character I may say in brief, that he was throughout, both to the great corporation which he served so long and faithfully and well, and to his private patients a most devoted and reliable "guide, philosopher and friend;" to his brethren an "ever-present help in time of trouble;" and to us all a bright example to emulate and follow.

Of my late, lamented colleague, Dr. J. E. Graham, close association makes me speak with some reserve. I may, however, without impropriety say, what I think all will readily admit, that he was the father in this country of clinical teaching as we now have it; that he gave a great impulse to the study of dermatology and of pathology amongst us, and that from start to finish he held high aloft, unflickering and undimmed, the lamp of science to guide our footsteps and his own. He was himself a beacon for our steering, and setting an example of assiduous application, patient perseverance, indomitable energy and pluck, personal probity and large esprit de corps, combined with ability and common sense, he showed the way, in spite of enervating influences within, to scale the rugged rocks of opposing difficulties and reach the heights of professional recognition and reward.

To refer to Harry Wright, of Ottawa, as he was always affectionately called, in terms of moderation is no easy task. Save Osler alone, I know of no man ever in this Association who became in the same degree the personal friend of every one of us. His personal magnetism knew no bounds nor obstacles. Peculiarly situated in that he enjoyed the largest practice in the Capital, he became through the members of both Houses of Parliament intimately known throughout the length and breadth of the Dominion, and from the highest to the lowest in the land, he was everywhere regarded as a true personal friend, a tried and trusted counsellor.

That without notice of his sailing, and free from "the sadness of farewell," he crossed the bar, was a great shock and grief to his innumerable friends, for Harry Wright was manifestly a favorite

of the gods.

"And him on whom, at the end
Of toil and dolour untold,
The gods have said that repose
At last shall descend undisturb'd—
Him you expect to behold
In an easy old age, in a happy home;
No end but this you praise.
But him on whom in the prime
Of life, with vigor undimmed,
With unspent mind, and a soul,

Unworn, undebased, undecayed,
. Mournfully grating the gates
Of the city of death have forever closed—
Him, I count him, well starr'd."

The last time the Association met in the city of Toronto (1889) H. P. Wright was president. But it was only a business meeting here, and the Association immediately adjourned to Banff. There it was his grievous task, very lovingly performed, to speak to the Association on the loss it had sustained through the premature death of his uncle, Dr. Robert Palmer Howard, of Montreal, one of the strongest minds ever associated with us, and facile princeps in Montreal's always strong contingent. That I am called upon today to do a similar office for himself fills me with grief, for "I owe more tears to this dead man than you shall see me pay."

While memory holds her seat in our distracted globes Harry Wright will never be forgotten; and the recollection of him will linger longer still, when our haunts of memory echo not, in the records of the hospital which he did so much to found and to foster, thanks to the munificence of that dear wife who was indeed

"a helpmeet for him."

Of all these dead friends alike I take my leave in the time-

honored words: "Fratres, uvete atque valete!"

"Si quis piorum manibus locus, si, ut sapientibus placet, non cum corpore extinguuntur anima magna, placide quiescatis!"

One word of cheer and I have done. Amongst the recipients of the last "birthday honors" men noted with applause the names of Sir John Burdon Sanderson, Sir Michael Foster, and Sir William Mitchell Banks. These honors were not bestowed for political reasons, for special service to the Sovereign, or to the State as such, but simply in recognition of scientific labors conducted in the laboratory, the dissecting-room, and the ward. That two physiologists and a surgeon-anatomist should be selected for this distinction bodes well for the future of our art, the hope of whose progress and development is wholly based upon our science!

As your mouthpiece on this occasion let me offer to these gentlemen, our masters and teachers of old, our warmest and sincerest congratulations upon the recognition by the Fountain of Honor of their great merit, worthiness, and deserts. Let us wish them long life and happiness to enjoy these honors which were never won more worthily, and which none will wear more "lightly as a

flower." "Floreat Res Medica!"

CHRISTIAN SCIENCE.*

BY J. H. RICHARDSON, M.D., M.R.C.S. (ENG.), TORONTO.

When it was suggested that I should read a paper before this Association upon the subject of Christian Science, I willingly consented, not because it was intrinsically worthy of five minutes attention from any rational being, but because it seems to me imperative that the medical profession should have more definite knowledge of its claims and teachings than can be found in the reports of lectures which appear from time to time, which do not give the faintest idea of the real nature of this so-called Christian Science.

The time at my disposal necessitates but a brief synopsis. I can merely quote extracts bearing upon the large majority of its teachings, confining more extended notice to such as seem to me to be of importance.

The quotations I will give will be mainly from the authorized text-book, "Science and Health, with Key to the Scriptures," but some will be from Mrs. Eddy's "Miscellaneous Writings," which, along with all her other published works, profess to be inspired.

"Science and Health" commences with the declaration: "In the year 1866 I discovered the science of metaphysical healing, and named it Christian Science. God had been graciously fitting me during many years for the reception of a final revelation of the absolute principle of scientific mind-healing."

In what this fitting consisted she does not tell us, but it appears to have been a dabbling in spiritualism, clairvoyance, hydropathy, homeopathy and mesmerism, and in being a patient and pupil of one, Dr. Guimby, who practised mesmerism and mind curing, and attained a wide reputation in the State of Maine during the first

half of the century for his marvellous cures.

In 1862, Mrs. Eddy (then Mrs. Patterson) went to Portland to obtain his valuable services for the relief of an illness which, she says, had made her a hopeless invalid for over six years. The exact nature of this illness is not stated, but any experienced physician will have no difficulty in diagnosing the case as one of common occurrence amongst a certain class of females, from the fact, as stated by herself, that "in less than one week after she visited Dr. Guimby she ascended by a stairway of 180 steps to the dome of the city hall." Mrs. Patterson remained in Portland for some time, and had frequent opportunities of becoming acquainted with Dr. Guimby's method of treatment, which he described as follows, in a circular distributed in Portland about that time: "My practice is unlike all medical practice. I give no medicines and make no outward applications, but simply sit by the patient, tell

^{*} Read before the Canadian Medical Association, August 30th, 1899.

him what he thinks is his disease, and my explanation is the cure. If I succeed in correcting his errors, I change the fluids of his system and establish the truth or health. The Truth is the cure."

In 1862, three weeks after her cure, Mrs. Patterson (Eddy) published an article in the Portland Courier eulogizing Dr. Guimby's method of cure, in which she expressly repudiates the ascription of her cure to spiritualism or mesmerism. After Dr. Guimby's death in 1866, she published "lines to his death," commencing

"Did sackcloth clothe the sun, and day grow night?" etc.

In that same year Mrs. Patterson (or Eddy) met with an accident, which seems to have brought back her old disease. She tells us (M. W. 179): "In 1866, God revealed to me this risen Christ, and I was delivered from the dark shadow and portal of death. My friends were frightened at beholding me restored to health. A dear old lady asked me, 'How is it that you are restored to us? Has Christ come again on earth?' 'Christ never left,' I replied; 'Christ is Truth, and Truth is always here, the impersonal Saviour.' Then another person, more material, met me, and I said in the words of the Master, 'Touch me not!'"

Such was the commencement of this so-called Christian Science. Mrs. Eddy's works abound with blasphemous utterances, but, I confess, none are to me more revolting than this appropriation of the words of the crucified Saviour by Mrs. Eddy. After this you need not be astounded at any of her pretentions to inspiration or

infallibility, however extravagant and unfounded.

Four years afterwards the first pamphlet was copyrighted, but "it did not appear in print until 1876, as she had learned that 'this science must be demonstrated by healing before a work on the subject could be profitably published!'" (Preface to "Science

and Health" IX.)

Twenty-one years after Dr. Guimby's death, when Mrs. Eddy's claim to the discovery of the science of mind healing was being contested by Dr. Guimby's friends, Mrs. Eddy had the cool effrontery to pronounce Dr. Guimby an "ignorant mesmerist," and to say, in explanation of her eulogistic article published in the Portland Courier, and her lines to his death, "that her head was so turned by animal magnetism and will-power under his treatment, that she might have written something as hopelessly incorrect" as the articles referred to.—(Christian Science Journal, June, 1887.)

Mrs. Eddy attributes her wonderful discovery to homeopathy. Her words are: "Years of practical proof through homeopathy revealed to me the fact that mind, instead of matter, is the prin-

ciple of pathology."

The influence which homoeopathy still exerts over Mrs. Eddy's doctrines, is shown on p. 46 "Science and Health": "The author has attenuated common salt until there was not a single saline property left, and yet, with one drop of that attenuation in a goblet of water, and a teaspoonful of the water administered every

three hours, I have cured a patient sinking in the last stage of

typhoid fever."

"The highest attenuation of homeopathy, and the most potent, steps out of matter into mind," on page 50. "Homeopathy mentalizes a drug with such repetition of thought-attenuations that it becomes more like mortal mind than the substratum of mortal mind called matter, and its power is proportionately increased."

More astounding still this doctrine of the infinitesimal applies not only to drugs, but even to truth itself. Page 47: "You say a boil is painful, but that is impossible. The boil simply manifests your belief in pain through inflammation and swelling, and you call this belief a boil. Now, administer mentally to your patient a high attenuation of truth on the subject, and it will soon cure the boil," i.e., as an attenuation of salt, so high that not a single particle of salt remained, cured her typhoid fever patient, so a high attenuation of truth, so high that not a vestige of truth remains, will soon cure boils.*

CLAIMS OF CHRISTIAN SCIENCE.

On p. 311 "Miscellaneous Writings," Mrs. Eddy declares: "The works I have written on Christian Science contain absolute truth, and my necessity was to tell it. I was a scribe under orders, and

who can refrain from transcribing what God indites?"

On p. 551, "Science and Health," she declares that "Science and Health" is the "little book" brought down from heaven by an angel, as described in the Apocalypse. Page 579: "It is the Holy Ghost." Page 167: "It is the Divine Comforter." Page 12: "The second coming of Christ." "It blots out all our iniquities." "It adds to the Divine glory." It is the child referred to by Isaiah: "Unto us a Child is born . . . and his name shall be called Wonderful" (p. 3).

Wonderful it certainly is. To ordinary mortals it seems to be a weary repetition of absurdities, contradictions, blasphemies, and puerilities, but Mrs. Eddy attributes this to their want of good morals. All difficulty in understanding Eddyism disappears in the pure minds of children. In "Miscellaneous Writings," p. 433, Mrs. Eddy quotes the experience of a mother: "My little one was a trifle over one year old. I was trying to overcome a claim (jargen for disease). One day as I sat near and treated him, it occurred to me to read aloud. I took up "Science and Health," began at the words 'Brains can give no idea of God's man,' and

^{*} The high attenuations commence at the 30th and run up to the 200th (Homopathic Pharmacy, London, 1850, p. 39). "Expressing the 30th attenuation arithmetically, a dose amounts to

part of a grain or drop, or one drop out of an ocean, 140,000,000,000,000 times as large as our whole planetary system" (see Sir James Simpson, "Hy. and its Tendencies," 1854, p. 296).

read on for two or three paragraphs, endeavoring to understand it myself, yet thinking that the purer thought of the babe might grasp the underlying meaning sooner than I. So it proved," and the baby was healed.

FUNDAMENTAL PROPOSITIONS OF CHRISTIAN SCIENCE.

Page 7: "The fundamental propositions of Christian Science are summarized in the four following, to me self-evident propositions:

"1. God is All in All.

"2. God is good.

"3. God, Spirit, being All in All, nothing is matter.

"4. Life, God, one omnipotent good, deny death, evil, sin,

disease, and vice versa."

Although these propositions are self-evident to Mrs. Eddy, she proceeds to prove them by inspired logic. Page 292: "It should be understood that error is nothing, and that its nothingness must be demonstrated in order to prove the somethingness—nay, the allness of truth." Page 183: "We call the absence of truth error. Truth and error are opposites. Truth has no opposite. Therefore error is unreal."

I hope your morals are pure enough to enable you to appreciate the force of this powerful argument. It is very simple. We must prove error to be nothing in order to prove truth to be something, and we do so by assuming truth to be something—nay, everything.

Mrs. Eddy's logic seems to be a sort of patent, reversible, double-back-action kind. It will take you anywhere you desire to go to, round and round, backwards or forwards; all depends upon how

you start.

For instance; you wish to prove the nothingness of good:

Poverty is real, poverty is evil.
 Evil is the opposite of good.
 Therefore good is unreal.

Here is another specimen of Mrs. Eddy's inspired horse-chestnut, chestnut horse logic. Page 7: The metaphysics of Christian Science prove the rule by inversion. For example:

"There is no pain in truth, no truth in pain.
"No matter in good, no good in matter."
According to which logic by inversion

There is no porridge in good, and no good in porridge; or There is good in porridge, and therefore no porridge in good.

Once more. Page 385: "A blundering dispatch, mistakenly announcing the death of a friend, occasions the same grief that his real death would bring. You think your anguish is caused by your loss. Another dispatch correcting that mistake heals that grief, and you learn that your suffering was merely the result of your belief. Thus it is with all sorrow, sickness, and death. You will learn at length that there is no cause for grief, and Divine wisdom will then be understood."

Divine wisdom! Was ever greater nonsense? Because a "blundering dispatch" caused me anguish therefore there is never any "cause for grief," no such thing as "sorrow, sickness, and death;" it is all a matter of belief. Standing in the presence of a dead friend I may be spared my grief if I can believe that he is still alive, but if I persist in asserting that he is not dead I will

assuredly be deemed a fit subject for an insane asylum.

Having logically annihilated evil, sin, sickness, and death, Mrs. Eddy is still confronted with the phenomena of corporeality and materiality. She admits that she has a body when she speaks of her corporeal presence (M. W., p. 152). She admits the possibility of the body being killed (p. 69). That man is mortal (pp. 332, 251). That man can suffer and be in "terrible" agony (p. 69). possesses corporeal senses (p. 174), and to meet this difficulty she conjures up a bug-a-boo which she calls "mortal mind," and invests it with diabolical malignity, and almost omnipotent power. This mortal mindis cruel and merciless, it punishes the innocent. "Electricity, governed by this so-called law of mortal mind, sparkles on the cloud, and strikes down the hoary saint. Floods swallow up homes and households; and childhood, age, and manhood go down in the death-dealing wave. Earthquakes engulf cities, churches, schools, Cyclones kill and destroy" (p. 257), etc., etc., ad and mortals. This term "mortal mind" is to be found in almost every page of "Science and Health." What it is and what it does require over two hundred references in the index. "It builds the body" (p. 70). "It and the body are one" (p. 146). "It has material consciousness only" (p. 188), whatever material consciousness may mean, but "It is not material" (p. 396). "It deserts the corpse which then is cold and decays" (p. 26), although she elsewhere tells us "the body cannot die" (p. 424). "It affirms that the body is dying, and that it must be buried and decomposed, but that is not so" (p. 527); although on page 26 she has declared that "the corpse deserted by thought is cold and decays."

"It is the source of contagion" (p. 47), etc., etc. According to this astounding theory every man carries about with him a veritable diabolus, from which proceed envy, hatred, malice, war, famine, pestilence, and death; but whence came these infernal agents? Surely all the horrors enumerated as products of "mortal mind" are evils and realities. What imbecility to try and get rid of them by shifting them on to the shoulders of a suppositious "mortal mind." God, we have been told, is good, and God is all in all, and therefore there can be no evil. Whence came this mortal mind, which is in itself the embodyment of all evil? Mrs. Eddy is quite equal to meet the difficulty. With one swoop of her pen she annihilates her own creation, and pronounces "mortal mind" itself to be an illusion (p. 398). "It has no reality" (pp. 283, 483). implies something untrue and therefore unreal, and is meant to designate something which has no real existence" (p. 7). attributes this to the paucity of language, and with wonderful

wisdom says: "In expressing the new tongue we must sometimes recur to the old and imperfect, and the new wine of the spirit has to be poured into the old bottles of the letter," to the inevitable destruction of both, I may add.

As a proper designation of something which "has no real existence," something which is untrue, something which is merely an "illusion," if permitted, I should suggest the term "ridiculus

mus."

As to sickness, sin and evil being merely illusions, as Mrs. Eddy declares (passim), we need only to test the theory by applying it to poverty. It seems possible to make some people believe they are well when they are sick; to make more believe that the only sin is the belief in sin (p. 444); to make some even believe that the corpse lying in the coffin is only an illusion; but it would be devilish mockery to proclaim that the privations and sufferings of starving millions are merely illusions. Eddyism may be acceptable to the well fed, well clad, self-satisfied followers of "Mother Mary," as she calls herself, but preach such a gospel to a father whose little ones are famishing, and I warrant it would be rejected with a malediction, if not with something more forcible.

To the poor poverty is a stern reality, not to be dissipated by the logic: God is good; God has no opposite, therefore evil is unreal.

Another pet theory of Mrs. Eddy's refers to the "evidence of the senses. We are told (p. 14) the senses are not to be relied on,

their evidence is false, it must be reversed" (p. 60).

This ridiculous theory is based upon the fact that before astronomers discovered that the sun is the centre of the solar system, the universal belief was that the sun revolved round the earth because it appeared to do so. Mrs. Eddy recurs to this over and over again, oblivious of the fact that it was only through the evidence of the senses that the erroneous belief was corrected. The theory seems to have been invented in order to prove that a man is well "when his senses say he is sick" (p. 14). She forgets that what is sauce for the goose is sauce for the gander, and if the evidence of the senses is to be reversed, a man must be sick when his senses declare that he is in sound health. Time will not permit me to do more than give short extracts as to the teachings of Christian Science:

Anatomy.—"Man is not structural" (p. 66). "Treatises on anatomy promote sickness and disease" (p. 72). "Bones are only

an appearance, a subjective state of mortal mind" (p. 421).

Physiology.—The blood, heart, lungs, brain, etc.. have nothing to do with life" (p. 45). Brain lobes cannot affect the functions of the mind" (394). "Exercise does not develop the muscles any more than it does the trip hammer" (p. 94). "The body cannot be fatigued by toil any more than a wheel" (p. 114).

^{* &}quot;The trip hammer is not increased in size by exercise. Why not, since muscles are as material as wood or iron? Because mortal mind is not willing that result on the hammer!"

"It is related that a father, anxious to try an experiment, plunged his infant babe, only a few hours old, into water for several minutes, and repeated this operation daily until the child would remain under water twenty minutes, moving and playing like a fish." We are then gravely advised by Mrs. Eddy: "Parents should remember this, and so learn to develop their children properly on dry land" (p. 549).

Hygiene.—"Ignorance of hygiene is a blessing" (p. 381).
"The less we know about it the better" (p. 387). "The body is to be made pure, but not by matter." It is a wonder that "Mrs. Eddy does not patent the kind of spiritual soap and water she

Juses in her ablutions.

Philology:—"The word 'Adam' is from the Hebrew 'Adamah."
. . . Divide the word into two syllables, and it reads, a dam or obstfuction. This suggests the thought of something fluid,—of mortal mind in solution" (p. 223).

While agreeing with Mrs. Eddy that this suggests the thought of her mortal mind being in solution, my mortal mind suggests something more pertinent, or impertinent, which, however, may not

be uttered to ears polite.

Electricity.—"The lightning is fierce and the electric current swift, yet in Christian Science both are harmless" (p. 262). Yet we are told (M. W., p. 257) "Electricity strikes down the hoary saint."

Heredity.—"The offspring of heavenly-minded parents inherit more intellect and sounder constitutions, and parents may reproduce in their little ones the grosser traits of their ancestors" (p. 271). Yet, "The scientist knows that there can be no hereditary disease, no transmission of good or evil" (p. 411).

In explanation of this glaring contradiction, I would remark that Mrs. Eddy seems to have discovered that the admission of the theory of heredity was fatal to her theory that generation does not rest on any exual basis, concerning which I shall speak at some

-length hereafter.

Thirst "is a matter of belief. If you think you ought to be thirsty, you are thirsty. The opposite belief would produce the

opposite result" (p. 384).

"It does not sustain life. It has no power to destroy life through its deficiency or excess in quantity or quality. It does not disturb

the harmonious functions of mind or body" (p. 387).

I cannot refrain from taking time enough to quote a remarkable case recorded in M. W., p. 69: "In Genesis i. 26 we read, 'Let them have dominion over the fish of the sea.' I was once called to visit a sick man to whom the regular physicians had given three doses of croton oil, and had then left him to die. Upon my arrival I found him barely alive, and in terrible agony. In one hour he was well. I removed the stoppage, healed him of enteritis, and neutralized the bad effects of the poisonous oil. His physicians had failed to even move the bowels, although the wonder was, with

the means used to accomplish this result, they had not killed him. According to their diagnosis, the exciting cause of the inflammation, and stoppage was eating smoked herring. Now comes the question, (please bear in mind I am quoting from Mrs. Eddy), 'Had that sick man dominion over the fish in his stomach? His want of control over the fish of the sea must have been an illusion, or else the, Scriptures must mistake man's power.'

How excruciatingly comical this is. This miraculous exhibition,

of Mrs. Eddy's power suggests several questions:

1. May not the three doses of croton oil have had something to do with removing the "stoppage"?

2. Was the "terrible agony" a mere delusion?

3. Can smoked herring be properly described as "fish of the sea"?

4. How could the man have died if death is an illusion?

5. If Mrs. Eddy had not been providentially called *in extremis*, the man would have died, and would not the Scriptures have been proved to be incorrect as the man had not "dominion over the fish of the sea"?

6. Might not the stoppage have been caused by some other, means? Mrs. Eddy has told us that "food has no power to destroy life, through its deficiency or excess, in quantity or quality," so that, the "stoppage" could not have been caused by the fish of the seather the smoked herring in his stomach. I think, therefore, we must look for the cause of "stoppage" elsewhere. Might it not have been "a dam or obstruction of mortal mind in solution?"

Notwithstanding Mrs. Eddy's assertion that food has nothing to do with sustaining life, we are not rashly to infer that she does without food, or advises her followers to do so; on the contrary, lest they should take her at her word, she warns them that," it would be foolish to venture beyond our present understanding; foolish to stop eating until we gain more goodness." (p. 337).

Nor must we conclude that Mrs. Eddy eats anything and, everything indiscriminately. She seems to have her fair, share of

liking for food and other creature comforts.

In M.W., p. 230, writing about "Thanksgiving dinner," she, descents with gusto upon the "mammoth turkey, the dericious pie, pudding and fruit," making one's mouth water with the description.

In the midst of her enjoyment of these illusions of her mortal; mind her sympathetic soul is stirred with remembrance of the poor and, she exclaims: "Willingly would, I have had the table give a spiritual groan for the unfeasted ones!" When she thought, of, "the homes with the vacant seat," she says, "we inwardly prayed; but the memory was too much, and turning fingunit;" to drown, her sorrows, "we drank to peace, plenty and happiness in a bumper,"—do not be alarmed, my teetotal friends—"in, 12, bumper of—of—pudding sauce."

Contagion.—Mrs., Eddy's teachings upon the subject of con-

tagion are especially pernicious. According to her there is no such thing as contagion. It is the belief of mortal mind which induces disease. "Smallpox is contained and carried in mortal mind" (p. 47); "common consent is contagious and it makes disease catching (M. W., p. 228.) It is common consent which causes certain substances to be poisonous. "The vast majority of mankind believe a drug to be poisonous. The consequence is that the result is controlled by the majority of opinions outside, not by the infinitesimal minority of opinions in the sick room," (p. 70.)

This monstrous doctrine is a very convenient one to shield a Christian Science practitioner in an action for manslaughter, where he had failed to use the stomach pump, or administer an antidote

in a case of poisoning.

The baneful effect of this Christian Science teaching is seen in the utter neglect of all the precautions for the separation and isolation of persons affected with such deadly diseases as diphtheria, etc.

Mrs. Eddy has, however, herself given the lie to this doctrine. For on page 257 of M. W. she has written, "Smoothing the pillow

of pain may infect you with smallpox."

For ages mankind believed in the power of witchcraft—that it was possible to produce disease in the bodies of others, so that they would sicken and even die. Those who possessed the evil eye could wreck destruction upon man or beast merely through their their minds. Wherein does this old belief in witchcraft differ from Mrs. Eddy's belief? She says (pp. 411, 412): "The mind being laden with illusions about disease, health laws and death conveys mental images to childrens' bodies, and often stamps them there, making it possible, at any time, that such ills may be reproduced in the very ailments feared. A child can have worms, if you say so, or any other malady."

A Christian Science writer, in the daily Mail, lately boldly enunciated the witchcraft theory by stating that disease may become outlined in the body through "design in the controlling mortal mind;" and Mrs. Woodbury in the Arena for May last states that Mrs. Eddy insisted that her husband, who (the physician who conducted the autopsy said) had died of heart disease, had been

mentally killed by arsenic, mentally administered.

The teachings of Mrs. Eddy upon the subject of generation are of the greatest importance:

"An egg was never the origin of man," (p. 472.)

"The time cometh when man shall be as the angels, when the soul shall rejoice in its own and passion shall have no part," (p. 274.)

"Until it is learned that generation rests on no sexual basis

let marriage continue," (p. 274.)

"Both man and woman proceed from God and are His eternal children, belonging to no lesser parent," (p. 521.)

"There is no necessity for procreation," (p. 101).

"Human knowledge inculcates that marriage is nearer right

than celibacy, while Christian Science indicates that it is not. Believing otherwise would prevent scientific demonstration," (M. W., p. 288.)

"It should be understood that Spirit, God, is the only creator,

and shuts out all other claims.

Josephine Curtis Woodbury, in the article in the Arena to which I have referred, refers to this subject as follows: "To what diabolical conclusions do such deductions lead? One may well hesitate to touch this delicate topic in print, yet thus only can the immoral possibilities and the utter lack of divine inspiration in Christian Science be shown. The substance of certain instruction

given by Mrs. Eddy in private is as follows:

"Women may become mothers by a supreme effort of their own minds, or through the influence upon them of an unholy ghost or malign spirit. Women of unquestioned integrity who have been Mrs. Eddy's students testify that she has so taught, and by this teaching families have been broken up; that thus maidens have been tempted out of their wits. Whatever her denials may be, such was Mrs. Eddy's teaching while in her college; to which she added the oracular declaration, that it lay within her power to dissolve such motherhood by a wave of her celestial rod. One result of Mrs. Eddy's interference in family life is, that Christian Science families are notably childless."

This is not the time or place to discuss theological questions, but I am quite within my proper bounds when I show how diametrically this teaching is opposed to the Scriptures, of which

Mrs. Eddy's book professes to be the "key."

They tell us that "God maketh the barren woman to rejoice, and to be a joyful mother of children." That "children are the heritage of the Lord, and the fruit of the womb is his reward." The younger women are enjoined to "marry and bear children;" and it is said in Holy Scripture that "In the latter days some shall depart from the faith forbidding to marry."

Mrs. Eddy has the audacity to twist the words contained in St. Matthew's gospel, "It is not good to marry," so as to make them appear to be an injunction of Scripture. The context shows that Mrs. Eddy's application of the words is in direct contradiction

to our Saviour's teaching on the subject of marriage.

Before leaving this part of my subject permit me to say a few words as to the Christianity of this so-called Christian Science mind. I am not discussing the truth of Christianity; I am, as I have the right to, enquiring whether Eddyism is (hristian or not. The fundamental doctrine of Christianity is the death and resurrection of our Saviour. He himself prophesied it. Everywhere in the New Testament it is asserted. On page 212 of "Science and Health" Mrs. Eddy asserts that Jesus was merely "fainting when he was taken down from the cross;" and on page 349 it is expressly stated: "His disciples believed that Jesus was dead, while he was hidden in the sepulchre; whereas he was alive,

demonstrating within the narrow tomb the power of spirit to destroy human material sense." "The lonely precincts of the tomb gave Jesus a refuge from His foes, and a place to solve the

great problem of being.'

I am quite aware that Easter services are held in the Eddyite churches, accompanied with great display of floral decorations, and the general public would infer that these were held in commemoration of the resurrection of our Saviour from the dead, but herein is the fatal deception. Read the report of Mrs. Eddy's sermon delivered at an Easter service ("Miscellaneous Writings," pp. 177, 180), in which she applied the words "Touch me not" to herself, and you will find that it was not the rising from the dead of our Saviour which was commemorated, but, in her own words, "Of the new, living, impersonal Christ-thought that has been given to the world to-day (p. 178), and on page 179 we read:

"In the new religion the teaching is: 'He is not here. Truth is not in matter. He is risen. Truth has become more to us, more true, more spiritual.' We must lay aside material consciousness, and then we can perceive truth, and say with Mary, 'Rabboni,

Master!'"

What a mockery of Easter, and all that it means to a Christian! Do you wish to learn what Christian Science teaches about God? Listen (p. 496): "God is substance." Page 197: "God and man, including the universe, are one and eternal." Page 232: "God and man are inseparable, harmonious, and eternal." Page 199: "God without the image and likeness of himself, would be a nonentity." I. e., God without man is absolutely nothing, and, if words have any meaning, and my intellect is capable of understanding plain language, man is God.

CHRISTIAN SCIENCE HEALING.

Before describing Christian Science healing it is essential to tell you what it is not. The common idea is that it is the result of prayer to God, and faith in God. Mrs. Eddy emphatically denies this. On page 317 I read as follows: "'The prayer of faith shall save the sick, says the Scriptures. The only beneficial effect of such prayer for the sick is on the human mind, making it act more powerfully on the body, through a blind faith in God. It is not truth itself which does this. This common custom of praying for the recovery of the sick finds help in blind belief, whereas, help should come from the enlightened understanding. In the Christian Science Sentinel of July 20th, Carl Norton, one of the shining lights of Christian Science, says: "The faith curist teaches that if enough faith is exercised God will, in direct answer to the prayer of the sick person and his friends, cure the disease. Christian, Science is not faith cure. The systems are at polar extremes"

In the report in the daily evening paper at Peterboro' of June 2 last, is the report of an inquest on the body of a 4-year-old son of Mr. Beatty, living near Garden Hill, some distance from Port Hope.

For two days the poor little boy lay struggling for breath in croup. Nothing whatever was even attempted for his relief until the second day, when the deluded father drove into Port Hope, and asked one Brundreth, a tinsmith, to give his child absent treatment. Brundreth, on giving his evidence, stated that he had been studying Christian Science for years, and that his absent treatment consisted in a prayer to God, which prayer he believed God could and would answer. Surely, if Christian Scientists are not to be held responsible because their treatment is part of their religious belief, anyone pretending to treat on Christian Science principles should be held accountable when those principles are so glaringly violated.

Before describing Christian Science treatment I ask you to bear in mind two assertions of Mrs. Eddy which are of great

importance. The first is found on page 492, as follows:

"There is no transference of mental suggestions from one mortal to another," and on page 96, "Miscellaneous Writings": "In healing by Christian Science it is not one mind acting upon another mind, not the transference of human images of thought to other minds."

The second I have alrealy referred to, viz.: "The evidence of

the senses is not to be relied on."

Bearing these two positive declarations in mind, I proceed to quote from "Science and Health," page 410: "Always begin your treatment by allaying the fear of your patient. Silently reassure the patient as to his exemption from disease and danger. Watch the result of this simple rule of Christian Science, and you will find that it alleviates the symptoms of every disease, If you succeed in wholly removing the fear, your patient is cured. Plead the case in science and for truth, mentally and silently. The silence of Christian Science is eloquent. Argue with the patient (mentally, not audibly) that he has no disease. Mentally insist that health is the everlasting fact, and sickness the temporal falsity. Then realize the presence of health, and the corporeal senses will respond, 'So be it.'"

This gentlemen, is the whole of Eddypathy in every case, under all circumstances—be the patient infant or adult, conscious or unconscious sane or insane (p. 412), imbecile or maniacal, surgical or nedical, believer or unbeliever, willing or unwilling, near by or thousands of miles away, organic or functional—anything and everything, from scabies to the plague, is to be cured by thinking, at the rate of \$5 a think.

There is, however, one piece of advice which Mrs. Eddy gives, which is evidently intended to prevent actions for malpractice. On page 400 she tells us that "Christian Science is always the most skilful surgeon," but, "until the advancing age admits the efficacy and supremacy of the mind, it is better to leave the adjustment of broken bones and dislocations to the fingers of a surgeon."

A few words more and I have done with this medly of folly and 1

blasphemy.

The half-yearly communion service (whatever that may mean) of the Eddyite churches was held in this city on June 11th. At that service a message was read from Mrs. Eddy, containing this sentence: "Divine love is our only physician—never loses a case."

During that very week there were no less than five inquests held on the bodies of children who died under Eddypathy of diptheria, and croup; two in Chicago, two in Buffalo, and one in

Port Hope.

I think you will have no hesitation in agreeing with me that when "Mother Mary" declared her treatment "Never loses a case" she uttered, well, let us call it the "Very highest attenuation of truth" of which it is possible to conceive.

The following did not form part of the address, but is a reprint

from a letter published in the Mail and Empire.

In the preface to "Science and Health" Mrs. Eddy tells us that the revelation from God was made to her in 1866, and "was copyrighted in 1870, but did not appear in print until 1876," because she wanted to make sure that it "could be profitably published." Copyright a revelation from God! Copyright a book in the production of which she acted merely as a "scribe," and afterwards claim all the honor and profit as its "author!" Surely this ought to be sufficient to expose Mrs. Eddy's pretensions, if not, what shall he said about withholding its publication for six years, in order to find out whether it could be "profitably published?"

Having satisfied herself on this point, the next step was to take measures for its extended circulation, so, in the exercise of her prerogative as founder of her new denomination, she issued an "ordinance," as follows:—"Humbly, and as I believe, divinely directed, I hereby ordain the Bible and Science with Key to the Scriptures, to be hereafter the only pastor of the Church of Christ, Scientist, throughout our land and other lands." (M. W., p. 313.)

In this ordinance she directs that, in the public services there shall be two readers, one of whom shall read passages from the Bible, and the other such selections as may be indicated in *Christian Science* qarterly. It should be particularly noted that while the first reader reads alone from the Bible, the second reader must read responsively with the congregation, thus ensuring the possession by each one of a copy of "Science and Health." Moreover, to give prominence to the book and Mrs. Eddy, the second reader "shall commence by announcing the full title of the book, with the name of the author, and add to the announcement the Christian Science text-book."

To further ensure the sale of her book, Mrs. Eddy forbade any written extracts from it to be read to the Church. One, apparently impecunious, student was so indiscreet as to ask her, "Is it right to copy your works, and read them for public service?" (M. W., p. 299, et seg.)

It is amusing to read the rebuke she gave the poor fellow. "Copy my book! What right have you to do this? True, it saves you pur-

chasing my book, but have you considered that it is the property of a noted firm? Reading in the pulpit from copies of my publications gives you the clergyman's salary, and spares you the printer's bill, but does it spare you our Master's condemnation? Read copies of my book to the Church! No, sir; this method is an unseen form of injustice standing 'in a holy place.' 2. It breaks the golden rule and it encourages infringement of my copyright, and seeks again to 'cast lots for His vesture!'"

To add to the sale of her back, it was heralded as a new, divine method of healing, dispensing with materia medica and doctors, who are denounced in no unmeasured terms all through her book. Seventy pages of "Miscellaneous Writings" are filled up with reports of miraculous cures, resulting merely from the reading of "Science

and Health."

Now, as to the financial results:—In the Christian Science Sentinel for May 25th, 1899, which must be indisputable authority, we are told: "It is estimated that nearly 200,000 copies of "Science and Health" have been distributed." The prices of the book, always "prepaid," range from \$3.18 to \$6. Publishers in this city have informed me that the cheapest edition could be published at 65 cents, say 68, that would leave a clear profit of \$2.50 per copy. Two hundred thousand copies would yield a profit of \$500,000.

For the Massachusetts Metaphysical College, "in January, 1881, Rev. Mary Baker G. Eddy obtained a charter—including the right to grant degrees" (M. W., p. 271). She was the first and only president, and the only professor. In 1889, for some cause which is not apparent,* Mrs. Eddy closed her college. In her account she says, "I withdraw from an overwhelming prosperity." (M.W., p. 273.) "There are 160 applications lying on the desk before me, for the primary class in the college. The work is more than one person can well accomplish, and the imperative call is for my exclusive teaching." Whatever the cause may have been the college was closed, but Mrs. Eddy follows up the last extract with this significant remark:—"From the scant history of Jesus and His disciples, we have no Biblical authority for a public institution. This point, however, had not impressed me when I opened my college." (M. W., p. 274.) The college is now, I believe, carried on by other persons.

^{*} Since writing the above, the cause was disclosed by Mrs. Woodbury in the Arena for May last. She says it was closed "at the very period when a Massachusetts district attorney was looking for evidence of that institution's illegally conferred degrees, of which there were thousands, punishable with a fine of \$500 for each offence." This has been denied by Mrs. Eddy's supporters, but the fact remains that her charter, including the right to grant degrees, was granted in 1881, and was repealed in 1882. Her college was carried on from 1883 until 1889 under a general statute, in which it is stated, "Any officer, agent, or servant of any corporation or association who confers, or authorizes to be conferred, any diploma or degree, shall be punished by a fine of not less than \$500, and not more than \$1,000." See M. W., p. 272.

The next fact to which I would especially call the attention of your readers, is that Mrs. Eddy in the ordinance to which I have already referred, positively ordains that "Teaching Christian Science shall be no question of money." Will it be believed that Mrs. Eddy was for seven years, president and sole professor in a college for teaching Christian Science, and receiving \$300 from each student? I do not know how long a course lasted, but I find—(M. W., p. 270)—that the course of lectures to the primary class of 1889 extended over just seven days.

Mow, as to the financial result:—In preface to "Science and Health" Mrs. Eddy says:—During seven years some 4,000 students were taught by me in this college, which at \$300 each, gives a total of \$1,200,000. Of course expenses have to be deducted, but they

might be large and yet yield a princely fortune.

Christian Scientists pretend to be carrying out our Saviour's directions in healing. The books have in gold letters on the front cover, "Heal the sick, raise the dead, cleanse the lepers, cast out. devils," and there they stop. Not only are the words, "Freely ye. have received, freely give," omitted, but Christian Scientists have a the audacity to declare that our Saviour received compensation for. his healing of the sick, (Christian Scientist Sentinel, February 16, 1899.)* Moreover, Christian Scientists practitioners are enjoined to charge, and the fees are regulated by the "Board of Education." The ground on which they are told to charge is, of course, purely a moral one. It is wrong, they say, for a person to wish to get some. thing for nothing, and Christian Science must not sanction this. wrong. Nay, more, the success of a Christian Science practitioner, in curing disease depends upon his charging for his services. In copy from the Christian Science Sentinel. One writes:—"When, I first began the healing work I rebelled against charging for it. One day I was called to see a patient who had had a doctor and; nurse for several weeks, but was no better. . . . As I disliked; to charge for my work, I was so much distressed that the patient, received no benefit from the treatment. Then it came to me that we had been told to charge for our services. That settled it, and the patient was better at once!" Lastly, in the preface to "Miscel-1. laneous Writings." Mrs. Eddy, exults in saying:—"In the early, history of Christian Science among my thousands of students, few. were wealthy. Now Christian Scientists are not indigent, and: their comfortable fortunes are acquired by healing mankind, mentally, physically, and spiritually." The Alpha and Omega of Christian Science is money. Who would not be a Christian Scientist practitioner?

^{*}Repeated in Christian Science Journal for September, (p. 413):

TYPHOID INFECTION WITHOUT LESIONS IN THE INTESTINES; A CASE WITH REMARKS.*

BY A. McPHEDRAN, M.D., TORONTO, Professor of Medicine, University of Toronto.

THE following case adds one more to a growing list of cases in which the bacillus of typhoid fever has been found in the organs

without the intestinal glands being diseased.

R. H., aged 24, was admitted to the Toronto General Hospital, October 19th, 1898. He reported having ailed about a week. His previous history contained nothing of importance except that he had taken alcoholic stimulants to excess at irregular intervals.

On admission his temperature was 104.6° F.; pulse, 96;

respiration, 24 to the minute.

He complained of weakness, headache, loss of appetite, slight nausea but no vomiting, abdominal pain and pains in the back and legs. There was no diarrhea. His countenance was heavy and dull. The tongue had a white coating in the middle, but was clean at the edges. His breath was offensive. The respiratory and circulatory systems were normal. The right side of the abdomen was fuller and more tense than the left. Absolute liver, dulness extended from the sixth lower costal border to one inch below the costal margin in the right mammory line. The spleen was palpable. The urine gave a marked diazo reaction, was slightly albuminous and contained a little bile pigment. Examination of the blood showed, 4,120,000 red corpuscles per c.mm.; 10,000 white corpuscles; hema-globin, by Von Fleischl hemometer, 85 per cent. The Widal serum test was positive.

·The treatment was cold baths (85° F.) and as much nourish-

ment as he could digest.

October 23rd.—The abdomen was somewhat distended; flanks full and dull on percussion; fluctuation determined; deep red papular rash on chest and back, many papules showing pustulation; no rash on abdomen.

November 1st.—The liver was greatly enlarged, its lower border extending down to the level of the umbilicus. The heart was weak with gallop rhythm. There was slight edema of the

lungs.

November 3rd.—He was very weak. He became cyanosed during a bath and was immediately removed to bed and bathing discontinued. Ten minims of an aqueous solution of supra-renal gland extract were administered hypodermically three times a day and was followed by a marked improvement in the pulse and temperature for three days when edema of both lungs became

^{*} Read at the meeting of the Canadian Medical Association, at Toronto, August 31st, 1899.

apparent, accompanied by increased tenderness over the liver and a friction rub showing the existence of perihepatitis. On examination of the expectoration neither tubercule bacilli nor pneumococci were found.

November 21st.—He had several rigors. A pericardial friction rub developed and a purpuric rash appeared on the lower part of the thorax and on the abdomen and legs. From this time on the serous effusions and edema increased. Death took place on November 29th.

The post mortem examination was made 14 hours after death by Dr. William Goldie. The signs of recent peritonitis, perihepatitis, perisplenitis, pleurisy and pericarditis were present, purulent lymph and dark serous fluid being found in these several situations. The intestines were congested and presented many petechial hemorrhages on the serous surface. There was no loss of substance nor enlargement of Peyer's patches. The liver was greatly enlarged (weight, 102½ ounces.) It was very firm and showed a great increase of the connective tissue. The spleen weighed 4½ ounces; its capsule was thickened and the pulp was dark and very firm. The mesenteric and retro-peritoneal glands were enlarged and some were very soft. The lungs showed edema and hypostatic congestion and also numerous small abscesses scattered throughout their substance.

Microcopical Examination of the Tissues: There was a unilobular cirrhosis of the liver, with strands of connective tissue penetrating many of the lobules: the connective tissue was not of embryonic type. The bile ducts were proliferated and many of them filled with leucocytes. The liver cells showed cloudy swelling. There were many areas of necrosis, in some places larger than a liver lobule, and colonies of bacilli, not staining by Gram's method, were found scattered throughout the liver in relation to these areas of necrosis. The spleen showed great engorgement and colonies of bacilli similar to those in the liver. The mesenteric glands showed infiltration with leucocytes and proliferation, and many areas of necrosis in which colonies of bacilli similar to those in the liver and spleen were found.

Bacteriological Examinations: From the spleen a bacillus, morphologically similar to the bacillus typhi abdominalis, was isolated giving the characteristic culture reaction. These bacilli clumped when tried in a hanging drop preparation with blood obtained from the patient before death, and also when tried with blood from a case of undoubted typhoid fever. A streptococcus, not pathogenic for rabits, was also obtained from the spleen. From the pleural, pericardial, perihepatic and peritoneal exudates a streptococcus was obtained which had no effect on rabbits. From the peritoneal exudates and from the liver substance the bacillus coli communis was obtained. From the lung abscesses only the bacillus pyocyaneus was obtained.

I am indebted to Dr. A. W. Tanner for making the foregoing

record of the case for me, as well as for the following tabulated statement of similar cases so far reported.

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No.	AUTHORITY.	ABSTRACT OF CLINICAL HISTORY.	POST MORTEM CONDITIONS.
1	Kuhman— (quoted by Flex- ner and Harris.)	Case occurred in puerperal woman, Died in 8th week.	No intestinal lesions; mesenteric glands enlarged an necrotic; spleen enlarged. Bacillus typhi abdominalls isolated from mesenterio glands.
2	Banti— Rifor na Medica Ottobre, 1887.	Ordinary typhoid symptoms. Death 28th day.	No intestinal lesions; spleen and mes- enteric glands enlarged. A bacillus morphologically similar to bacillus typhi abdominalis obtained from the spleen.
3	Vaillard— Soc. des Hop. de Paris, March, 1890.	Typhoid with severe nervous manifestations and constipation. Death 3rd day.	No intestinal lesions; congestion of lungs; congestion of meninges. Bacillus typhi abdominalis obtained from spleen, lungs and spinal cord.
5 6	Karlinski— Wein, Med. Woch., 1891, No. 11.	Three cases. Clinically typhoid. Occurred during an epidemic.	No intestinal lesions; spleen and mes- enteric glands enlarged. Bacillus typhi abdominalis isolated from the spleen in n!! cases.
7	Vincent— Le Bulletin Medical, 1891.	Characteristic case with purpuric rash and coma.	No intestinal lesions; spleen and mes- enteric glands not enlarged; both lungs congested. Bacillus typhi abdominalis obtained from spleen lungs and heart's blood.
-8	Guarnieri— Riv. gen. ital. di Clin. Med., 1892.	Characteristic symptoms.	No intestinal lesions; spleen and mes, enteric glands enlarged. Racillus typhi abdominalis obtained from spleen, liver and biliary passages.
9	Du Cazal— Soc. des Hop. de Paris, 1893.	Characteristic symptoms.	No intestinal lesions; mesenteric glands and spleen not enlarged. Bacillus typhi abdominalis obtained from the spleen.
10	Beatty— Dublin Journal of Medical Sciences, Febru- ary, 1897.	Case presented pyrexia, jaundice and hematuria. Death 6th day. Beatty also reports a similar case without autopsy.	No intestinal lesions; spleen and mes- enteric glands enlarged. Bacillus typhi abdominalis obtained from apleen.
711	Cheadle— Lancet, London, July 31st, 1897.	Boy 3 years of age; characteristic symptoms with constipa- tion; Wadl's serum test posi- tive; bacillus typhi abdominalis obtained from the urine on 26th day. Death in 4th week.	No intestinal lesions; s n not enlarged: mesenteric glaz enlarged; liver enlarged. Bacillus typ. M abdominalis obtained from spicen.
12	Flexner and Harris, Johns Hopkins Bulle- tin, December, 1897.	Man aged 63 years. Shortness of breath and symptoms of pleurisy. Death 2nd day after admission.	No interinal lesions; thrombosis of main branch of pulmonary artery supplying lower lobe of right lung; gangreen of right lung; perforation of the pleura; pyopneumothorax; spleen enlarged; cloudy swelling of liver and kidneys. Bacillus typhi abdominalis obtained from lung, liver, kidneys and spleen.
18	Chiari and Kraus, Zeits- chrift f. Heil- kunde, 1897.	Report of 7 cases occuring. 19 autopsies. Each of the 19 cases gave a positive serum test before death.	The seven cases presented no intestinal lesions. In three of the cases the bacillus typhi abdominalis was obtained post mortem from the organs.
714	Pick, Wilner Klin, Woch. 1897.	Characteristic symptoms; positive serum test. Death in 4th week.	No intestinal lesions; spleen not enlarged; broncho-pneumonia of left lung; mesenteric glands enlarged. Bacillus typhi abdominalis obtained from the gall bladder and mesenteric glands; not obtained from the spleen.
15	Mennier— Soc. des Hop. de Paris, 1897.	Case in a boy suffering from miliary tuberculosis; rose spots appeared shortly after admission; Widal's serum test positive.	Tuberculous ulcers of intestine, but no typhoid ulcers. Bacillus typhi abdomi- nalis obtained from spleen lungs and pleural exudates.
16	Nicholls and Keenan, Mont- real Medical Journal, Janu- ary, 1898.	Characteristic symptoms with constitution and positive serum test. Death 6th week.	No intestinal lessions; broncho-pneu- monia; spleen and mesenteric glands enlarged. Bacillus typhi abdominalis obtained from the spleen.

No. Authority. Abstract of

ABSTRACT OF CLINICAL HISTORY.

POST MORTEM CONDITION.

17 Lartigan— Johns Hopkins Bulletin, April, 1899. . Characteristic symptoms with constipation and delirium. Death 3rd week. No intestinal lesions: edema and congestion of both lungs; pleurisy; enlargement of spleen, liver and mescuttric glands; areas of necrosis in the liver; cloudy swelling of the kidneys. Bacillus, typhi abdominalis obtained from the heart's blood, lungs; liver, gall bladder, and spleen.

18 Bryant, British Med. Jour. April, 1899. Case in a boy 1 year and 9 months of age; severe diarrhea and vomiting; pyrexia; res; pirations greatly increased-proncho-pneumonia; Widal's serum test positive. Death 5th week. A sister also had typhoid fever.

No intestinal lesions; pleurisy; areas of consolidation and small abscesses scattered throughout the lungs; spleen and mesenteric glands enlarged, the glands were very soft. Bacillus typhi abdominalis obtained from mesenteric glands.

19 Lartigan—
New York Medical Journal,
July 29th, 1899.
Reports two
cases, the second
being open to
objection on account of a possible typhoid infection four
months previous
to observation
and the consequent possibility
of the persistence of the
typhoid bacilli
from that time.

OASE I.—Man aged 51 years. Characteristic symptoms with constipation. The day before death convulsions and rigors followed by dilatation of the pupils and retraction of the head.

No intestinal lesions; chronic interstitial nephritis; broncho-pneumonia and edema of lungs; chronic adhesive pleurisy; spleen slightly enlarged; mesenteric glands not enlarged. Bacillus typhi abdominalis obtained from the liver, gall bladder, kidney and urine. Bacillus pyocyaneus was obtained from broncho-pneumonic patches.

Case II.—Came under observation for ectopic gestation for which an operation was performed followed by death on the 4th day. History of possible typhoid fever four months previously.

No intestinal lesions; spleen greatly enlarged and adherent to omentum by old bands; liver enlarged; gall bladder distended; mesenteric glands not enlarged; claudy swelling of kidneys; enclometritis. Bacillus ty-lih abdominals obtained from the liver, gall bladder, kidneys and uterus. Streptococcus pyogenes obtained from the uterus. Pneumococcus obtained from the hearts blood.

These cases are of great interest as they show the possibility and the probable frequency of infection without lesion of the intestinal glands. Of course the frequency of such infection can only be determined by a long series of post mortem examinations in which careful bacteriological examinations are made of all the organs. It remains to be determined, also, whether there is general infection in typhoid fever before anatomic changes are demonstrable in the intestinal glands. These cases also indicate the irrational basis on which the purgative and miscalled eliminative treatment rests.

HOW TO DEAL WITH THE CONSUMPTIVE POOR.*

BY E. J. BARRICK, M.D., OF TORONTO.

I BEG to submit the following as among the more important means of dealing with the consumptive poor, including the providing of the necessary funds therefor:

1. The establishment and maintenance of a rural sanatorium in connection with each municipality or group of municipalities for the reception of such cases as admit of a reasonable hope of cure or improvement.

^{*} Read before the Canadian Medical Association, August 30th, 1899.

2. The erection and maintenance in connection with the above sanatorium of a suitable isolated building for the reception and treatment of such advanced cases of the disease as are unsuitable for sanatoria treatment, and until such provision is adequate to utilize so far as practicable the various existing hospitals for that purpose, and would urge upon the authorities of such institutions the absolute necessity of adopting such means of isolation as may be approved of by the Provincial and Local Boards of Health.

3. The co-operation of the Dominion Parliament, Local Legislatures, municipalities, philanthropic and charitable organizations and individuals in providing the necessary funds therefor.

4. And further, that the following plan of co-operation is worthy

of careful consideration:

(a) The adoption of regulations by the Dominion Parliament and Local Legislatures for supplementing grants approved of by by-law submitted to the qualified ratepayers for the purchase of

land and erection of buildings.

(b) A per diem allowance by the Dominion Parliament, Provincial Legislature, and Municipal Council, supplemented by philanthropy and charity by subscriptions, donations, bequests, legacies, etc., for the maintenance thereof, and that such rural sanatoria should be under the control and management of a large committee of citizens, acting in conjunction with the Local Board of Health.

The subject of tuberculosis at the present time is undoubtedly one of the most important questions that can engage the attention of any government, legislature, municipal council, association or individual; and to whom are the eyes of the world turning to-day for light and guidance, but to the medical practitioners, who in their daily rounds are brought face to face not only with this disease in its various stages, but also with the distress and poverty that are its natural consequences. Could there be then a more fitting place for its discussion than the thirty-second annual meeting of this National Association of medical men?

I hope, therefore, Mr. President, that this paper will receive at the hands of this meeting the consideration that the subject deserves, and that you will bear with me while I endeavor as briefly as possible to state some of the more important reasons in

support of the propositions I have here laid down.

You will observe that I have left the broader domain of the subject and confined myself strictly to one phase, which I believe is of the utmost importance in checking the spread of tuberculosis and lessening the mortality therefrom, namely, the isolation and treatment of the consumptive poor and the providing the necessary funds therefor.

The subject has been dealt with somewhat exhaustively from a scientific and clinical standpoint, and the concensus of opinion is that the disease is contagious, preventable, and curable, especially in the earlier stages.

Sanatoria have been built in various parts of the world, and the

medical and public opinion in both Great Britain and America is, that whether viewed from a preventative or curative standpoint, the sanatoria treatment of tuberculosis has produced the best results.

But while sanatoria provision has been made for the reception and treatment of those who are able and willing to pay, so far the doors have been closed against the poor. While the mortality of the disease falls most heavily upon the artisan, the wage-earner, and especially upon the poor, where the conditions and surroundings are more favorable to the spread of the disease, it is a deplorable fact that no sanatorium door is to-day open to the consumptive poor. The object of this paper is to open a door.

I need not dwell upon the first two propositions setting forth the desirability of rural sanatoria, of isolation in existing hospitals, as these, when viewed from a scientific and clinical standpoint, like the axioms and postulates of Euclid, are self-evident, not only to medical men, but to every thinking person, and therefore require

no discussion, argument, or demonstration.

But while we should ever keep before us the scientific and clinical aspect of this question, and it is perhaps more strictly within the province of this Association to confine its deliberations to that side, yet if any progress is expected to be made in a more rational way of dealing with the consumptive poor, public opinion must be directed to the practical, financial, and economical side; and this is the object of the third proposition, to which I shall devote the time yet allotted to me.

The third proposition calls for the co-operation of the Dominion Parliament, Provincial Legislatures, municipalities, philanthropic and charitable organizations and individuals, for the purpose of

providing the necessary funds.

I shall note first some of the excuses offered why none of these four sources of help have done anything towards the end here sought.

The first cry is one of regret—"no power"; second, one of poverty—"no money"; third, one of repudiation—"none of our business"; and fourth, one of discouragement—"no use trying."

It is claimed that the Dominion Parliament has "no power," the British North America Act having delegated that power to the provinces. It was, however, gratifying to read in the daily press a few weeks ago of the stand that was taken in the Dominion House by Dr. Roddick, Sir Charles Tupper, Dr. Sproule, and others, that notwithstanding the above fact, they thought the question was of national importance, and that the Dominion Parliament should take action.

It is claimed that the provinces, having a fixed income and an increasing demand from the existing charities, have "no money" for rural sanatoria.

It is claimed by prominent municipal politicians, and I have

heard them say, "it is none of our business; it is a national question, and should be dealt with by the Government."

It is said by philanthropic and charitable people that there is "no use trying to cope with a question of such magnitude unless

the other three sources mentioned co-operate."

Thus we have reproduced day after day and year after year by these four sources of help the old, old story of the Priest and the Levite, with this exception, that so far no good Samaritan has come to the relief and opened one sanatorium door for one poor consumptive.

Now, Mr. President, at the close of this nineteenth century, when million dollar funds are being raised by the churches, and the spirit of combination, amalgamation, and trusts seem to be floating in the air, is there no power that can be brought to bear upon these four sources of help to bring about the co-operation asked for in the

third proposition?

There is one power, and I believe only one, that can bring it about—it is the power of public opinion. Every parliament, every legislature, every municipal council, every organization and association of every kind, and every individual has power and can assist in producing the necessary public opinion. As the mighty power of Niagara is only the united power of the tiny rain drops that fall from the clouds, so the mighty power of public opinion is only the united opinions of the individuals that make up the nation.

I hope, therefore, we have heard the last of the "no power" cry, and that all will unite to bring about the co-operation so much

needed in the interest of the consumptive poor.

I shall now give a few reasons why each of the four sources mentioned should contribute and also co-operate.

WHY THE DOMINION GOVERNMENT SHOULD CONTRIBUTE.

It goes without saying that the Dominion Government represents the nation. A nation may have ever so valuable assets in its forests, in its fisheries, in its mines, in its broad acres of fertile land, etc., but the most valuable asset a nation can have is its people; and this is eminently true of a nation like this Canada of ours, with its unparalleled natural resources awaiting development. The cry of the nation is "people, more people!" And successive governments have expended large amounts of money, and given large grants of mineral and fertile lands to induce people to come and live within our borders and assist in developing these rich resources.

Now statistics tell us that of all people who die between the ages of 15 and 60, no less than 37 out of every 100 die of tuberculosis—37 out of every 100 die at an age when their lives are of the most value to the nation, to the municipality, and to the home—37 out of every 100 die of a disease that is preventable and curable.

Now I submit that one of our people is at least of as much

value to the nation as one immigrant, and I am sure that public opinion that approves of the expenditure to secure the latter will also endorse the granting of a moderate amount of money towards the isolation and treatment of our consumptive poor, and thus check the spread of the disease and save and prolong the lives of our

people.

Again, a large proportion of the national revenue is obtained from a tariff duty. It is a pretty well established fact that the consumer pays the duty, therefore it is not unreasonable that a portion of the revenue thus contributed by the people should be returned and used to protect the people from the spread of tuberculosis. Again, a considerable amount of revenue is derived from the liquor traffic. Now everyone will admit that the excessive use of intoxicating liquor lowers the vitality of the system, produces poverty, and thus predisposes the victim to the development of tuberculosis; is it unreasonable then to ask that a portion of the revenue thus obtained be applied to the care of the consumptive poor?

WHY THE PROVINCE SHOULD AID.

The provinces should aid in the first place because they have the power which was delegated to them by the British North America Act, and secondly, because they have the money. There was a time, perhaps, when the provinces might justly claim that their income was fixed, and the growing demands of the existing charities left no money for the isolation and treatment of the consumptive poor. However, in recent years a new source of revenue has been created by legislation, and a large amount is now received from the succession tax. It is claimed that the imposition of this tax has diverted from charities large amounts in the form of bequests, legacies, etc., which formerly went to such organizations. Is it not reasonable, then, that some of the income derived from the estates of the rich should be used in caring for the poor who are suffering from tuberculosis?

Again, by more recent legislation in Ontario, monetary institutions, rich corporations, and trusts have been removed from the domain of the municipal tax-gatherer and used for revenue purposes by the province. Some municipalities that have been large contributors to charitable institutions have suffered considerable financial loss by this change, and their ability to contribute correspondingly lessened. Surely, with such rich sources of revenue at hand, no excuse can be offered why a province should not contribute towards rural sanatoria.

WHY THE MUNICIPALITY SHOULD CONTRIBUTE.

There is no one who knows better than the municipal taxpayer himself that his burden is great, and that it will probably be greater, especially in those municipalities where the loss is great from the removal from the assessment roll of the above-mentioned wealthy monetary institutions, corporations, and trusts; we will therefore have to approach the taxpayer from the financial standpoint, and show him that the policy he is pursuing toward tuberculosis is a penny wise and pound foolish one. What would you say of a man who is complaining of the great expense he is put to each year in repairing the damage done to decorations, carpets, and furniture caused by a leaky roof? You would say, "You foolish man, why do you not repair the leaky roof? Why not apply the ounce of prevention rather than pay the pound of cure, as you are doing?" This is the short-sighted policy pursued to-day by the taxpayer in reference to the consumptive poor. He does nothing to check the spread of the disease and lessen the mortality therefrom, but goes on each year paying thousands of dollars to relieve the distress and poverty it produces.

In Germany, where compulsory life insurance is in force, and where all in receipt of a wage below a certain amount are obliged to insure, sanatoria for the treatment of tuberculosis have been established and maintained largely by the insurance companies, where they send their insured for treatment with a view to prolonging their lives, and thus postponing the day of paying the death claim. So successful has this undertaking been purely from a financial standpoint that the number of such sanatoria has increased each year, that, while in 1895 there were only two of such institutions, there are at the present time in Germany over sixty.

I submit that this experiment of sanatoria treatment of tuberculosis in Germany demonstrates beyond doubt that from a financial standpoint it would be cheaper and more economical for the taxpayer to contribute towards the erection and maintenance of rural sanatoria for the reception and treatment of the consumptive poor, and thus do something towards preventing the spread of the disease and lessen the distress and poverty for which he is now spending so much money every year.

WHY THE PHILANTHROPIC AND CHARITABLE SHOULD CONTRIBUTE.

There is no disease that so strongly appeals to one's sympathy and charity as tuberculosis among the poor, especially when we see the breadwinner stricken down, and the life ebbing away in crowded, unsanitary, and ill-ventilated dwellings, with nothing in the surroundings to give half a chance for life, and everything to facilitate the spread of the germs of disease to others in whom the poverty and surroundings have helped to produce the nidus for the rapid development of the disease.

I am sure that when a clear, well-defined and workable plan is presented wherein the the three other mentioned sources would cooperate, a liberal response would be forthcoming from the charitably-disposed in contributions, donations, legacies, and bequests. No greater inducement could be given, and no more potent argument

could be advanced than the willingness of the Dominion Parliament, Provincial Legislatures, and municipalities to co-operate in this im-

portant work.

Some may object to the plan because they think it is new, and has never been tried in any part of the world. This may be true, and if it is true, I see no reason why a young, vigorous nation like this Canada of ours should not have something new. Name it if you like the "Canadian Rational Plan" for dealing with the consumptive poor, and I care not whether you call it old or new so long as it accomplishes the end in view. However, whether the plan is new or not, the co-operative principle that underlies it is not new. It is now being applied in a somewhat modified form in our public schools, technical schools, and houses of refuge for the poor; and to illustrate the effect of grants by the Government and qualified ratepayers upon the charitably-disposed, I refer you to what has taken place in the county of Ontario during the present month. John Cowan, and his brother, W. F. Cowan, of Oshawa, offered grants, the former \$5,000 in cash, and the latter forty-five acres of land, provided that a by-law for \$12,000 is approved of by the qualified ratepayers of the county. To secure this and also the Government grant of \$4,000, a by-law was submitted for the above amount on August 21st, and carried by a large majority. makes, I am told, the twentieth county in this province where such Houses of Refuge have been established.

Now I maintain that every argument that can be used in support of such Houses of Refuge for the poor can with greater force be used in support of the co-operative plan proposed in this proposition for the establishment of rural sanatoria for the consumptive poor. In other words, if the poor who are well require a House of Refuge how much more do the poor who are ill with tuberculosis

need a rural sanatorium?

If the Dominion and Local Governments would adopt regulations for supplementing grants by by-law approved by the qualified ratepayers, similar to what is now done by the Province of Ontario in connection with Houses of Refuge for the poor, and also a per diem allowance for maintenance, I believe there would be a-liberal response from the charitably-disposed, and that a by-law would be submitted and carried at the first January elections in the new century in at least one municipality, and by this time next year a rural sanatorium for the consumptive poor would be an accomplished fact.

I submit that from the facts, arguments, and reasons presented, it is clearly the duty of the Dominion Parliament, Provincial Legislatures, municipalities, and philanthropic and charitable organizations and individuals, not only to contribute towards the support of rural sanatoria for the consumptive poor, but also to cooperate in this important work, as by so doing a greater number of needy ones can be reached, a greater check be given to the spread of the disease, and a great number of valuable lives be saved to the home and to the nation.

I shall conclude with a word or two in reference to the last suggestion, namely, that such rural sanatorium should be under the control and management of a large committee of citizens, each of whom should bring the work in touch with some particular interest or phase of modern civilization, working in conjunction with the local Board of Health. At present I shall offer only two reasons in

its support.

1. Public opinion is not and will not for some years be ripe for notification and compulsory isolation in tuberculosis as is now enforced by the Boards of Health in cases of small-pox, diphtheria, and scarlet fever. Much will therefore have to be done by means of educating the public, so that the poor who are suffering from this disease will voluntarily take advantage of the rural sanatorium, not only for their own benefit, but also in consideration of the safety from contagion that such a course would afford their family and the public at large, who have provided this free home for their care and treatment. These large committees of citizens would, no doubt, be an important factor in this educating process.

2. There is no philanthropic work, if properly handled, that will bring a more liberal response from the charitably-disposed than a clearly, well-defined, practical, rational, co-operative plan for dealing with the consumptive poor; and there is no more simple and practical way of encouraging this plan than by placing the control and management under a large committee of charitably-disposed people who are willing to contribute of their means and time to this most

important and necessary work.

I do not pretend that the plan I have imperfectly outlined is anything like perfect, and my object in presenting it is merely to bring the subject before the Association, and ask that a strong representative committee be appointed to bring in a report on the question at the annual meeting in 1900, and trust that the discussion on said report will form one of the prominent features of next year's meeting.

On motion of Dr. Barrick the following were appointed a committee to report at the annual meeting in 1900 on "The best means of dealing with the consumptive poor, including the providing of

the necessary funds therefor":

J. G. Adami, M.A., M.D., Montreal, Prof. Pathology McGill University; P. H. Bryce, M.A., M.D., L.R.C.P. and S. Edin., Secretary Provincial Board of Health, Ont.; E. J. Barrick, M.D., M.R.C.S. Eng., L.R.C.P. Lond., Toronto, member of the Medical Council, Ont.; H. H. Chown, B.A., M.D., Winnipeg; H. A. Lefleur, B.A., M.D., Montreal, Ass. Prof. of Medicine McGill University; J. Lafferty, M.D., Calgary, N.W.T.; W. Oldwright, M.A., M.D., Toronto, Prof. Hygiene, Toronto University; R. W. Powell, M.D., C.M., Ottawa, President Elect. Can. Med. Ass.; J. A. Williams, M.D., M.R.C.S. Eng., L.R.C.P. Lond., Ingersoll, ex-President Medical Council Ont.

FIBRINOUS RHINITIS.*

BY D. J. GIBB WISHART, M.D., TORONTO, ONT.,

Professor of Laryngology and Rhinology, Trinity Medical College; Surgeon, Nose and Throat Department, Toronto General Hospital, St. Michael's Hospital, and Victoria Hospital for Sick Children.

THE occurrence during last summer and fall of a series of cases, which apparently were fair examples of what has been described as fibrinous rhinitis, and certainly were the first to fall under my owr notice, and a desire thereby to add a little, if possible, to the small amount of knowledge we possess upon this interesting subject

leads me to present this paper.

Fibrinous Rhinitis is an affection described under a variety of names, such as Membranous Rhinitis, Croupous Rhinitis, Pseudo-Membranous Rhinitis, Streptococcic Rhinitis, Laminated Fibrino-Plastic Rhinitis, and by Bretonneau, and other writers in France as Coryza Couenneux. It was mentioned about twenty-six years ago by Henoch. The best description of the disease that I can find in the most recent text-books is that contained in Walsham's "Nasal Obstruction." It is as follows: "The nasal cavities are obstructed by false membranes of a grayish-white color and fibrinous consistency, adhering to the swollen and reddened mucous membrane, especially that covering the septum and turbinal bones. false membrane adheres more or less firmly, and leaves a bleed-Ing surface when forcibly removed, or it may come away easily without bleeding. Cocaine does not cause a shrinking of the No membrane is discovered in the fauces, the glands in swelling. the neck are not enlarged, and no constitutional symptoms are The patient is most likely a child. It usually begins, without apparent cause, as ordinary cold in the head, and may be ushered in by headache and slight fever, which, however, quickly The urine is not albuminous, and the disease abates in a couple of weeks, and is not followed by paralysis."

The last extensive paper on this subject in American and Canadian literature is that of Ravenel², of Philadelphia, published in 1895, wherein he collects reports of seventy-seven cases. As a result of these observations, Ravenel drew the conclusion that, "patients suffering from fibrinous rhinitis were always a possible source of contagion, and should be isolated as carefully as those

affected with the more common types of diphtheria."

I find, however, that such eminent authorities as Bosworth in America, and Lennox Browne and Walsham in England express themselves in their recent publications to the effect, that fibrinous rhinitis is a benign disease distinct from diphtheria. It is true that Bosworth states that all these cases should be isolated, but where is the need of isolation, with all that is implied thereby, if the disease

^{*}Read before the Ontario Medical Association, Toronco, June, 1899.

be benign? Bosworth³ states that "croupous or fibrinous rhinitis is characterized by a deposit of fibrinous exudation, which is superimposed upon the epithelial layer, and does not involve the deeper tissues. The disease, undoubtedly, is frequently caused by, or follows operations in the nose, as after the galvano cautery. In children the exudate forms a soft, thick, almost granular mass, very friable, which, in most cases, can almost be wiped from the mucous membrane in small fragments. The treatment appropriate to diphtheritic cases is most often used with benefit in these cases. The patient should be isolated at once."

Walsham⁴ says "Fibrinous rhinitis is rare. The affection is sporadic, and not contagious. In bacteriological examinations, the Klebs-Loeffler bacillus is not found, but the staphylococcus pyogenes aureus, or a staphylococcus resembling this organism may be present. By some observers fibrinous rhinitis is believed to be merely a mild form of nasal diphtheria, since in some supposed cases of the affection, the Klebs-Loeffler bacillus has been discovered in the membrane. It is possible that these particular cases were mild forms of nasal diphtheria, fibrinous rhinitis being a benign disease

distinct from diphtheria."

Lennox Browne⁵ says, "Recognizing there is such a disease as diphtherial rhinitis, there is also a form of nasal inflammation characterized by exudation of membrane which, although probably bacterial in its nature, holds a subsidiary position in pathology analogous to that of non-bacillary membrane laryngitis. Risk of contagion is remote. Cultivation and inoculation experiments give negative results. The neighboring glands are not involved, and no

one has found the Klebs-Loeffler bacillus."

On the other hand, Haviland Hall, in Albutt's "System of Medicine," says, "In the majority of cases the disease is the result of diphtheritic infection, and in some the general symptoms are so slight that the true nature of the disease is likely to be overlooked. It is only after a careful bacteriological investigation with a negative result, that the possibility of any cause other than diphtheria should be admitted, and until such examination is made the patient should be isolated. In the non-diphtheritic cases have been found a coccus resembling the staphylococcus pyogenes aureus, but differing from it by its extraordinarily quick growth, and by the duration of its power of infection. The streptococcus aureus and the pneumococcus membranous rhinitis occasionally occurs in the newborn infant, usually in connection with septicemia in the mother."

Here, then, we have very opposite views expressed by leading authorities upon a subject of great importance, namely, the contagiousness of one form of a disease which is looked upon with

dread by physician and community.

All of the cases which I here record occurred within a period of about fourteen months, and must be considered, in my opinion, simply as cases of diphtheria, where the type was of an unusually mild character. These cases are as follows:

CASE 1. On July 17th, 1898, M. W., aged 6, complained of stuffiness of the left nostril in the evening, but was quite well and

slept soundly, and was not examined till the day following.

The left nasal chamber was then found completely filled, from front to back, with a grayish-white fibrinous semi-transparent membrane. It was removed entire by injecting cocaine beneath it, and by the use of a probe. The membrane was attached to the septum anteriorly, and to the inferior, and, perhaps, to the middle turbinated bones, as far back as the posterior nares, and when removed left a slightly bleeding surface. The throat showed no signs of membrane, except two faint white lines behind the right posterior faucial pillar. The pulse was 76, and the temperature normal. After the removal of the membrane, finely powered iodoform was dusted on to the surface. The membrane was examined the same day by Professor Anderson, who found numerous polynuclear leucocytes with fibrini, but no bacteria. Cultures were also made which showed abundance of staphylococcus albus, but nothing else.

The membrane did not re-form to any appreciable extent, and did not invade other parts. Iodoform was blown in daily, the child was not isolated, and was not ill in any way, and the nose was

healed in about a week.

M. E. W., aged 5, sister of No. 1, was examined accidentally on the evening of the 29th of July, 1898, twelve days following the above, and a membrane was observed on the posterior wall of the pharynx, which was examined also by Professor Anderson. Culture proved this to contain Klebs-Loeffler bacilli. She was isolated, and antitoxin promptly administered. The glands were slightly enlarged, and there was a slight extension of the membrane. Recovery ensued within a week. No paralysis followed, but the anemia was very marked. The nose was not involved. Neither of these children were exposed to contagion in any known way, and no other members of the family were affected.

Case 2. August 25th, 1898, H. W., aged 9, was brought to the office by her mother, who stated that she was not sick, but that she complained of some stuffiness of the nose, which she thought might be a return of adenoids, for which an operation had been performed in May. On inquiry it was found that she had had a sore throat about ten days earlier, which had been pronounced by a physician non-diphtheritic, and from which she had quite recovered. The one side of the nose was found completely blocked with a membrane similar to that described in No 1. Removal left a bleeding surface. The child was promptly referred to the Isolation Hospital, and the Klebs-Loeffler bacilli were found. The membrane spread out to the pharynx. Recovery ensued, but over six weeks passed before the bacilli disappeared.

CANE 3. In the early part of 1898, M., an infant a few days of age, was referred to me by Dr. McMahon. The child was found to have difficulty in nursing, as its nose seemed to be blocked. On examination I found one side of the nose filled by a fibrinous

The membrane was examined at the health office, and There was an extension of the the Klebs-Loeffler bacillus found. membrane, and no other symptoms of diphtheria were observed.

CASE 4. H. R., boy, aged 5, in the practice of Dr. Fotheringham, developed a choked nose in November, 1898. The musal chamber was completely occluded by a whitish membrane. The Klebs-Loeffler bacillus was found in abundance. The membrane remained present for fourteen days, and the bacillus was found on each of several examinations. There was no clinical evidence of diphtheria at any time, and there was no extension of the membrane. The remaining residents of the house, father, mother and maid, each developed typical pharyngeal diphtheria with all the clinical symptoms, the maid's case being of a severe type, with faucial paralysis, and a peripheral neuritis of the anterior tibialis following.

The following cases occurred in my practice in the Hospital for

Sick Children:

CASE 5. F. J., aged 9, was operated upon in September, 1898, for deflected septum. On the fourth day thereafter one nostril was occluded by a fibrinous membrane. Bacteriological examination showed the presence of staphylococci and the Klebs-Loeffler bacillus. The child was isolated for nine days, and there was no extension of the membrane, and no delay in the healing of the wound.

CASE 6. W. R. C., aged 4, was admitted in February, 1898, for anemia and epistaxis. The child proved to be a hemophylic. Some months after admission, both nostrils were found to contain a fibrinous membrane which, on removal, left a bleeding surface. This membrane recurred persistently, and its presence was attended by attacks of epistaxis. Repeated bacteriological examinations were made, but no Klebs-Loeffler bacilli were ever found. The child was not isolated, the membrane was removed, and various powders, styptic and antiseptic, were applied. The membrane finally disappeared, and the child was discharged in the following September.

CASE 7. H. P., boy, aged 10, entered the hospital for Bell's paralysis on December 30th, 1898. On the 27th of January his nose was observed to be sore and bleeding, and high up in the right chamber a whitish membrane was discovered. This was found to contain staphylococci only. No other symptoms were observed, and

the patient was discharged on the 9th of February.

As will be seen, these seven cases give examples of a benign membrane in two cases, and of a membrane containing Klebs-Loeffler bacilli in five cases. Again in two cases, one of them with a benign membrane, there is a clear history of the infection of those brought into contact with the patient. The appearance of the membrane varied, being grayish and viscid in No. 1 and white and somewhat friable in No. 6. In no case could the membrane be removed without leaving some slight bleeding point, and in no case, except in No. 6, was the bleeding very marked. In Case No. 1 the membrane was the most typical that I ever saw, and careful examination proved nothing to be present but staphylococcus, and yet the only child with which she was brought into contact developed pharyngeal diphtheria. In Case No. 3, which was examined by a very accurate observer, the membrane was typical, constitutional symptoms were absent, and yet the patient spread true diphtheria to three persons. Of the hospital cases, only one was isolated; diphtheria, however, was epidemic in the hospital in the summer of 1898, and an occasional case appeared in the wards throughout the winter, the greatest watchfulness being required to prevent an outbreak. These two cases, therefore, would appear to have suffered from fibrinous rhinitis owing to their exposure to diphtheritic contagion. I have already presented the views of our leading authorities, and now present as full a list as I have been able to obtain of cases recorded since 1895, of which there are ninety-one, making, with my own, a total of ninety-eight cases.

F. J. Dixon reports two cases, in one of which cultures showed micrococcus albus liquefaciens and bacillus termo of Vignal, but no

others.

Hennig's reports eighteen cases which were fairly typical, and, after a careful comparison, concludes that fibrinous rhinitis is not a disease sui generis, but is intimately related in a clinical and pathologico-anatomical manner to diphtheria; that its etiology is ob-

scure, but that it is not due to Klebs-Loeffler bacillus.

H. Lambert Lack reports thirty-six cases, forming 2½ per cent. of all the children attending his hospital practice. The results of bacteriological examinations carried out in thirty-three cases showed the true Klebs-Loeffler bacillus constantly present, generally in pure culture, sometimes mixed with pyogenic cocci, etc. It was usually of the large variety, and its identity was proved by its morphology, by its growth in various culture media, etc. It was shown to be of full virulence in animals, to produce virulent toxins, and to be neutralised by antitoxins, to live for several months in culture media, and by its vigorous growth to crowd out other organisms if present. A thorough examination proved a previous history of diphtheria in connection with one case only. The disease gave rise to itself in nine cases in four families, and often to-mild sore throat, twenty-five cases out of eleven families.

John Middlemas Hunt¹⁰ reports three cases presenting the clinical characters of fibrinous rhinitis, but all of them so related to diphtheria as to make him thoroughly distrust any case based on clinical evidence alone. In two of these there was a bleeding surface left after removal of the membrane. In two cases true pharyngeal diphtheria occurred among those associated with the patient, and the other case developed a severe attack of diphtheria two weeks later, followed by extensive paralysis. The Klebs-Loeffler bacillus was found in the only case submitted to bacterio-

logical examination.

Richard Lake 11 reports one case with a white gelatinous mass filling entirely the cleft between the septum and the inferior

turbinate bone. Bacteriologically no organisms but staphylococcus pyogenes aureus were found. The case was lost sight of before a cure was affected.

Price Brown 12 reports one case with a large white patch of cartilage-like membrane filling the whole cavity, and adherent to the septum. It had been noticed by the patient for about two weeks. On removal it left a more or less abraded surface. Therewere no indications of diphtheria. The membrane was made up of fibrin and leucocytes. No bacteriological examination was made.

Meyer ¹³ reports twenty-two cases in which he had made bacteriological examinations with inoculation experiments, and found in nine cases streptococci only, and in thirteen others the Klebs-Loeffler bacillus in virulent form. In their clinical course the cases with diphtheria bacilli showed no difference from those without.

Gerber 14 reports seven cases where virulent diphtheria bacilli were found. In other cases, the number not being given, streptococci, staphylococci, diplococci, etc., were found without the Klebs-Loeffler bacillus. Gerber considers that the clinical pictures may be identical while the diseases are different, and that the difference between this and true diphtheria is one of degree only, dependent upon the vulnerability of the mucous membrane.

Gerber and Podack 15 report five cases of primary fibrinous rhinitis in which the virulent Klebs-Loeffler bacillus were present. They emphasize the great danger of infection in these cases on account of the relatively slight symptoms, and the chronic course, and

insist on strict isolation.

Pluder ¹⁶ reports six cases of fibrinosa diphtherica of which five were examined bacteriologically. Klebs-Loeffler bacilli were found in all, while in one case there occurred extension to the pharynx, pharyngeal diphtheria, and more or less severe diphtheritic sore throat in persons in contact with the patient. He considers that but for the fact that there is no known case of fibrinous rhinitis which has been followed by paralysis, the diseases might be considered as identical.

In these series of cases we have the Klebs-Loeffler bacillus present in sixty-nine out of a total of ninety-eight cases. These are not the observations of one man but of a number, and most of the cases bear the ear-marks of careful observation. Looked at from the point of view of these results, are not the conclusions of Ravenel, in 1895, amply borne out? The cases of fibrinous rhinitis are rare, and the general practitioner who meets with a case will look up the subject in one of the recognized authorities, and, acting upon their conclusions, will be apt to leave the case without isolation. This is too dangerous for the community, and not justified by what we now know of the disease.

With regard to the frequency with which this form of disease appears, I feel convinced that the observations of Potter and Lambert Lack are not borne out in the experience of others. In my own case, in an experience of six years in charge of an Intern and

Extern Nose and Throat Clinic in the Hospital for Sick Children, not one case of fibrinous rhinitis was observed till those recorded appeared. This long experience without a case, and then the sudden appearance of a comparatively large number, only goes to prove in my own mind that fibrinous rhinitis is but one of the forms or phases of diphtheria, due to an attenuation of the bacillus. It is assumed by some observers that the membrane which is now and then found in the nose after operative procedures is identical with that found in fibrinous rhinitis. To this I would demur. The appearance is not at all the same. The history of the case in itself is a guide if the physician has occasion to suspect the nature of the deposit present. I have in many instances observed this membrane-like eschar after the galvano cautery.

It would appear that observers of this interesting disease thus

fall readily into three classes:

1. Those who consider diphtheria and fibrinous rhinitis to be distinct diseases.

2. Those who consider there is but one disease, but that the degree of contagiousness varies, so that we may safely neglect to isolate such cases where no clinical and bacteriological evidences of diphtheria are to be found.

3. Those who would isolate every case.

In view of the fact that cases possessing a membrane bacteriologically innocent have apparently communicated diphtheria to others, are we not warranted in thinking that the Klebs-Loeffler bacilli were really present somewhere! If so, we are forbidden thereby to abandon the isolation of these cases until a series of bacteriological examinations have been made, which practically means until the disease itself has disappeared.

In conclusion we may fairly consider that the accumulated

evidence proves the following points:

1. Fibrinous rhinitis and diphtheria are not distinct diseases.

2. All cases of fibrinous rhinitis need the same precautions as to

isolation that diphtheria requires.

Note.—Subsequent to the presentation of this paper the writer has received a copy of "Non-Diphtheritic Pseudo-Membranous Rhinitis," by Dr. Price Brown, in which the conclusions reached are diametrically opposed to those of this paper.

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47 Grosvenor Street.

RESULTS ALREADY ACHIEVED AT THE MUSKOKA COTTAGE SANATORIUM.*

BY J. H. ELLIOTT, M.B. (TOR.), GRAVENHURST, Medical Superintendent.

In view of the general interest at present evinced by the profession in the prophylaxis and treatment of tuberculosis, I have thought that a communication in reference to the Sanatorium in Gravenhurst would not prove uninteresting to this Association. The Sanatorium has been built by the National Sanatorium Association, which was founded with an object of establishing public institu-

tions for the treatment of pulmonary disease.

The officers of the Association are: Lord Strathcona and Mount Royal, President; Sir William Ralph Meredith, Vice-President; W. J. Gage, Esq., Treasurer; N. A. Powell, Esq., M.D., Secretary. It is in no sense of the term a commercial speculation. There is no capital stock subscribed, and no dividends to be paid. It is intended to be in every respect a public national undertaking. The Association hopes to secure, through public and private appeal, sufficient endowment to make at least one-half the beds free. As soon as this is accomplished the intention is to establish similar institutions elsewhere. Already about \$70,000 has been expended on buildings, land, improvements, electric light plant, water supply, etc. There is now accommodation for fifty patients, and every room is occupied, while many are waiting for admission.

Through the munificence of W. J. Gage, and the late Hart A. Massey, who each gave \$25,000 towards the undertaking, the trustees were enabled about two years ago to open the administration building for the accommodation of patients. Since then five cottages have been completed through the gifts of Wm. Christie, Esq., Wm. Davies, Esq., and family, and Mrs. T. H. Bull, of Toronto, Mrs. E. Jackson Sandford, of Hamilton, and the bequest of Mrs. Jesse Maver, of Pickering. Three of these cottages are for four patients each, one for six, and one for ten. The bedrooms open into a large sitting-room, in which is an open fireplace. Each cottage has a spacious veranda, so arranged as to afford shelter from the winds in winter and still allow the patients the free

benefit of the sunshine.

In the administration building are the dining-room, kitchen, billiard, reading, and music room, secretary's office, consultation room, dispensary, and laboratory. There are also three solaria, one facing east, one south-east, and one south-west. A broad piazza, with balcony above, stretches along the whole front of the building. The patients' rooms, twenty-two in number, are principally on the first floor. All the buildings have hardwood floors. The walls and ceilings are of cement plaster, which allows of washing. There are no sharp angles to allow accumulation of dust. All corners, both

of woodwork and walls, are rounded. The windows are large, to admit plenty of light and fresh air. The rooms are large and airy, with unusually high ceilings. They are heated by steam or hot

water, and lighted by electricity.

Each patient has his own room. The furnishings of each bedroom consist of an iron bedstead, with hair mattress, a dresser, washstand, wardrobe, one small table, one chair and one rocker. In addition are two small rugs, one beside the bed, the other at the washstand. Carpets or curtains are not allowed.

The Sanatorium has been built and equipped for the treatment of the earlier forms of the disease. With the cottage system it has been possible to admit a few of the more advanced cases from time to time, but it has been found advisable to keep these classes separate, the advanced cases needing that special care and attention

which the earlier cases do not require.

Especial care is taken in the disposal of the sputa. Patients are strictly forbidden to expectorate outside the cuspidors or paper handkerchiefs provided, either on the grounds of the Sanatorium or elsewhere. The cuspidors in use for the collection of sputa are the spitting cups supplied by Seabury & Johnson, made of water-proof paper, so folded as not to spill the contents should they be accidentally overturned. These are carried in a special holder, made after the pattern of the one supplied by the above firm, but which I have modified by putting on a solid bottom, converting it into a watertight box, so that should any of the papers be imperfect, or should there be leakage from any other cause, there will be no contamination of any object on which the box may be placed, as there must be in the original which possesses only a bar across. the bottom. As often as necessary these are renewed, the patient removing the paper containing the sputum, wrapping it securely in paper and tying with twine. This is then deposited in a receptacle capable of holding the day's collection; from this they are removed daily and cremated. While walking these boxes are found rather inconvenient for patients who have but little expectoration. In their place the patient carries a supply of Japanese-paper handkerchiefs. They are cautioned after once using a handkerchief neverto open it to use a second time, but always to use another. are disposed of in the same way as the boxes, by wrapping securely in paper and burning. When a patient leaves, the room and itscontents are exposed to the action of formaldehyde vapor before being again occupied. The window shades are not allowed down during the day to obstruct the entrance of sunlight. Except when dressing, the shades are kept completely rolled up.

In my classification of cases I have followed Trudeau, employing the terms: incipient, advanced, and far advanced. 1. Incipient—Cases in which both the physical and rational signs point to but slight local and constitutional involvement. 2. Advanced—Cases in which the localized disease process is either extensive or in an advanced stage, or where with a comparatively slight amount of pulmonary involvement the rational signs point to grave constitu-

tional impairment, or to some complication. 3. Far advanced— Cases in which both the rational and physical signs warrant the On discharge, the cases are classified under the terms: apparently cured, disease arrested, improved, stationary, failed, or died. 1. Apparently cured—Cases in which the rational signs of phthisis and the bacilli in the expectoration have been absent for at least three months, or who have no expectoration at all; any abnormal physical signs remaining being interpreted as indicative of a healed lesion. 2. Disease arrested—Cases in which caugh, expectoration and bacilli are still present, but in which all constitutional disturbance has disappeared for some time; the physical signs being interpreted as indicative of a retrogressive or arrested process. 3. Improved—Cases in which there has been some marked gain in the condition of the lungs, or in which there has been marked amelioration of the constitutional disturbances; cases with simply a slight gain in weight are not placed under this term.

I take the following figures from the first year's report:—

Number of patients treated during the Number at Sanatorium under treatment				
Number to be reported on				
with disease arrested with marked improunimproved Died	78.			
	ss I.			
Condition on Admission.	months. Average stay, 7 weeks. Condition when Discharged.			
	Apparently cured 8			
Average gain	er gained nor lost 7			
	ss II.			
30 patients remaining 3 to 9 month Condition on Admission.	s. Average stay, 5 months 15 days. [Condition when Discharged.			
Incipient disease 6 Advanced 16 Far advanced 8	Apparently cured 4			

Number	of patie	nts wh	o gained in weight	22
- 11	- II	11	lost " "	
11	11	11	neither gained nor lost	4
Average	gain		1	6 lbs.
ıı Ö				
Maximu	m gain f	or one	month 1	5 11
11	Ü	two		5} ıı
11	11			4 11
And one	patient		months gained 4	1 1 11

These results were obtained while the Sanatorium was undergoing rapid development, and with a class of cases not the most desirable for building favorable statistics, and with an average stay of less than one hundred days.

Our year ending September 30th, I am unable to present a full report for the present year, but have prepared a statement regarding the seventy two cases discharged during the first nine months of the year up to June 30th, 1899:

Condition of Patient on Admission.	Apparently cured.	Disease arrested.	Much improved.	Stationary.	Failed.	Died.	TOTAL.
Incipient cases	11	4	2				17
Advanced	3	20	2	5	1		31
Far advanced	1	4	6	5	5		21
With doubtful evidence of phthisis.	2		1			••••	3
	17	28	11	10	6		72

Average stay, 152 days.

Of the 72 cases, 61 had bacilli on admission.

47 " discharge.

or 35% of those treated, had no bacilli on discharge.

Of the 72, 60, i.e., 83% gained in weight, the average g. heing 11½ has

The maximum gain for one month was 18 lbs.

The maximum total gain was 43 lbs.

In comparing these results with those of the first year a satisfactory improvement is noted. That while the advanced cases far outnumber the incipient cases, and the proportion is practically the same as last year, we see that with the average stay increased from 98 days to 152 days, the percentage of apparent cures has also increased from 15 per cent. to 23 per cent. I would like to draw especial attention to the fact that of the 17 incipient cases 11, or 65 per cent., were apparently cured. With a longer stay there is every reason to believe the percentage of incipient cases cured would be 80 per cent. or over.

It is early yet to speak of permanent results, but there is every reason to hope that those apparently cured will have no recurrence of their trouble if they take reasonable care after leaving. From 12 to 18 months have now elapsed since the discharge of the patients of the first year. Twelve were reported apparently cured. In none of these has there been a return of cough, and all are in perfect health. Of the 23 with disease arrested, I cannot be traced, I is now in an advanced condition, 2 who returned to city life against advice have since died, the remaining 19 are at work and quite as well as on discharge. Of a number who gave promise of speedy cure had they been enabled to remain, several have progressed favorably since discharge, and now report the cough entirely gone.

That tuberculosis is one of the most curable of chronic diseases, when brought under this treatment sufficiently early, is clearly proven. As soon as diagnosis is made the physician must urge upon his patient the necessity for prompt action. Do not tell the patient his lungs are weak; tell him frankly what his trouble is, so that he will understand the need of proper care of himself, how to avoid self-infection, and to avoid infecting others, and tell him also his prospects of recovery are of the best if he will follow your advice, while if he is careless the termination will necessarily be fatal.

If it is desirable for the patient to go away from home, be sure that he goes to a locality where he can have proper medical supervision. Without this he is very apt to be injudicious, and do many things detrimental to his progress. Symptoms may change, hence any instructions given before leaving may in a short time be contra-indicated. And here may I enter a protest against the sending far from home of patients far advanced in pulmonary trouble, and in whom there is little chance of improvement. The utter uselessness of this, the separation of the sick one from kind friends at home, the weariness and fatigue of the journey, and the realization of the hopelessness of his case soon after arrival, combine to make a sad picture which should be avoided.

It is impossible within the limits of this paper to deal with the treatment employed. It is, broadly speaking, that generally carried out in special sanatoria: rest when pyrexia is present, regulated exercise in apyretic case, suitable diet and hygiene, and fresh air 24 hours in the day; medicines are exhibited only as indications call for; perhaps the most important factors in the treatment being the constant supervision of the patient's daily life, which cannot be secured in private practice, and the special facilities provided for out-of-door life in all seasons and in all weathers.

"THE COUNTRY DOCTOR."—By special request from more than one source, and knowing that our readers have in the past appreciated our efforts to adorn the representative medical journal of Canada, we reproduce in this issue, on special coated plate paper (for framing if desired), "The Country Doctor," the original of of which, in oil, has become so famous.

Proceedings of Societies.

THE THIRTY-SECOND ANNUAL MEETING OF THE CANADIAN MEDICAL ASSOCIATION.

THE thirty-second annual meeting of the Canadian Medical Association convened on August 30th, 1899, at Toronto, in the amphitheatre of the Educational Department in the Normal School buildings, the use of which was courteously tendered to the Association by the Minister of Education, the Hon. G. W. Ross. A wealth of intertwined Stars and Stripes, while here and there Old Glory, gave a welcome to the visitors from across the line, made bright patches of color and showed in relief the marble buststhe ghostly images of those once famed in song and story—that adorn its walls. The very place to sit at the feet of Gamaliel. The exhibit hall (connected with the Association) occupied a welllighted room at the rear and upstairs in the same building, and was well patronized by the physicians. To the President and the genial and energetic Secretary it must have been a gratification to see, as early as nine o'clock, upon the opening morning, members beginning to wend their way to the meeting place, and when the opening hour came, the assistant secretary's desk had a goodly number around it, waiting to register their names and pay their fees. Especially pleasing to the Toronto physicians it must have been to see so many from Montreal and the East, not to mention those from the West, as last year's meeting was held in Quebec with its many local attractions and points of historical interest; and yet the newer, busier city this year drew even a larger number. But surely the book is more than the cover, and so not wholly to locality, be it ever so interesting, need we ascribe the magnetism that draws the numbers, but tender the praise to the devotion of the student to his Mæstro, the worship of the devotee at the intellectual shrine of his science god, the great Æsculapius.

Promptly at the hour announced the President, Mr. Irving Cameron, called the meeting to order in a few well chosen words. His presidential address, however, was not delivered until two o'clock of the opening day. The secretary's chair was once again occupied by the popular Dr. F. N. G. Starr. In the next few pages we present a condensed report of the proceedings. The first paper

Tuberculosis in Canadian Cattle and its Prevention.—Dr. George J. Adami, of Montreal, presented a very creditable paper

read was entitled:

upon this subject. We will not give more than a few of the points to which the reader drew attention, as we will present the paper in full in our next issue of the JOURNAL. Dr. Adami concreted his subject by asking three questions: (1) Is tuberculosis in cattle a source of danger to other cattle, so as to seriously effect their wellbeing, and be a source of loss to their owners? (2) If infectious from animal to animal, is it infectious from animal to man and consequently a source of danger to the human race? (3) If infectious from animal to man, what are the commonest modes of infection and how can the danger be lessened? The answer to the first question was a decided affirmative, the instance of an infected bull being introduced into a herd of healthy cattle and the consequent appearance of the disease in some of the cattle. However, Canadian cattle were shown by the comparison of statistics in a very favorable light. In 1894, at Montreal, ninety thousand cattle were inspected, and out of that large number only sixty were rejected, and of the sixty only two were infected by tuberculosis. Adami dwelt on the importance of detaining all cattle imported for breeding purposes in quarantine for seven weeks, and then if they failed to react to the tuberculin test, they might be released and given to their owners. In answer to the second question, he found it difficult to secure reliable information. The danger at present was not very formidable owing to the comparative freedom from the disease shown by the Canadian cattle. As lately as 1894, in the abattoirs at Montreal, Halifax, and St. John, N.B., over two thousand five hundred animals had their lungs examined, and only fourteen showed signs of tuberculosis, a remarkable showing, indeed. An interested audience has assembled to listen to the paper on:

Christian Science.—DR. J. H. RICHARDSON, Toronto. The grand old man was, as ever, able, and in this instance more than willing to fire the guns of his genius and knock down the straw nine-pins which he culled from "Science and Health," the product, in the text-book line, of the brain of the much-married lady-apostle of this cult, Madame Eddy. Dr. Richardson's grim humor caused many a hearty laugh. His paper will be found in this number of

What Has Been Done at the Muskoka Cottage Sanatorium for Consumptives.—Dr. J. H. ELLIOTT, the medical superintendent, gave a detailed description of the inception, progress, and results,

achieved at this institution. His paper dealt largely in statistics, giving classification, and figures, and proved interesting in its conciseness. We present this paper in full in this issue of the

JOURNAL.

the Journal.

The President's Address.—Mr. IRVING H. CAMERON, Toronto, rose to the occasion. His scholarly address was worthy of the man, and his chaste English and well-finished sentences a genuine pleasure to listen to in this age of rapid transit and abbreviation. This address we present to our readers in full on another page of this issue. We list briefly the many interesting papers read:

An Experience in Formaldehyde Disinfection.—Dr. F. Mon-TIZAMBERT, director-general of public health, of Ottawa, gave the history of an outbreak of small-pox on board the Lake Huron steamship, twenty-six days out from port on the Black Sea, with twenty-four hundred Doukhobors on board. All of the passengers were landed on June 9th, the vessel was disinfected by the 13th, and a new crew put in by 4 p.m. on the 14th. A solution of formaldehyde was employed, and twelve ounces of this was allowed for each one thousand cubic feet of space. Two and a half months had since elapsed, and there had not been reported a single case of the disease occurring among the passengers. Dr. Montizambert's paper will appear in this JOURNAL later.

Massage and the Relief of Eye Strain in the Treatment of Glaucoma.—Dr. George M. Gould, of Philadelphia, Pa. Our readers may look forward to Dr. Gould's paper appearing in next month's issue, it having been handed to this Journal by the writer himself for exclusive publication in Canada. Dr. Gould said that usually all cases of glaucoma first came under the notice of the general practitioner. Four years ago he wrote concerning glaucoma that massage properly applied seemed to exert a beneficial action in stimulating and arousing normal functions generally. He illustrated this plan of treatment by citing several cases in which it had been employed with beneficial effect, and concluded by describing his method of operation. It was to be done with the soft parts of thumbs and the tips of the fingers. In this way all venous and

lymph spaces were cleared and broken.

Treatment of Acute Digestive Disorders of Infancy.—Dr. A. R. GORDON, of Toronto, gave a description of the different gastrointestinal disorders, and then dwelt more fully on the treatment and management of these cases. If the attack was a simple one, the suspension of all food for from eight to twenty-four hours might be all that was necessary; water might be allowed for thirst. After this period was past, rice water and such like fluids might be permitted. Liquid peptonoids he had found very satisfactory in those of more serious aspect. It was necessary to persist in this diet for days, until all symptoms had disappeared, and the child was perfectly convalescent. Cow's milk should be the very last article of diet to be allowed. Calomel with sodium bicarbonate should be early administered until the characteristic bile stools are seen, and even for some time thereafter the bowels should be watched, and phosphate of soda or aromatic syrup of ginger employed to keep them in condition. In cases which become exceedingly chronic, paregoric in suitable doses may be employed.

Dr. Holmes, of Chatham, Ont., spoke of the advantages of

hydrotherapy in these cases.

Dr. A. L. Benedict, of Buffalo, discountenanced opium and astringents, and said he had found catnip tea a valuable sedative to be employed. Dr. Gordon's paper will also appear in a later issue.

A Case of Subcutaneous Emphysema. Dr. Fred. Fenton, of Toronto, reported this case, which occurred in a child of six and one-half months old. The child had been described to the doctor as being perfectly well up to five months, except a slight attack of bronchitis about the third month. On December 23rd last, five days before death, the baby was restless, but did not cough much, in fact cough was not a marked feature at any time. Swelling was noticed in the greater part of the neck, chest, and shoulders, passing upward over the head and face, and also downward over the chest and abdomen. It was limited to the neck behind, and as low as Pouparts ligaments over the abdomen. A post-mortem was made six hours after death. The point of entrance of the air into the pleural sac could not be discovered. The spleen was large and grayish, tubercles were scattered over its surface; the liver was There was no gas formation in any of the internal also large. organs. Examination under the microscope of the tissues showed tubercle bacilli in the lungs, a few in the liver and spleen, but none in the kidneys. The father, fifty years old, had suffered from a cough in winter for years, owing to chronic bronchitis. No direct signs of tuberculosis were apparent in the mother, but she was frail and looked a fit subject for the disease.

Successful Treatment of Three Important Cases by the Combined Form of Treatment.—Dr. G. H. Burnham, Toronto, gave the histories of three cases and his plan of treatment for specific iritis. Pilocarpine was applied hypodermically, from gr. $\frac{1}{40}$ to $\frac{1}{4}$, in a series of sittings, consisting of from ten to fourteen injections. An interval was then allowed to elapse of from three to eight weeks, during which time the patient was taking internally the bichloride and the iodide of potash. Then another sitting was repeated. Before each injection the patient was made comfortable in a room at a temperature of 75° F., and lay either on the left or right side, as convenient. In winter a hot water bottle was applied to the feet. The proper effect of the injections was shown by prespiration and a free flow of saliva; the latter varying from six ounces to a pint. At the end of an hour the patient arose, dressed and Two hours after he could partake of food. went home. doctor generally gave the injection about two hours after the midday meal. In some cases a few months' treatment would suffice, in others it had to be continued for three or four years. Relapses had not occurred under this treatment.

The Best Method of Dealing with the Consumptive Poor.—Dr. E. J. Barrick, Toronto. The writer grouped his method under three headings: First, the establishment and maintenance of rural sanatoria in connection with each municipality; secondly, the erection and maintenance, in connection with the sanatoria, of suitable buildings for the reception and treatment of incurable cases of the disease; third, the co-operation of the Dominion Government, provincial legislatures, etc., also, of course, philanthropists in providing the necessary funds. We publish Dr. Barrick's paper in full in this month's number.

A Skin Clinic at St. Michael's Hospital was fairly well attended, about thirty cases were shown, among them several rare cases, such as dermatitis herpetiformis, larva migrans, urticaria pigmentosa, hydrocystoma, hydradenitis, favus, molluscum contagissum, exfoliative dermatitis following psoriasis. Drs. A. R. Robinson, of New York; Shepherd, of Montreal; A. MacPhedran, and Graham-Chambers, of Toronto, took part in the discussions that followed.

SECOND DAY.

On Thursday, August 31st, the second day of the meeting, a great many papers were read, among others Erysipelas, with Treatment by Marmoreks Serum, by Dr. A. De MARTIGNY, of Montreal. During a little over a year past the doctor had treated several cases of erysipelas of the face with Marmoreks serum with good results. He described one rather obstinate case in which tonic and general treatment had been employed for five days without any appreciable result. The temperature, which had been 105° F. with pulse rate 148. On the next morning after the injection of the serum (20 C.C.) became normal, with pulse 96. Next day the pulse also became normal, and in five days the patient was at work The previous treatment had been a 30 per cent. solution of ichthyol as an application, with iron and quinine internally. In addition to the injection, a solution of bichloride, 1 in 4000, was used externally. Several other cases were cited, and stress was laid upon the beneficial results the antitoxin exerted in preventing relapses. 1)r. Powell asked concerning the method of injection, and if 20 C.C. was the usual amount employed.

Dr. CAMERON endorsed Dr. Martigny's treatment from his own experience with several cases of his own; in one case seven attacks or recurrences of the disease had occurred in fourteen months, but since trying the treatment in question no relapse had

recurred in that particular case.

Sir James Grant, of Ottawa, said that thirty-two years ago, when the Canadian Medical Association was organized, this subject was not even in its infancy. Now great advances have been made, and he hoped Dr. De Martigny would prosecute his researches still further in this direction. In 1860 Sir James received a severe blood-poisoning, and was near the point of death. In 1863 he was induced to try the influence of the serum of ordinary vaccine injected into his system. He also spoke of the treatment at that time of skin diseases by the same method, particularly psoriasis, confirming the fact that serum therapy was then in vogue.

Dr. IRWIN, of West in, also gave instances of treatment with

Marmoreks serum, in one case with an unhappy result.

Dr. DE MARTIGNY, in answering the objections stated that 10 C.C. might be sufficient in a given case, providing the serum

were taken from the same family of streptococci as represented in the disease, but as this was not always known, 20 C.C. was the amount best to be administered. He requested the members of the Association to give this treatment a fair trial during the next

year, and report their results next year at Ottawa.

Complications and Treatment of Fracture of the Skull, by Dr. J. M. Elder, of Montreal. The writer stated that his paper referred to fractures at the base of the skull. During the summer he had seven cases of these injuries in the Montreal General Hospital, five at the same time, and fortunately the entire number ended in recovery. He was impressed by the good results of the routine treatment; he believed that often general practitioners considered this form of injury treatment quite unjustifiable, as it would be in a compound fracture of the tibia, for instance. The history of the first case cited was as follows: A young girl, eged eight, was rendered unconscious as the result of a fall of fifteen feet, striking There was a large hematoma about the parietal bone and a depressed fracture above the left ear; the pupils were widely dilated; blood was oozing from the nose and ears. Bright red blood in small quantities was vomited, which, on examination with the mirror, was found to be originally dripping from the vault of the pharynx. Something had to be done at once. The left common carotid artery was immediately tied, the injury being on the left side; the patient regained consciousness on the third day, and the temperature kept fairly good. On the twelfth day she developed thromboses in different sinuses, but she fully recovered, and left the hospital perfectly well, after a period of twenty-six days' habitation. She continued well, and was in perfect health at the present time. The histories of the otner cases were given, after which Dr. Elder detailed the routine treatment to be followed. Absolute rest in bed and quiet, and attention to the mouth, nose, and ears were enjoined.

Dr. Lett, of Guelph, Ont., brought up the question of mental trouble following these injuries, and whether any symptoms of this

nature followed the act of tying the carotids.

Dr. Shepherd, of Montreal, said that he had tied the carotid many years ago for an injury of this character. In his case, there was a gradual loss of consciousness after the accident, and then he had operated and had found a large clot at the base of the skull. The hemorrhage was so profuse that he tied the common carotid immediately. There were no mental symptoms afterward in this case.

Dr. Elder stated he had assisted Dr. Shepherd in operating on that case, and had but recently heard that that patient had become insane, which fact Dr. Shepherd, however, took occasion to deny. He was watching this case carefully to see if any such symptoms did supervene.

Dr. ATHERTON, of St. John, N.B., stated that he had seen the carotid artery tied in the case of a medical man of St. John, and no

mental symptoms followed; and if any of the members should hear him speak on a medical or political topic, he would perceive

that his mental faculties were all right.

Dr. Bell, of Montreal, thought that certainly many cases could be relieved by prompt interference. Little could be done to avert the menual symptons which were the direct result of the traumatism; but patients should not be let die of hemorrhage. The great point

was to know when to interfere, and to interfere promptly.

Observations on Adenoids and Enlarged Tonsils and Their Removal.—Dr. D. J. GIBB WISHART, of Toronto, in a four years' service at the Hospital for Sick Children, gave the results from 1896 to 1899 of a total of 103 operations, 47 being boys and 56 girls. Twenty-four per cent. were under five years of age, twenty-four per cent. were over ten years, and fifty-two per cent. were between five and ten years. Some of these were examined years after operations. In only sixteen cases could an examination be obtained. and only four of these showed any return of the disease. Five of the patients had been previously operated on by other surgeons. Two deaths occurred, both from the anæsthetic. In forty-seven per cent. of the cases there were enlarged tonsils. Dr. Wishart spoke of the diagnosis of adenoids, and said that the facial expression was most helpful. The nose was flattened and broadened between the eyes. In discussing the employment of anæsthetics in these operations, he favored chloroform, nitrous oxide gas being too evanescent in its effects to prove beneficial. Ether at times could be advantageously substituted for chloroform. Tonsillotomy was too frequently performed.

SIR WILLIAM HINGSTON had rather that Dr. Wishart had confined himself to one or the other topic because remarks on one did not apply to the other. It occurred to him that when these adenoids were present an operation should take place as soon as possible. There was nothing to be gained by waiting. When he came, however, to the tonsils, that was a very different thing. He thought many operated there altogether too frequently. He had seen whole families of children with enlarged tonsils, and when they grew older the tonsils came down to their normal condition. He had seen the tonsils almost meeting, and yet had hesitated to remove them. He also took exception to the use of the spray in the nasal cavities, as the membrane of the nose was unaccustomed to it. For years he had not used water medicated in any way for use in the nose. He preferred to get there by the proper application of

powders.

Tuberculosis and Insurance.—Dr. John Hunter, of Toronto, contributed a paper on this subject and which we will publish in full in another issue of the Journal. He spoke of giving applicants for life insurance the advantages of progressive medicine and of the modern thought of the day. It was the imperative duty for examining physicians to be honest for their employers. It was the duty of the physician to furnish the medical director with a

full, accurate, and honest report in all cases. The aim of this paper was to invite discussion, that might be used to define more clearly "the position of examining physicians" with reference to the relationship between tuberculosis and insurance. He spoke of the causative and predisposing factors of tuberculosis, viz., environment, physical condition, and hereditary tendency. Of the latter so much stress was not now laid on heredity as formerly; the disease was infectious just as scarlet fever was infectious, only with a longer incubation period. He quoted Dr. Bryce as saying that about eighty per cent. of deaths from tuberculosis occurred among working classes or individuals working at trades.

SIR JAMES GRANT, of Ottawa, entered a strong plea for the establishment of a great national society such as that instituted by Sir William Broadbent in England, over a year ago, for the spread of information among the people with regard to this disease and

the means necessary to be adopted to stay its ravages.

Cyst of Broad Ligament.—Dr. CHARLES SMITH, of Orangeville, Ont., related his experience with a case of this kind. Ite described fully the operation he had performed, and noted the difficulties encountered in its completion. The tumor was removed through an incision five inches in length, and the patient subsequently enjoyed the best of health for five years, when she suc-

cumbed to an attack of apoplexy.

Implantation of the Ureters in the Rectum in a Case of Exstrophy of the Bladder, with Patient.—Dr. George A. Peters, of Toronto, presented the petient, a little boy aged four and onehalf years, who, after the description of the operation, was most thoroughly examined by the surgeons present. In addition to the exstrophy, the patient had also procidentia recti. These conditions were very loathsome, and disgusting to friends and should be submitted to operative procedure for relief. Two years ago Dr. Peters operated on this child for the relief of the rectal condition with very marked and beneficial results. The exstrophy had been removed altogether. The operation was performed extraperitoneally and the ureters were conducted one on either side into the rectum. Almost immediately after the operation, the rectum manifested a toleran of the urinary secretion. The child could now go from two to three hours without anything passing from his bowels; at night he could go from four to five hours. Dr. Peters stated there was danger of death in these cases after operation, from an ascending pyelo-nephritis. In animals on which this operation had been performed, this was the manner of their death.

Co-Operation of Surgeon and Physician in Abdominal Cases.— Dr. A. L. Benedict, of Buffalo, chose this as the subject of his paper, and pleaded for the co-operation of the medical and surgical attendants upon abdominal cases of tumors and cancers in which both were required in their treatment. He was of the opinion that very often the patient would progress more quickly and efficiently if the case after operation was handed over again to the medical attendant. He proceeded to instance a number of cases in support of his contention, as cancer of the cardia, etc., and asserted a diagnosis should not be made at the time of the operation.

SIR WILLIAM HINGSTON said the diagnosis should not be made at the time of the operation, but that by a process of exclusion it could generally be arrived at satisfactorily. Dr. Benedict has given this paper for publication and it will appear next month.

Gall-Bladder Surgery. -Dr. J. F. W. Ross showed a number of gall stones which he had removed in operations; also a mucous fistula in a specimen of the gall bladder. He described the surgical operations of the gall bladder, stating the difficulty he generally had in extracting these stones from the common bile duct. He exhibited an instrument he had devised for this purpose which he had manufactured in England, with which now he could overcome his former difficulty.

Dr. Holmes, of Chatham, Ont., stated that when the gall bladder was enlarged and the abdominal walls were thin, the operation for the removal of these stones became a comparatively easy one. He illustrated on the blackboard how he extracted the stones from the common bile duct without any difficulty.

Address in Surgery.—Dr. W. B. Coley, of New York, delive da magnificent address on "The Radical Cure of Hernia." It was a scholarly effort. He traced the inception and progress of the operation from the earliest times, mentioning the names and dates of those who had helped in improving or perfecting the operation. He discussed the operation as performed at the present day and noted the rapid progress brought about within the last decade, apportioning to Macewen, Bassini, Kocher, Halsted, and others, the respective honor that should be allotted to these gentlemen. Then a description of their operations was given, and with a reference to femoral and umbilical hernia he concluded his subject.

THIRD DAY.

Anasthesia by Chloroform and Ether.—Dr. W. B. Jones, of Rochester, described this subject in detail. We have this paper at present in type and will publish next issue, Dr. Jones having kindly handed it to us for publication. The anæsthetist he advised to give his whole attention to the work in hand and take notice of nothing pertaining to the operation. He should be a thorough master of the subject and should countenance no interference on the part of the operator. The preparation of the patient for an operation was thoroughly explained and the physical condition referred to. Referring to the heart, he said it was not so much heart murmurs that one had to fear as it was a degenerated state of muscular fibre. The capacity of the chest should be understood, and the total quantity of solids excreted in the twenty-four hours, by the secre-

tion of the kidneys, should be known. Attention was then given to the quantity of the anæsthetic, from eight to twelve drops perminute being sufficient to keep the patient anæsthetized. Everything should be close at hand, so that in the presence of an emergency or pending dissolution, prompt service could be rendered. In conclusion, he said the anæsthetist should have a knowledge of the operation and the length of time it should take to perform it.

Some Observations on the Treatment of Cancer.—Dr. A. R. ROBINSON, of New York, gave his ideas concerning the epitheliomata, and illustrated by means of a diagrammatic drawing the cases of cancer in which the knife was indicated. He considered that in those cancers in which one could not cut down deeply, as on the scalp and around the nose, an arsenious acid paste was The composition of this paste should be equal parts of preferable. arsenious acid and gum acacia of the consistency of butter. It should be applied and left on from sixteen to eighteen hours to get the right effect. From this would result a complete necrosis en masse and an inflammation, but a simple one, with resulting granulation. The speaker took exception to a recent remark of Mr. Watson Cheyne, that all these cancers should be treated early with the knife and the knife alone. This was an assertion too sweeping in its character.

DR. SHEPHERD thought that in the majority of cases the knife was the proper instrument, but in cancer on the scalp or at the side of the nose, escharotics if properly applied were better than any other remedy. Cancer in the first place was local and ought to be

treated immediately by removal.

Dominion Registration.—Dr. Roddick, in an able an exhaustive speech on the whole subject, presented the matter in its proper light to the members of the association. The plan or scheme as outlined by him was as follows: There was to be a central board, called the Dominion Medical Council. Each province would have three representatives on that board: one nominated by the governor in council, one appointed by the Provincial Medical Council, and the third the president of each provincial council ex officio. All practitioners of ten years' standing in any one province would be, should they so desire, licensed by this Dominion. Council to practice in any of the other provinces, but no practitioner would be so licensed until he was a licentiate of ten years' standing. The provincial medical councils were to remain and goon doing their work as in the past. The Dominion would look after the licensing of young practitioners when they desired to practise in any province they pleased, and as aforesaid.

Dr. ARTHUR WILLIAMS, of Ingersoll, Ont., representing the On-

Dr. ARTHUR WILLIAMS, of Ingersoll, Ont., representing the Ontario Medical Council, supported this proposed plan, in a vigorous speech, and at the conclusion moved a resolution indorsing Dr. Roddick's scheme, and further authorizing that gentleman to proceed to Parliament at the next session and bring about the consumma-

tion so much to be desired.

Dr. McNeil, of Prince Edward Island, seconded the resolution, and many others supported it, after which it was put to the meet-

ing and carried unanimously.

Notes on Recent European Conventions.—Dr. R. A. Reeve, of Toronto, gave his experience at several of these meetings this summer while in Europe, at the British Medical, the International Otological, and the International Ophthalmological congresses. He cited several of the papers and addresses which he had heard, and spoke of the newer remedies of the silver salts, such as protargol and argentin, which are proving effective and less irritating than nitrate of silver in conjunctivitis, etc.

Surgery Among the Insane.—This was the subject of Dr. A. T. Hobbs' paper. Dr. Hobbs is on the staff of the Asylum for the Insane at London, Ont. He discussed the differences in operating upon sane and insane persons, the difficulty of making examinations, especially in women, and a large number of insane women have pelvic disease requiring attention. Ether was the anesthetic used; chloroform rendered the patient so weak after the operation so that its use was discontinued. A good many statistics of operations were given. The best results were from inflammatory diseases of the pelvic organs when operated upon.

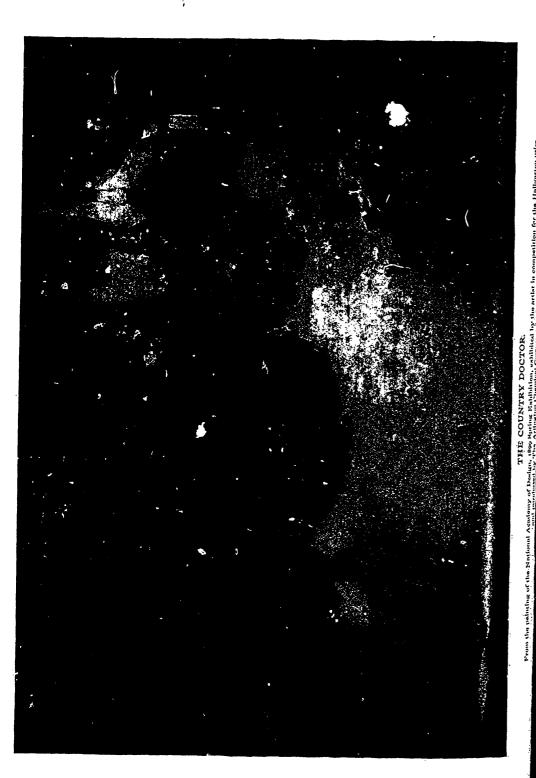
Dr. ERNEST HALL, of Toronto, confirmed Hobbs in his opinion, stating that he believed 92 per cent. of insane women had pelvic

Craniectomy for Microcephalus.—This paper we have also been handed for publication by its writer, Dr. W. J. WILSON, of Toronto. We hope to insert it in our next issue. Dr. Wilson presented his patient, a boy, four and a half years old. Before the operation the only word the child could say was "Mamma." Now he can say many words, and is making rapid progress. He stands erect, and walks with his body straight; previous to the operation he bent

forward, almost at the proverbial angle of 45°.

With many regrets that the time could not be longer, the 1899 meeting came to a close with the usual election of officers for the ensuing year. The vote resulted in the election of the following gentlemen:—President, Dr. R. W. Powell, Ottawa; Vice-President for Ontario, Dr. A. J. Johnson, of Toronto; Vice-President for Quebec, Dr. A. R. Marsalais. of Montreal; Vice-President for New Brunswick, Dr. Meyers, of Monckton; Vice-President for Nova Scotia, Dr. W. G. Putnam, of Yarmouth; Vice-President for Prince Edward Island, Dr. S. P. Jenkins, of Charlottetown; Vice-President for Manitoba, Dr. W. J. Neilson, of Winnipeg; Vice-President for North-West Torritories, Dr. Hugh Bain, of Prince Albert; Vice-President for British Columbia, Dr. O. M. Jones, of Victoria; Treasurer, Dr. H. B. Small, of Ottawa; General Secretary, Dr. F. N. G. Starr, of Toronto.

Next year the Canadian Medical Association will convene at the capital city-Ottawa.



Che Canadian Journal of Medicine and Surgery

J. J. CASSIDY, M.D.,

EDITOR,

69 BLOOR STREET EAST, TORONTO.

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Orthopedic Sur₂ery_B. R. MCKENER, R.A., M.D., Toronto, Surgeon to the Toronto Orthopedic Hospital; Surgeon to the Onl-Patient Department, Toronto General Hospital; Assistant Professor of Clinical Surgery, Ontario Medical College for Women; Member of the American Orthopedic Association; and H. P. H. GALLOWAY, M.D., Toronto, Surgeon to the Toronto Orthopedic Hospital; Orthopedic Surgeon, Toronto Western Hospital; Member of the American Orthopedic Association.

-Oral Surgery-E. H. ADAMS, M.D., D.D.S., Toronto.

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Physiology—A. B. EADIE, M.D., Teronto, Professor of Physiology Woman's Medical College, Toronto.

Peddufrics—Augusta Stown Guilen, M.D., Toronto, Professor of Diseases of Children Woman's Medical College, Toronto.

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SANITARY IMPROVEMENTS IN COUNTRY HOUSES.

A FEW years ago an American critic, in decrying farm life, said that people could not be as healthy on a farm as in a city, so long as farmers lived in houses which had low ceilings, poor ventilation, and cellars filled with rotting turnips. He might have gone further and indicated in the village or country house some other sources of impurity which are not found in the ordinary city house.

For instance, the cellars in country houses are generally dark. The housewife closes the windows and keeps her cellar dark, because in summer it will be cooler, and in winter the windows are boarded up to keep out the cold. It is also damp, because no precautions are taken to favor dryness when the house is being built. In the country the usual method is to dig an excavation of the required size, which is then surrounded by a wall upon which the building No attempt is made to exclude the air of the soil and soil moisture, although the necessary preventive measures are easy of execution. The late Colonel Waring showed that six inches of wet clay, well rammed while wet, is one of the safest materials to put on a cellar bottom, or about the foundation walls of a building. In the cellar, of course, it may be covered with concrete for cleanliness and good appearance. A solid course of slate in the foundation wall, above the ground level, will prevent the soaking up intothe structure of the moisture of a heavy soil. Cellars holding more or less water are common in the country, especially in the spring, while at all seasons the city dwelling of modern construction has a comparatively dry and impervious foundation. In a city house the chief sources of impurity are found in the kitchen sink and the bathroom; but these rarely ever breed the trouble that is likely to arise from the old privy and the saturated soil near the kitchen door of a country house.

To overcome the evils arising from primitive methods of disposing of slop water and excreta, drainage from a country house into a system of subsoil tile drains has been recommended. An inexpensive method of accomplishing this reform in houses having plumbing appliances, and in which water is obtained from a public supply, or a tank in the house supplied by a wind mill or hand pump, is published in "Pamphlet No, 1," 1893, issued by the Provincial Board of Health, Ontario. This system, if extended, is ample for dealing with the total sewage of any small Canadian town or village in the most perfect fashion; while the cost to a householder in the country, who has a garden beside his house, is very little.

The old well with its pure, sweet water is too often a delusion which becomes the direct cause of attacks of typhoid fever in country people. Warned by outbreaks of this water-borne disease, a great many rural municipal authorities in Ontario have established public waterworks, and others are contemplating similar action. Now that the era of good times has reappeared in Ontario building permits are as freely called for in the country as in the

city. The general declaration of observers in Ontario towns is that they never saw so many fine houses and barns being erected in the country as at present. It is also stated that the new houses are nearly all of brick, with large, airy rooms, and provided with bathrooms, cellars, and furnaces. Thus, the reproach of low-ceilinged, ill-ventilated houses is being taken away.

We sincerely hope that the builder of the modern brick house may have many imitators, in fact, that his example may prove contagious. Certainly, if ground air and moisture are excluded from the building, an ample supply of pure water secured, house drainage into field tiles provided for, and garbage buried in the garden, the good people who live in the new brick house in the country have little to deplore in their own sanitary conditions, and less to envy in the more highly-taxed improvements of their city friends.

J. J. C.

THE CANADIAN MEDICAL ASSOCIATION.

NINETY in the shade! "A hot time in the old town" whistled lustily a physician as he entered the Normal School building to join in the feast of reason and flow of eloquence at the opening session of the thirty-second annual meeting of the Canadian Medical Association. Nobody strangled the musical doctor and nobody smiled; the furnace seven times heated is a "fearsome" subject to contemplate, the experience is not capable of expression in Bostonian English.

Lately some of the medical journals have been decrying the holding of so many medical conventions and rather depreciating the value of the work done and the prominence given to the social side. Certainly the thought that attendance at the annual meeting of the Canadian Medical Association is "a game not worth the candle," evidently has never entered the minds of any of its members. The attendance this year outnumbered that of recent years, and the papers read were exceptionally interesting and many in number. Several of the Toronto men very wisely gave place to their guests, requesting that, owing to the shortness of the time, their papers be "taken as read."

We think busy physicians need the opportunity for the cultivation of esprit de corps such as a convention affords, also united thought, and a voice in the arrangement even of the petty bubbles, quibbles, and ethical technicalities that may mean so much, or so little, to the majority of the profession; also the opportunity to be under the good generalship of the powers that be, and the chance to enjoy a few social pleasures and perhaps a bit of sight-seeing, for all too few are the hours that the genus *medico* can call his own or devote to a jaunt about the towns and cities of his Ain Countree.

One of the most important discussions which took place at this year's meeting, and one which is fraught with the utmost concern to the profession of this country was that on "Inter-provincial Registration." Dr. Roddick is deserving of the sincere thanks of the profession for the work which he has accomplished, and we look forward to his scheme becoming a reality in the near future.

The visiting physicians were kindly in their expressions of appreciation both as to the scientific and social programme provided. The president is to be heartily congratulated upon the way in which he discharged his duties. The committee of arrangement tried to crowd in all they could, but had a big rival in the "greater than has been "Fair which claimed daily an amused or admiring number from the ranks of the physicians. However, a reception and musicale, a garden party at the Yacht Club on the Island, especially for the ladies, a luncheon (tendered by the Directors) at the Fair, and for the closing evening of the convention, a moonlight excursion, were planned and brought to a successful issue. at "the moonlighter" the moon failed to put in an appearance and never sent even a wireless telegram of regret; but the blaze of firework glory that moves to cheers a weary multitude of the devotees of Canada's Greatest Exhibition illumined the darkness until rain drops began to fall, then the banjos and quartette on board the boat began to call loudly for their Lulu, and no wonder, for in the big saloon stood a groaning buffet and ice cream galore, with the compliments of the Mayor and all the city fathers.

W A V

PREVENTION OF CONTAGION IN HOSPITALS.

THE treatment of a case of typhoid fever in a large, well-kept house is a menace to the other inmates, as sick-room infection is more common than is generally supposed. In the homes of the poor, which are often small and overcrowded, the danger of infection is relatively greater. These common evils, together with inability to pay for nursing and the fear of contagion on the part of neighbors induce people to send typhoid fever patients to a

general hospital. Generally speaking the change is decidedly to the advantage of the patient. Sometimes, however, a patient sent to a general hospital gets a contagious disease which he did not bring there. Thus a youth, sent in for a fracture of the radius, contracts typhoid fever four weeks after his arrival and dies of it. such a case it would have been more humane to have let the youth stay at home, carrying his arm in splints, rather than send him away into an institution where the infection of typhoid fever is present in the atmosphere. Then, a patient sent to an isolation hospital with scarlatina, may, almost simultaneously, develop measles, and the latter disease, as frequently happens, may be complicated with broncho-pneumonia. A fatal result takes place. An error of diagnosis is charged and much angry feeling excited in the public mind, although the hospital medical staff and the nurses have done their full duty by the patient. It cannot be denied that communicable diseases are frequently transmitted from patient to patient in hospitals for the diseases of children. Physicians agree that measles treated in hospitals show a large mortality due to the transmission of broncho-pneumonia, and in spite of separate pavilions other contagious diseases are communicated in isolation hospitals. As the number of infectious diseases is more clearly defined and becomes larger, prophylaxis will require to change in Typhoid fever, tuberculosis, pneumonia, broncho-pneumonia, even mumps are treated in general hospitals. It seems strange to see patients with these diseases placed in wards freely communicating with other wards, when cases of erysipelas and whooping cough are fully isolated. General hospital hygiene should provide for the careful segregation of cases of communicable disease, and should always have, in addition to ordinary wards, rooms for doubtful cases, which should be used until the diagnosis in each case is quite certain." J. J. C.

TEN YEARS AFTER.

DURING the late session of the Canadian Medical Association, held in Toronto, it was expected that there would be in the city quite a number of the old Toronto School of Medicine Class of '89, and a reunion dinner was accordingly arranged for the evening of August 31st, which, through the efforts of Drs. Starr, Silverthorn, Patton, Groves and Harrington, passed off charmingly. The class numbered

eighty-one, but less than a third of the original number were present, many having drifted in the strenuous race of life into distant countries, and seven fallen silently out of that race forever.

A moment of peculiar interest was when the babel of voices arose as the former confreres gathered about the board, scrutinizing each other's faces, at first often blankly, and then with boisterous outbursts of recognition. Many had grown illustrious, others had grown beards, one or two had grown fat, and a few had grown families—but no one seemed to have grown old.

J. C. Patton had the head of the table, and, as a specialty showed unusual gifts for the responsibilities of chairmanship while A. H. Holliday, who had come all the way from northern Michigan to act as vice, made a brilliant second. The chief condiment of the collation seemed to be Attic salt, and the secretary, G. Silverthorne's report, was permeated with this delightful adjuvant. "Gid," by the way, was one of those who had not changed a particle, and the sight of the familiar face, perhaps more than anything else, unless one, except the presence of the venerable professor of anatomy, made the reunited class feel as if they were back in the old theatre, with Batty staggering in with a "sub," or some poor devil being gently "elevated" to the upper row.

James H. Richardson, the "Grand Old Man," was the guest of honor, and in a speech full of bygone pleasantry, expressed not a little pardonable pride in a school of medicine, of which he was the first graduate, and for many years one of the moving spirits. As the old man stood there among his former pupils, with voice unchanged, and the same piercing eye, though with the hair perhaps a shade whiter upon his massive brow, more than one felt that in him fin de siécle medicine possessed one of the last noble links which binds our period to that of Larrey, Dupuytren, Rokitañsky, and Skoda. The spectacle was not one soon to be forgotten. Yet he must needs have his joke too; for with a face suddenly darkening, the old professor turned sternly upon the peccant Starr, and solemnly called down upon his head the all approbation of all worthy men for a celibacy so impiously persisted in.

Meanwhile A. J. Harrington sang con spirito a simple little lyric of first love, so tender and so touching that it moved the hardest Hart there; and the boys had to take another beer all round. F. N. G. Starr followed with a series of old-time college recollections, in which, with affectionate freedom, he dealt with the personal of both the class and the faculty—forsan et hace olim

meminisse iuvabit—and as a solemn closing, and befitting such an occasion, E. H. Stafford, to whom histrionic gifts had been attributed by the same discriminating conspirators who had to Harrington assigned vocal, recited a selection from the theological writings of Baculavadus, a copy of which (in the expurgate 1 form) appears elsewhere in this issue.

Among the men of '89 present, besides those who have been already mentioned, were: G. Chambers, F. E. Godfrey, R. G. Howell, E. Meek, J. Noble, F. H. Scherk, O. Sisley and T. S. Webster.

E. H. S.

DRAINAGE AND MALARIA IN TORONTO

A SUBJECT which would interest all physicians and freshen the recollections of the older practitioners would be the description of types of disease prevalent in different sections of Ontario, thirty. forty, or even fifty years ago. The physical conditions of the soil, which were due to the retention of water, have in many well settled parts of the Province been changed by drainage, and types of disease which formerly used to call for the adm tration of quinine are now rarely observed. At one time, and coat not very long ago, Toronto was declared by British medical authorities to be an agueish place. Parke's "Hygiene," sixth English edition, published in 1883, says: "The town stands on ground originally marshy. The new barracks are built on limestone rocks of the Silurian age. Intermittent fevers among the civil population; not very prevalent among the troops." 'The mortality from malarial fevers is not given. The surface of the soil at Toronto, falling rapidly towards Lake Ontario, is favorable to natural drainage and the water used to reach the lake through .several small creeks, running in a direction from the north-west towards the south-east; but in the southerly portion of the city, near the mouths of these creeks, and at some places higher up along their banks, swamps had formed. Thirty years, however, before the publication of the work mentioned, many of these creeks and swamps had been drained into the main sewers constructed in the streets, running to the waterside. So that the conditions which produced a marsh, having been removed by drainage and drying of the soil, malarial fevers among the civil population in Toronto had become rare. So rare, indeed, that unless among the population living in the valley of the Don, in the eastern quarter of the city or in the valley of the Humber, on its western border, malaria could not be said to exist in Toronto. The writer knows many persons, born and brought up in Toronto previous to 1883, who never had malarial fever. Then no deaths in Toronto are ascribed to malarial fevers in the annual reports of the Registrar-General of Ontario for the years 1896 and 1897. The data given in Parke's Hygiene were probably obtained from the surgeons of the different British regiments garrisoned at Toronto up to 1867.

These statistics were no longer correct in 1883, and since then the drying of the soil and the drainage of the site of the city have been so complete (there are 230 miles of sewers) that if a Toronto practitioner encounters a case of ague he is almost sure the patient is a stranger and probably from the United States.

We make this correction because, among other reasons, Parke's Hygiene is read by physicians in different parts of the world, and it is but fair that the facts about Toronto's present freedom from malaria should be correctly stated.

J. J. C.

OUR CANADIAN MEDICAL ASSOCIATION REPORT.

THE CANADIAN JOURNAL OF MEDICINE AND SURGERY has been enabled, through the courtesy of many of the physicians who prepared and read such comprehensive papers at this year's meeting of the Association, to publish them exclusively for Canada.

At the request of Dr. G. M. Goul, who was a welcome guest at the meeting, the papers appearing in this issue have been sent on for simultaneous publication in the *Philadelphia Monthly Medical Journal*, of which he is the editor.

The management of this journal appreciate their opportunity, and so deem it advisable to curtail somewhat the formal report of the society's proceedings, thereby leaving the extra space for the publication of the papers themselves.

W. A. Y.

Dr. W. F. Gallow, of College Street, Toronto, was married, on September 13th, at Goderich, Ont. We wish him the best of good luck.

Dr. J. J. Cassidy spent some days in London, Ont., last month, when carrying out his duties as president of the Medical Health Officers' Association, which convened in that town in their annual session. Under his guidance the meeting was an immense success

THE FIRST CASE.

(AN OBSTETRICAL BALLAD.)

In hours that brim with memories, with pleasures past beset, There still are some few little things we sooner would forget; Of both, as I look back ten years—it only seems a week— Of both the tragic and the gay, I shall a moment speak.

First, of a little incident that I remember yet; And will not in a score of years be willing to forget; It was the Council Finals, and with feelings that appall, Despondently we gathered in the sickening Council Hall.

The paper was distributed, and we were reading them; It did not strike me that it was a literary gem; And only one thing to my mind was absolutely clear—Were I an inspired writer I could get no "fifty" here.

Meanwhile the minions of the hall in rubber overshoes About us hovered noiselessly, 'lest we to err should choose; While on the platform, high enthroned, and proud of what he'd done, Sat, just as he sits here to-night, old Doctor Richardson.

After a time, however, he stalked down the hall awhile And—what had no to rack his soul!—beamed with a peaceful smile. I gnawed my pen as he approached—my face was grey, perhaps; And he saw I was moribund with a profound collapse.

So by my chair he paused, and for a moment took his stand; Glared as he wished to eat me—then reached out and shook my hand, "Good luck to you, sir," he exclaimed—as if he meant it, too; And these words of the grand old man cheered me with courage new.

The other little matter is the sort one would forget; I do not tell it frequently—I never told it yet. The first case that I had was not what one might call a case, Because I never really met that patient face to face:

"Gee Whiz!" the husband said when I appeared before the same,
"I thought you were a doctress—isn't Ezra a woman's name?
The wife she wauts a female—wouldn't have no other brung—
And then besides your being a man—you look so gol darned young!"

I nursed a leaging for revenge six weeks with morbid mind; And then I had my vengeance on the "cruel of my kind;" A dissolute young carpenter (who led a troubled life) Prayed me upon his hands and knees to come and see his wife.

The husband left me at the door, and I went in instead. With an enlarged abdomen, she reclined upon her bed; Her mother, dropping tears and rags, tramped up and down the room. While I upset a pot de chambre, and tripped across a broom.

- "My good soul, let me see your tongue!"—her pulse I also took;—But 'twas a different region that the mother wished to look; "O Lord," she said, "put up with that, are you a doctor, say, And don't observe the poor sweet lamb is in a family way?"
- "Madam, enlightened doctors always in this way begin—I now will carefully proceed to—see what is within."
- "O mamma" next the suffering wife her parent did implore, "I don't think that this doctor ever had a case before."

- "Enlightened doctors usually," I said, with scowl severe,
 "First diagnose you there before they diagnose you here.
 Aha! 'tis hydrocephalus! The chances now are grave;
 Nothing can save this infant's life—but yours I'll try to save."
- "Bear down a little more, poor dear," the mother interposed;
 "No, not so much, I tell you, for the os is—nearly closed—
 Bestill—by Jove you've done it now!"—"Done what?" the mother said,
 "The sharp coccygeal bones," I hissed, "have tapped the offspring's head."
- "I tell you it's the waters broke,"—"I tell you that it's not—
 She bore down, and she smashed its head—the only head it's got.
 But stay!—perhaps your right, for now, after the bag is burst,
 I notice there's another head, and smaller than the first."
- "Perhaps it is her maiden head," the jeering mother cried—
 "There, take a little drink, poor dear, and Pu sit by your side."
 "I think it is a maiden's head," I muttered in a minute;
- "Where is that flannel that you had-you'd better wrap it in it."
- "Of all the doctors in the town, for that dull man to bring,"
 She shrieked again, "will you, or I, tie up its navel string?"
 Next thing the raptured grandmother with lard had rubbed it down,
 And from the woodshed called the father to behold—his own!

The two then to the kitchen went. where loud the infant bawled; And I approached the mother once again—and grew appalled; For there I found another head (exactly like the first) But hardly liked to handle it, for fear that it would burst.

I reached out for the vaseline, and in a moment more, A second infant sprang to light with an astounding roar; Amazed at the phenomenon, I had sufficient sense To tie the cord, and see in all the hand of Providence!

Meanwhile the firstborn yelled so loud, they did not hear me call, Thinking the second's squawling but an echo from the wall, I wrapped it in a petticoat, and to them went with it, That shut the hateful mother up—and sobered him a bit.

"This is your work (she turned on him) this is your work, I say; And the poor dove half dead with care, and no rest any day! This is the sort of man that you have proved yourself to be! My God, you men, you men, have you the face to look at me?

But it shall not occur again—and you shall sweat for it—"
The husband here emphatically, but briefly, answered "Nit."
And I went back, and for the after birth performed my best—See Playfair (if you have your copy still) for all the rest.

The dissolute young carpenter to whom I sent my duns, I was not long in learning did not chance to be in funds; And so to settle up the score he built—deride him not! A little wooden building at the rear end of my lot.

BACULAVADUS (1674-1737).

Dr. G. A. Peters was married ten days ago to Miss Meredith, daughter of the Chief Justice.

Dr. Geo. Bingham, of Isabella Street, was married a few weeks ago to a popular Kingston lady.

The Physician's Library.

BOOK REVIEWS.

General Pathology, or the Science of the Causes, Nature, and Course of the Pathological Disturbances which occur in the Living Subject. By Dr. Ennest Ziegler, Professor of Pathological Anatomy and of General Pathology at the University of Freiburg in Briesgan, translated from the ninth revised German edition by Drs. Theodore Dunham, Edward M. Foote, Philip H. Hiss, jr., Walter B. James, William G. Le Boutillier, and Mathias Nicoll, jr., of New York; Dr. B. Meade Bolton, Philadelphia, Pa,: and Drs. Leonard Woolsey Bacon, jr., John S. Ely, and R. A. McDonnell, of New Haven, Conn. Editor, Dr. Albert H. Buck, New York. New York: William Wood & Company. 1899.

One more edition of Ziegler's "General Pathology" has been written, translated, edited, and published, and this, the ninth revised edition, gives us the most finished and scientific work on the subject yet in print. In the preceding edition the author made many valuable revisions. More space was allotted to the consideration of pathological processes, their causes, their mode of origin, the course they pursue, and their sequela. Special consideration was given to the subjects of general etiology of diseases, and pathological physiology; and in order to be in harmony with these alterations, the author thought it advisable to change the title from "General Pathological Anatomy" to that of "General Pathology." The author argued (we think correctly) that a textbook on this subject intended for the use of medical men should deal with the matter in very concise manner, and that compendious treaties of this nature would not tend to promote the study of pathological anatomy, and would not make the student's task easier.

In the first place, it is not possible within the limits of a small compend to treat general pathology and pathological anatomy in a scientific manner. Then, in the next place, it is extremely difficult, owing to the amount and richness of material obtainable, to treat the subject in such a manner that the book shall

not be a mere catalogue of facts.

These alterations and additions met with such general approval that the author has adopted them in this his ninth edition, coupled with a full account of the advances which have been made in general pathology and pathological anatomy during the last few years. At the same time the author has, by carefully rewriting the text in places where new light had been furnished by recent investigations, kept this book from being too bulky. The most radical changes are found in Chapters IV. and VII., which have been entirely re-written. The arrangement of the degenerations which led to the formation of hyaline products has simplified this subject very materially. The author groups them under four heads: (1) The formation of colloid by epithelium and the epithelial hyaline concretions. (2) The pathological cornification of epithelium. (3) The amyloid degeneration of connective tissue and the amyloid concretions. (4) The hyaline degeneration of connective tissue and the hyaline products of connective tissue cells; by this classification we obtain a good general idea of the different processes under consideration.

The subject of pathological formation and absence of pigment has been very fully considered, and we find the many forms of albinism taken up as follows: (1) Leukopathia congenita; (2) leukopathia acquisita; (3)

leukoderma. This portion of the work is especially interesting and useful, in that there has been comparatively little written on this subject up to date.

In chapter VII. we find the tumors divided into three large groups: (a) Tumors of the connective substances; (b) epithelial tumors, and (c) toratoid tumors and cysts. This division very much lessens the perplexity that surrounds the consideration of this subjec.. The author has been careful to keep out the infectious granulation growths from among the tumors, as their presence there would only tend to confuse the reader. Forty pages have been reserved for the consideration of inflammation. The clear description of this most important section should of itself recommend this book to all. The author's definition of inflammation, viz., that it is essentially a local tissue degeneration combined with pathological exadutions from the blood ressels caused by some injurious agency, and with these pathological changes are associated, sometimes earlier, sometimes later, tissue-proliferations leading to regeneration or to hypertrophy, is, we think, an excellent standpoint from which one may view the different processes that form an essential part of inflammation. He first describes the phenomena of inflammation in order as they occur, then the different exudates that are met with, and lastly repair; the processes of chemotaxis and phagocytosis being well explained.

In chapter VIII. will be found an especially interesting description of the disturbances of development and the resulting malformations. The chapter is divided into two sections. The first contains a general consideration in regard to these disturbances, their causes, classification, etc. The second part deals

with the special malformations.

Considerable space has been given to the different bacteria, the usual classification has been adopted, but the bacteria which assumes different forms as they advance in their development, have been grouped under the head of polymorphous bacilli, and in this way have not been separated from the group of bacilli to which they are closely related, and thus rendering these processes less difficult to comprehend. There is a full description of the bacillus of syphilis as described by Lustgarten, but the author considers the bacilli can hardly be used for differential diagnosis at the present time. There are a large number of additional cuts and illustrations, carefully prepared. This is especially noticeable in the chapter on Tumors. The colored plates of melanosarcoma, osteo-sarcoma, papillary cystoma of ovary, mucous carcinoma of mammary gland, and adenocystoma of testicle, being particularly fine and true. As a result of the care taken by the translators, this work has in no way depreciated in value by the process of translation.

We can heartily congratulate the publishers, William Wood & Co., New York, on the excellent text, paper, and binding of this work. In conclusion, we sincerely recommend this the latest effort of Dr. Ernest Ziegler to both medical men and students.

W. H. P.

General Physiology. An outline of the Science of Life. By Max Verworks, of Jena, translated from the second German edition, and edited by Frederick S. Lee, Columbia University. Macmillan & Co., Ltd. 1899. Price, 15s. net.

The object of this work is explained by the author in his preface to the first edition. He says: "I wished to write something that would appeal first to my fellow physiologists, and offer them, besides certain new facts and ideas, a summary of our scattered knowledge. But at the same time I wished the work to give to any interested scientific reader, whether a student of medicine, philosophy, botany, or zoology, an outlook over the problems, facts, theories, and hypotheses of life."

The first chapter deals with "The Aims and Methods of Physiological Re-

The first chapter deals with "The Aims and Methods of Physiological Research." It contains a historical review of the rise and progress of physiological investigation, and includes a very interesting discussion on the relation of

psychology to physiology.

The second chapter treats of "Living Substance." The simplest individual element of living substance is the cell. "All living individuals of whatever order, either are composed of cells as the elementary structural components, or

are themselves free—living cells. The cell must, therefore, be the sent of those events, the expression of which is life." "The cell is a bit of protoplasm containing a distinct nucleus."

"What is called life is a series of vital phenomena very unequal in importance." These vital phenomena are divided into three groups, and are associated with changes of substance, of form, and of energy. The changes of substance are due to assimulation and dissimulation, or, in other words, to the

process of metabolism.

Chapter four is given up to a discussion of the "General Conditions of Life." The general external conditions of life are food, water, oxygen, temperature, and pressure. The "Origin of Life Upon the Earth" is considered in this chapter, and it forms one of the most entertaining parts of the book. Four theories concerning the origin of life upon the earth are brought under consideration:

1. "The Doctrine of Spontaneous Generation."

2. "The Theory of Cosmozoa," or the theory that life has always been transferred from one world to another. "Starting from the idea that small, solid particles are moving about everywhere in space, and in the rapid flight of the heavenly bodies are continually being stripped off from them, Richter assumes that, at the same time and attached to these solid particles, germs of micro-organisms capable of life are also continually being thrown off from such heavenly bodies as are inhabited, and carried to others." "Organic life, therefore, has never originated, but has always been transferred from one world to another." 3. "Preyers' Theory of the Continuity of Life." "We do not say, therefore, that protoplasm as such existed from the beginning of the earth's formation; or that without beginning it wandered as such from elsewhere out of space to the cooled earth; or, still less, that without life it became compounded upon the planets out of inorganic bodies, as spontaneous generation would have it; but we maintain that the movement that exists in the universe without beginning is life." 4. Pflüger's Idea." "It is seen how strongly and remarkably all facts of chemistry point to fire as the force that has produced by synthesis the constituents of proteid. In other words, life is derived from fire, and its fundamental conditions were laid down at a time when the earth was still an incandescent ball."

A chapter on "Stimuli and Their Actions" and a concluding one on "The Mechanisms of Life," brings this interesting and instructive book to a close. It is a book that is sure to be prized by the progressive medical practitioner. While many of the author's conclusions and inferences may be open to criticism, still the work is written in a scientific manner, and is a distinct and valuable addition to the litraeture of physiology.

A. E.

A Text-book of Pharmacology and Therapeutics, or the Action of Drugs in Health and Disease. By Arthur R. Cushing, M.A., M.D. Philadelphia and New York: Lea Bros. & Co.

This is an exceedingly good work, and the author has succeeded in compiling a book which every physician and student should possess. Each drug is systematically classified, and its preparation shortly and concisely described, followed by its therapeutical action in fuller detail. The author's classification differs somewhat from the current works on this subject, and has, in my opinion, been carefully considered. The first part is devoted to organic substances, which are characterized chiefly by their local action, as demulcents, emollients, etc. The second part describes organic substances characterized chiefly by their action after absorption, as alcohol, strychnia, opium, etc. Part three treats of combinations of the alkalies, alkaline earths, acids, and allied bodies. Part four, of the heavy metals. Part five, of ferments, secretions, and toxalbumins, while the sixth, or concluding part, is devoted to menstrua and mechanical remedies. This mode of classification makes it an excellent work for quick reference. We are particularly well pleased with the thorough manner in which the physiological action of the more powerful drugs are described. This is most essential to the practitioner who has to rely on the experimentalist for his knowledge, and the author has been most careful and painstaking in his laboratory experiments. The book is printed on good paper, with an excellent

type, and is bound as Lea Bros. & Co. always bind their works, with an eye to durability as well as to external appearance. It seems to us that this work will be in much demand.

Degeneration: Its Causes, Signs and Results. By Eugene S. Talbot, M.D., D.D.S. London: Walter Scott. Contemporary Science Series. 6s.

To medical science the subject of degeneration, in its legitimate sense, is of quite as much, if not of more importance, than evolution. Though the scientific study of degeneration is of comparatively recent date, the idea is itself a very old one. Hesiod suggested the notion in his Theogonia: and from that day to this such expressions as "These degenerate days," and "O tempora, O mores!" have been of common currency in the conversation of all The genus homo excels in dulness, and would sooner imagine itself fallen from a high estate than risen from a low one. The attitude is especially marked in servant girls and the elderly vendors of lead pencils. Hence the ready acceptance given to the pessimistic theory of degeneration, and the uncouth antagonism with which Darwin was at first warded off.

To Cesare Lombroso, of Turin, may be acceded the honor of having

examined the phenomena of degeneration in the modern scientific spirit. He has been followed, unfortunately, by certain other writers, who, in an altogether different spirit, have adopted the term as an insolent catchword for scurrilous personal attacks upon political and literary enemies. The rather clever, but altogether unjustifiable lampoon of Nordau may be taken as a case in point. At present it would seem that there was some danger of the term being wrested from the hands of science, and relegated to the use of charlatans and unscrupu-

In the work before us, wherein an outline of the subject is attempted, the personal element is lacking, however, and the writer (who is a dentist) pays considerable attention to the degenerative stigmata of the teeth. In the past the ears, and nose, and jaw, have come in for an undue share in this respect; but now that Bertillon has covered himself with glory at the trial at Rennes, some new departure in the stigmatic repertoire will prove timely.

The temptation which writers on degeneration must feel to lay down general axioms seems to have been always very strong. They have all yielded to it. According to the criteria of the writer before us, Mr. Gladstone and Robert Louis Stevenson would both, though somewhat unlike in character, be degenerates in common. And there are other complications. Death itself is an uncontrovertable sign of pre-existing degeneration. Indeed, the study, as at present pursued, seems to have no bounds or limits of any sort. Every natural instinct or appetite is a pathological result of some "nerve storm," and the lack of the same, a form of dementia. Writers upon degeneration will soon have to be licensed by a sane medical board before they can write. From degeneration there is escape, it seems, for none but the authors themselves; and on the tower of Babel which they are building, even they may yet come to grief in a chaos of words.

The Practice of Dental Medicine. By George F. Eames, M.D., D.D.S., Professor of Pathology and Therapeutics in Boston Dental College, Member of the Massachusetts Medical Society, and the American Medical Association; ex-President of the Massachusetts Dental Society; Member of the American Academy of Dental Science; Honorary Member of the Maine Dental So-Society, etc. Containing thirty-eight illustrations, and three colored plates. Philadelphia: The S. S. White Dental Manufacturing Co.; London, Eng.: Claudius Ash & Sons, Ltd. 1899.

It is surprising the amount of ignorance manifested by the general medical profession in medico-dental subjects, and the practise of dental medicine, though written, perhaps, more especially for the dental student, and the dentist Limself should find a place also in the library of every progressive physician.

The names of the publishers, The S. S. White Dental Manufacturing Co., of Philadelphia, and Claudius Ash & Sons, Limited, London, Eng., are always a guarantee for a high-class publication, whether it be in the subject matter itself or in the quality of the paper, the letter-press, and the engravings, and illustrations, and this book is certainly no exception to the general excellence of their work. The book contains three very fine colored plates in addition to thirty-eight illustrations.

Too much stress cannot be laid on the importance of a higher education of both dentists and physicians as to the relations of local pathological conditions

of the mouth and teeth to general pathological conditions.

The general scope of the work can be best understood by a glance at the table of contents. A couple of chapters are devoted to the general consideration of Pathology, and to the inflammatory process in general, and then several chapters to diverse conditions, presenting to the dental practitioner, such as Syncope, Hysteria, Neuralgia, Menstruation, Pregnancy, Hemorrhage, Constipation, Swallowing of Plates and other foreign bodies, and subjects involved in the administration of anesthetic agents.

Each of the following diseases having local expressions in the mouth have a chapter devoted to them:—Stomatitis, Diphtheria, Scurvy, Rhachitis, Scrofula, Chanchroid and Soft Chancre, Syphilis, Rheumatism, Dyspepsia, and Tetanus. Local diseases affecting the soft tissues of the mouth are next given consideration: Gingivitis, Pyorrhea, Alveolaris, Phagedenic, Pericementitis, Difficult

Dentition, Salivray Fistula, Salivation and Ranula.

Following these are local diseases affecting the dental and surrounding bony tissues, and while some of these belong almost solely to the domain of the dental specialist, they are still very important to the general practitioner in making a correct diagnosis of many common oral diseases. Among these are dental caries:—Hypersensitive Dentine, Hyperenia of the Dental Pulp, Pulpitis, Suppuration and Abscess of the Dental pulp, Pericementitis, Dento-Alveolar Abscess, Dental Erosion Abrasion, Hypercementosis. Secondary Dentine, Pulp Nodules, Necrosis, Ankylosis of the Jaw.

The concluding chapters are devoted to diseases affecting the adnexa of the mouth—Empyema and other pathological conditions of the maxillary sinus, Hypertrophy of the Faucial Tonsils, Hypertrophy of the Adenoid Tissue in the post nasal space, and the Relation of adenoid vegetations to irregularities of the

teeth and associate parts.

When we consider that the rather lengthy list of subjects are scientifically and thoroughly treated in a volume of less than 250 pages, we cannot help congratulating the author on the excellence of his work, and again recommending the careful perusal of its contents to every dental and medical practitioner.

E. H. A.

Asthma; Recent Developments in Its Treatment. By Ernest Kingscote, M.B., C.M., L.R.C.S. Edin., Fellow of the Medical Society of London, etc. Author of "On So-called Spasmodic Asthma," with colored frontispiece and illustrations. London: Henry J. Glaisher.

This book is somewhat of a medley, but, partly because of this, it is a very interesting work. In a large experience the author has found the heart dilated in all the cases he has examined, and in the treatment of them he has found that restoring the heart to its normal size and strength is followed by permanent relief of the asthma. To relieve the cardiac dilatation he resorts to the now well-known Schott treatment by baths and exercises, and the results, he reports, are exceedingly creditable. He is an adherent of the theory that asthma is due to spasm of the bronchial muscles, and that this is always excited by vagal initation. In all cases a careful search should be made to localize the vagal initation, and then the treatment directed towards its removal. The diction is not all that could be desired, such expressions as "flop" and "quash" being more expressive than elegant. The work, however, is suggestive, and well worth perusal. The print is large and clear, and the book is creditable to the publisher.

Claude Bernard. By Sir Michael Foster. London: Fisher Unwin. 3s. 6d.

In this little book, the eminent physiologist appears in the rôle of biographer, and tells the story of Claude Bernard's life in a simple and straightforward way, that has a peculiar charm, especially to those who are familiar with the writings of Sir Michael Foster upon other subjects. It is, moreover, not an uninteresting nor an uninstructive story; the way in which the young apothecary's clerk, and afterwards the aspiring dramatist, made his way to Paris, and there, instead of becoming a poet, became a great physician and physiologist. The book is a dainty little literary trifle, and will afford the medical reader a half hour of pleasure. To the publishers also is due the credit of having made it very attractive.

Dr. JAS. D. THORBURN has moved into his handsome new residence at 321 Bloor Street west.

Dr. W. P. CAVEN has, we a glad to say, recovered from his recent attack of typhoid fever.

Dr. G. A. Peters is now captain of a company in the Governor-General's Body Guard, having been promoted from a lieutenancy.

WE take this opportunity of extending our sympathy towards Drs. Hutchison and Lapthorn Smith, of Montreal, on their recent heavy family bereavements.

WE should have stated in our last issue that Wm. Wood & Co., New York, are the American publishers of Norman Walker's "Introduction to Dermatology.

Dr. F. N. G. STARR, Dr. J. M. McCallum, and Dr. H. T. Machell, returned a week or so ago after spending a delightful two weeks' holiday on a house boat in the Georgian Bay. Their hunting stories are not to be discounted, either.

It was a great pleasure to many to meet in Toronto last month Dr. George Gould, editor of the *Philadelphia Medical Journal*, and Dr. Foster, editor of the *New York Medical Journal*. Dr. Gould was the guest of Dr. Alex. McPhedran on College Street.

WE take great pleasure in congratulating Dr. F. N. G. Starr on his being requested to accept a position as joint secretary to-the Canadian National Committee of the World's International Congress of Medicine, which takes place at Paris in August, 1900.

Dr. W. B. GEIKIE, of Maitland Street, returned on the 3rd ultimo, after a delightful holiday spent in Auld Reekie. The genial doctor looks the picture of good health. Dr. Geikie will, as we already announced, devote himself from this date to consultation work.

We beg to announce that Dr. Alex. McPhedran offers his residence, No. 84 College Street for sale. This is an exceedingly commodious house, roomy, and built to suit, in every detail, a physician. Full particulars can be received, by telephone or letter, from the owner. Purchaser may move in as soon as Dr. McPhedran's new residence, on Bloor St. West, is ready for occupation.