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Original Articles

PRESIDENTIAL ADDRESS — ONTARIO MEDICAL ASSOCIATION*

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Fellow-members of the Ontario Medical Association:

This gathering to-night in the city of Peterborough marks an epoch in the history of our branch of the Canadian Medical Association, in that for the first time in our history, we have elected to hold our sessions in one of the smaller centres. The burden thus thrown upon a comparative few of our medical brethren has been, as you will agree from the welcome you have already received, most loyally shouldered, and the experiment has become a complete success. On your behalf, I beg to thank Doctor Cameron and the members of the Peterborough Medical Society for their hard, resolute and unflinching labor in the preparation involved for our gathering here this week.

For the first time, too, we meet in conjunction with the Provincial Officers of Health, and I trust that the result of this union of effort will be followed up by a continuation of these combined meetings. It will benefit both associations. United we stand, divided we might fall.

Before proceeding to the subject proper of my address this evening, I must beg your forbearance while I refer to several matters of common interest to us as professional brethren.

We are, as a nation, in the midst of a great war, and we, as a profession, have risen to the emergency in Canada, and therefore naturally in the Province of Ontario.

“Remember when those tales you read
Of rude but honest ‘Canayen,’
That Joliet, La Verandrye,
La Salle, Marquette, and Hennepin,
Were all true ‘Canayen’ themselves—

* Delivered at Peterborough, Ontario, May 26th.

And in their veins the same red stream
The conquering blood of Normandy
Flowed strong, and gave America
Coureurs de bois and voyageurs
Whose trail extends from sea to sea."

It is a matter of pride to be able to state that thus far we have provided:

1. A Base Hospital, No. 4, from the University of Toronto, of 1,040 beds, a staff of thirty-five physicians and surgeons, and twenty medical students in the rank and file.

2. A Casualty Clearing Hospital, No. 2, with a staff of physicians and surgeons, and over thirty-nine medical students and young graduates in the rank and file.

3. Two further hospitals have been offered to the Government, one by the Western University, and the second by the Medical Society of the city in which we are meeting now. The handsome offer of the Peterborough Medical Society, which numbers twenty-five all told, was to furnish a Stationary Hospital with medical staff, thirty-five nurses and rank and file, together with the needful supplement of the Government issue in the way of initial supplies, and in addition, to guarantee \$350.00 per month until the close of the war, to be used for comforts and necessities for the men. It will be difficult to find an equal of this offer, and you will agree with me that the Peterborough medical men are a force to be reckoned with. Congratulations to the Medical Society of Peterborough!

4. Over forty medical officers have accompanied regiments and field ambulances, etc., and many more are awaiting orders. Not a few of our brethren are enrolled in the combative ranks, and some of these have already shed their blood for our liberties. In No. 1 General Hospital, under the command of the last President of the Canadian Medical Association, our genial Dr. Murray MacLaren, of St. John, there were four officers from Ontario, and in No. 2 General Hospital, fourteen. In reply to a request from the British War Office for Canadian medical men, offering to give them temporary commissions in the Royal Army Medical Corps, over 125 responded from Ontario, and thirty-five of these are now on their way to their posts of duty.

In addition to this long roll, training units were established in each of our Provincial Universities, in which our students of medicine were not behindhand in enrolling. It has been impossible for me to obtain the exact figures, but in the Western University, 160 students were in training. Queen's has sent with the

Army Medical Corps, First Contingent, three doctors and seven undergraduates; with the Duchess of Connaught's Hospital at Cliveden, twenty-one graduates and nine undergraduates, and with No. 6 Field Company of Engineers, three medical undergraduates; and these are additional to the large body of students who took the Officers' Training Corps' drill. In Toronto, there were over 1,800 students in the O. T. C., of whom 450 were from the Faculty of Medicine. Long after the war has ended, and God grant it may be soon, the effect of the self-sacrifice exhibited by the practitioners and students of medicine in leaving wives, children and lucrative practices, or in abandoning a course of study attained after years of effort, just when the goal came into view, will continue to clarify our vision, and give us a truer perspective. We are reminded of the words of our Master, "but I am in the midst of you as he that serveth." Noblesse oblige.

The Germans may at least be indirectly credited with one good deed—in that owing to the necessity which arose last September that holders of the licence of the College of Physicians and Surgeons of Ontario, should proceed with the Canadian forces to the British Isles, and later to the Continent, and thus work under the War Office, it became obligatory upon the part of our Provincial Council to take the necessary steps to establish medical reciprocity with Great Britain. The Council passed the enabling legislation on the 22nd of December last, and when the Ontario House rose at Easter, the Lieutenant-Governor gave the Royal assent to the Ontario Medical Amendment Act, 1915. A doctor holding a qualification to practice in Britain, may now register in Ontario, and *vice versa*. Thus Ontario is now in line with the Provinces of Prince Edward Island, Nova Scotia, New Brunswick and Quebec, and a step forward has been taken in regard to the creation of one professional standard for the British Empire. Those gentlemen who drew up the provisions of the Act of British North America and brought into being our Dominion of Canada, may have acted wisely in leaving the control of education to the respective Provinces, but should in the light of subsequent events have excepted the profession of medicine. We have long labored under the yoke then placed upon our necks, and every step in the process of release must be hailed with triumph, for we belong to a profession which is bound only by the inadequacy of the human mind to comprehend the height and depth and breadth of the states of health and disease. As Osler writes, "A man who presents evidence of proper training, who is a registered practitioner in his own country, and who brings credentials of good standing at the time of

departure, should be welcomed as a brother, treated as such in any country, and registered upon payment of the usual fee." And again, "Medicine is the only world-wide profession, following everywhere the same methods, actuated by the same ambitions, and pursuing the same ends. This homogeneity, its most characteristic feature, is not shared by the law, and not by the church, certainly not in the same degree. While in antiquity the law rivals medicine, there is not in it that extraordinary solidarity which makes the physician at home in any country, in any place where two or three sons of men are gathered together. Similar in its high aims and in the devotion of its officers, the Christian Church, widespread as it is, and saturated with the humanitarian instincts of its Founder, yet lacks that catholicity—*urbi et orbi*—which enables the physician to practise the same art amid the same surroundings in every country of the earth. There is a unity, too, in its aims—the prevention of diseases by discovering their causes and the cure and relief of sickness and suffering. In a little more than a century, a united profession, working in many lands, has done more for the race than has ever been accomplished by any body of men before."

In the *British Medical Journal* of November 21st last, there was published an article by Prof. C. Jacobs, of the University of Brussels, in which in few, yet pregnant sentences, he drew a picture of the hideous sufferings into which the cruelty of Germany had plunged our Belgian confreres in medicine and pharmacy. At least one-fifth of these two professions had been reduced to abject poverty. "Of these," says Professor Jacobs, "many of them, victims of a barbarian foe, are homeless, deprived of their laboratories, instruments, and their medical stores. What will become of those that still remain of our people, threatened as they are by the grim havoc of war and by contagious diseases, its constant followers? I have witnessed such misery amongst them. Some have had to work as navvies in order to have a few pence in their pockets; others have told me that they have not seen bread for a fortnight, but had lived exclusively on potatoes. Others had a meagre bunch of straw laid on the bare ground as a bedstead; the only pair of boots owned by one of them was falling to pieces in tatters. Men I have seen were dressed in torn garments and their children were in rags. One of my colleagues had to live on wayside herbs for three days and three nights and his wife shared his fate. A professor of a university, bereft of everything, was, when I saw him, in dire want of a bed, and another of equal academic standard was wand-

ering haggard over the countryside searching in vain for a beloved family. And some of our ranks have been taken as hostages, others have been shot, and their widows and orphans have been deprived of everything."

This appeal to our sympathies, at once brought about in Britain the foundation of a most representative committee, under the chairmanship of Sir Rickman J. Godlee, who visited this country in 1913, and upon his request, a committee for Canada was shortly afterwards formed, consisting of the leading representatives of the profession in every Province. I am happy to state that the response from our brethren throughout the length and breadth of the Dominion has been most enthusiastic, prompt, and self-sacrificing, and that the cash in hand to date amounts to the handsome sum of \$7,622.00, of which Ontario has contributed \$4,919.00. In addition to this, the sum of \$2,600.00 was forwarded by a French committee in Montreal, so that the total for Canada amounts to \$10,222.00. From the *British Medical Journal* of the 24th April, we learn that the British committee, to whose care the Canadian committee has remitted to date the sum of \$6,916.00, had forwarded £964 10s. to Belgium to meet the urgent needs of Belgian doctors and pharmacists remaining in their own country, while a further sum of £350 had been devoted to the purchase of drugs and clothes, and by way of loans. The total sum received by the British committee, according to the same authority, amounts to £10,012 11s. 2d.

While we are pleased at the results attained, we must remind ourselves that if poor Belgium has passed through the fire already, its furnace of suffering will be heated yet again seven times, in the slow and awful torture which must be inflicted upon its cities and citizens during the process of the expulsion of the ruthless foe.

As Prof. Sarolea has stated in his Toronto addresses, so full of soul anguish, and yet so resolute, Belgium is between the upper and nether millstones, and will be ground to dust. The need for help will outlast the war, and neither must our purse strings be drawn, nor our sympathies dried up until our professional brethren in Belgium are once more reinstated. "When the day comes for the nations to adjust the balance, and right the wrongs which Belgium has suffered, one of the first duties of the medical profession throughout the world will be to see that the practitioners who have played so distinguished and useful a part in the life of their country are reinstated. We cannot at once rebuild the houses of Belgian doctors, or restock the shelves of Belgian pharmacists, but it is clear that the people require prompt medical

attention, and it is a debt of honor to try and meet the immediate necessities of their doctors and pharmacists."

To-morrow afternoon there will be placed before you for consideration the results of the labors of Dr. Wallace's committee upon Affiliation with the County and Town Medical Societies. I trust that you will decide to adopt the recommendations offered.

Were admission to the County and Town Society, within whose borders a physician practises, made the one portal of entrance to the Provincial body, and through the latter to the Dominion Association, all doubt would be removed as to the eligibility of the candidate. He would literally be judged by his peers, a truly British method. On the other hand, the impossibility of obtaining admission to the Dominion or Provincial body, if refused by the local society, would serve to regulate the steps of the beginner in practice. It is in the smaller towns and country districts that conditions are most favorable for mutual misunderstandings. Only those who have been brought up in such surroundings can appreciate how hard it is for physicians to keep on good terms with one another. The practice of medicine calls equally for the exercise of the heart and the head. The association of all the physicians of a district in a society where they may frequently meet with one another, and so learn to value the good points, and excuse the bad points of their confreres, will do much to unite the profession in this Province, and prevent misunderstandings.

These beneficial results are obvious, and extremely valuable, but there is another end to be gained from the scheme proposed, an end to which no real approach has ever been made by our Canadian profession hitherto, namely, the enrolment of every member of the profession in an organized whole, which may speak with the authority consequent upon its composition, upon any matter which affects its welfare or that of the health of the public. At present, associations and societies may only speak for their respective members, and a government may decide to consider these non-representative; whereas there are many questions, the solution of which cannot be properly secured without the aid of our profession. Assemblies, Conferences and Synods speak for every member of the various religious bodies, and the Benchers for the lawyers, but our profession has no united voice, nor will it have until each practitioner be enrolled in a common membership of a common body and recognizes that he belongs to a guild, the interests of which are incompatible with all professional bitterness, all rancour or personal hostility. The brethren must dwell together in unity.

The attention of the representatives in both Houses of Parliament should be directed by our members to the Act for the curtailment of the sale of habit-forming drugs—opium, heroin, codeine, cocaine and morphia—which was enacted in Washington recently. The above-mentioned drugs, together with all like preparations, are withdrawn from sale except under very restrictive conditions, which, if carried out in the spirit of the Act, will tend to minimize the evil, if not to wipe it out altogether.

“No person or company may sell one of these articles, except under license of the Bureau of Internal Revenue. The consumer of the dangerous drugs must present either a prescription or an order written by himself, for the drug in question, which order calls for a full description of the purchaser, including age, color of eyes, occupation, etc., and is later examined and reported upon by a government inspector. The sale of the drugs, in fact, is made so irksome to both parties in it, that it is expected that the drug victim, or the possible drug victim, will shrink from the red tape and the prospect of exposure which the law has provided for drug buyers and users.” It is stated that the result of the passage of this law already is that every institution for the treatment of the victims of the drug habit, is crowded with patients who would rather be freed from its curse, than attempt to satisfy their cravings under the difficulties provided by the act. Our own laws in regard to the sale of similar drugs may be improved with advantage to the inhabitants of Canada, and the results of the passage of this act in the United States should be carefully noticed with this in view. I trust that you will individually keep your member posted so that a further important step in preventive medicine may be gained.

The subject which I have chosen as the main topic of this year's Presidential Address is “The Evolution of the Specialist in Oto-Laryngology,” yet what I have to say will apply equally perhaps to any of the so-called specialties. The subject conveniently arranges itself under four heads:

- (a) The definition of a specialist;
- (b) The need for his existence;
- (c) The training required;
- (d) The nature of his relationship to the general practitioner.

In developing this subject, I shall require to use some plain speech, because between the degrading, but alluring effect of the establishment of certain polyclinics or postgraduate schools, where to quote the Carnegie Report, “the training is of a practical, not

of a fundamental, or intensive kind," "calculated to 'teach the trick,' or perhaps better to exhibit an instructor in the art of doing it," and on the other hand, the desire of the wearied practitioner to get into something "easy," this country is threatened with becoming burdened by a load of ill-trained specialists.

Believing that, in the words of Oliver Wendell Holmes, "fear of open discussion implies feebleness of inward conviction, and great sensitiveness to the expression of individual opinion is a mark of weakness," and disclaiming all intention to offend, I invite your attention and forbearance.

A specialist has been defined as "one who knows as much about all parts of his subject as any, and more about one part of it than any other," but I would paraphrase this definition and bring out its meaning more fully. A specialist is one who, *after* completing the usual time of medical study, and obtaining his degree, pursues a further course of instruction over a number of years, in some limited field, and abandoning the practice of every other branch of medicine, confines himself solely to that branch in which he has thus become qualified to speak with authority. No one has a right to pose as a specialist who has not proved his title to do so by such a prolonged course of special study, and let me remind you that the cards which some of our number permit to appear in the advertising columns of the newspapers, reading somewhat as follows: "Dr.——, Phys. & Surgeon, Graduate of the —— University, Licentiate of the College of Physicians and Surgeons of Ontario (as if he could practice at all without this). Special attention given to Diseases of the Eye, Ear, Nose and Throat," are strictly unethical, according to the code of this Association, and in my personal opinion, beneath contempt.

The backbone of our profession is the general practitioner. As Osler writes, "There never was a time in our history in which he was so prosperous, so much in evidence, in which his prospects were so good or his power in the community so potent. He still does the work, that great mass of routine practice which brings the doctor into every household in the land, and makes him, not alone the adviser, but the valued friend. He is the standard by which we are all measured. What he is, we are; and the estimate of the profession in the eyes of the public is their estimate of him. A well-trained sensible doctor is one of the most valuable assets in a community, worth to-day, as in Homer's time, many another man. To make him efficient is our highest ambition as teachers, to save him from evil should be our constant care as a guild."

But medicine advances by leaps and bounds, and it is absolutely impossible for one brain to compass the length and breadth of medical knowledge. Nor is it reasonable that the man just graduated should be expected to be equipped with a full knowledge of medicine, embracing all the newest procedures, and ultimate tests in every specialty. If this were demanded, the curriculum of the medical course would be stretched out by many years, and the task of entering upon the practice of the healing art, already difficult enough, would be made impossible for the average man or woman. In addition, the pecuniary results to be obtained afterwards, would not be worth the investment of time and money. *Our license to practice does not even yet demand that the graduate be able to recognize a membrana tympani*, the hearing of a few lectures will not teach him this. In the Universities of McGill and Toronto, it is only very recently that the course has been made clinical, instead of didactic.

The public is both ignorant and superstitious; they have been accustomed to think that the letters M.B. or M.D.C.M. mean that the owner of these mystical characters is possessed of a complete knowledge of all things medical. On the other hand, you know and I know, that we are vastly ignorant, and that medicine is far from an exact science. It is needful to correct this ignorance on the part of the general public.

Reason is there, and the very best, that men should specialize, should fit themselves to know all there is to know upon some one of the various branches of the healing art.

The specialist exists to give assistance to his brethren, the general practitioners, not to enter into competition with them in any shape or form.

But if the specialist exists for the assistance of the general practitioner, I would have the latter fixed in his determination to demand high qualifications of those whom he calls upon for such assistance. What should those qualifications be?

1st. An excellent general preliminary education, including a knowledge of the more important modern languages, an indispensable accomplishment for one who must follow the international literature of the day.

2nd. A postgraduate position as hospital interne, preferably in medicine, but better still in both medicine and surgery.

3rd. A year or more in general practice, during which he may try himself out, and when he chooses his specialty, choose wisely.

4th. If the choice be Oto-Laryngology, then must there follow an internship of at least eighteen months, devoted exclusively

to the special subjects, where he will toil daily with patients in a special clinic, mastering the details of examination and diagnosis, and be trained under a master eye in the technique of operations.

5th. Lastly, he must place a coping-stone of a further year at some university where he will obtain postgraduate instruction upon:

- (1) Clinical diagnosis and treatment.
- (2) Functional tests especially.
- (3) Bedside work on surgical cases.
- (4) Surgical practice on the cadaver.
- (5) Practical treatment and minor operations in the out-patients' ward.
- (6) Demonstrations and lectures on normal and pathological anatomy, histology and physiology.
- (7) Diagnosis and pathology of labyrinth diseases.

When finally he seeks the suffrage of his fellows of the general profession, he must become attached to a hospital where he can maintain his contact with a public clinic, for otherwise he can never hope to advance, or even to keep abreast of his subject.

I have given you above the qualifications demanded by the American Laryngological, Rhinological and Otological Society, and also of the hospital where I have the honor to control the Oto-Laryngological service.

Am I too ambitious in making these demands? No; if we, as specialists, are to deserve the respect of our confreres, we can demand no less.

Unfortunately, although specialism, with its implicit claim of superior skill in one direction, is now recognized as both efficient and useful, it remains on a very informal basis, and few universities are yet equipped to give adequate preparation for specializing, but a better day is dawning, and this function will be recognized by the universities, and indeed specialization will not be allowed without such university post-graduate training.

As the Carnegie Report says: "Improved medical education will undoubtedly cut the ground from under the independent post-graduate school as we know it. This is not to say that the undergraduate medical curriculum will exhaust the field; on the contrary the undergraduate school curriculum will do only the elementary work; but that it will do, not needing subsequent and more elementary instruction to patch it up. Graduate instruction will be advanced and intensive, the natural prolongation of the elective courses now coming into vogue. For productive investigation and intensive instruction, the medical school will use its own teaching

hospital and laboratories; for the elaboration of really thorough training in specialties resting on a solid undergraduate education, it may use the great municipal hospitals of the larger cities. But advanced instruction along these lines will not thrive in isolation. It will be but the upper story of a university department of medicine. The postgraduate schools of the better type can hasten this evolution by incorporating themselves in accessible universities, taking up university ideals, and submitting to reorganization on university lines."

The truth is, we have too many so-called specialists, the damaged fruit of commercial postgraduate colleges, managed by a board of stockholders for the sake of the almighty dollar. The unfinished product of these institutions has resulted in the establishment of a class of mediocre specialists, who often bring discredit upon the whole institution of specialism. To quote from a recent writer in the *New York Medical Journal*, "The true specialist can never afford to stop working scientifically. The continued wave of progress in medicine must be closely followed by him, lest he remain behind. In his practice the true specialist should be, before all, a reliable diagnostician. Acquaintance with the commoner diseases of any organ may safely be expected of any well-trained and fairly-experienced general physician. But we have a right to demand from the specialist thorough and easy familiarity with rare and exotic affections also. In other words, in his role of consultant, he should be an expert. Likewise he should be fully at home in all therapeutic methods pertaining to his specialty." "Whereas to the mediocre specialist his specialty is nothing more than a milch cow. Such a man probably enters medical college with a firm determination of eventually 'making a specialty' of a certain class of diseases. While in college he considers everything which is not directly related to his prospective fields, as irrelevant, gets through his medical course easily, about well enough to barely pass his examinations without being plucked. His sheepskin still damp from the signatures of the faculty members, he at once goes abroad for special studies, to Paris, London, Vienna. Those studies are largely devoted to a minute investigation of the most famous cafes, restaurants, theatres and other places of amusement; a few special courses by privatdozents or assistants, given in a poorly understood foreign language, are, however, usually taken along by the way, as it were. Six or twelve months later he arrives home, where his friends have already been prepared by numerous letters of his wonderful attainments abroad, armed with instruments of the latest pattern,

declaiming about the very most recent methods of treatment of which he is now the only possessor, and superciliously sneering at old-fogeyish Dr. X., whose competitor he starts out to become."

The nature of the relationship of the specialist to the general practitioner, must be considered from opposite sides. The specialist must remember that he is dependent for his practice upon the general practitioner, and that his advice is sought for the purpose of a skilled diagnosis in determining the line of treatment, which often may be carried out fully by the family doctor. He is to be the ally, not the competitor, ever ready to support, and never willing to supplant. It is up to him, in association with the pathologist, the physiologist and the clinician, to do the bulk of the real work in the science and art of medicine.

On his side the general practitioner should make free use of the specialist. Is he to refer all cases in Oto-Laryngology to the specialist? No. But it is wrong for him to fail to do so, when he cannot fairly claim that he possesses the requisite knowledge of the conditions before him, which will enable him to serve the best interests of his patient. His conscience should tell him whether he has arrived at the point where his patient should have the benefit of a knowledge beyond his own. If this point is reached, failure to employ this extra knowledge is nothing short of criminal. If he is absolutely steadfast in calling to his aid every possible means of securing the best interests of his patient, he will surely and steadily build up for himself a reputation for reliability and carefulness, which will establish his high standing in the community, and give him the priceless possession of a conscience void of offence toward all men.

To do the opposite is to descend to the commercial basis of the public, the results of which are seen in the deplorable editorial attitude of many of our leading newspapers towards all things medical, in the scepticism of the legislature to the altruistic intentions of the profession as a body, and in the too widespread opinion among the general public, that the physician is not sincere in the promotion of measures which might prejudicially affect his pocket, because it would not be "business."

As Osler puts it, "Faith is the great lever of life; without it man can do nothing; with it, even with a fragment, as a grain of mustard seed, all things are possible to him. Faith in us, faith in our drugs and methods, is the great stock-in-trade of the profession." "To wrest from Nature the secrets which have perplexed philosophers in all ages, to track to their sources the causes of

disease, to co-relate the vast stores of knowledge, that they may be quickly available for the prevention and cure of disease, these are our ambitions."

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PROFESSOR EDWARD PARKES ON A SPIRIT RATION*

Sir,—In a discussion on the issue of a rum ration to our soldiers I have been expecting to see some reference made to the most important scientific experiments on this subject in the Ashanti Campaign in 1874, which were made by Edward Parkes, F.R.S., to whom the British Army is enormously indebted for the improvements he effected in its hygiene. The results of these experiments were published in the *Lancet* in August, 1874, and reprinted with introduction and appendices in a small pamphlet entitled "On the Issue of a Spirit Ration during the Ashanti Campaign of 1874" (London: Churchill, 1875). This report is so valuable that one would like to reprint it in its entirety. This being impossible, I would like to quote some of his conclusions verbatim.

"It (alcohol) is not a perfectly reliable aid, and requires, when used at all, to be so with a full knowledge of its mode of action (p. viii). The first effect of alcohol, when given in a moderate dose (for example, what is equal to one fluid ounce of absolute alcohol) is reviving, but this effect is transient. As shown both in the Report and in the first Appendix, the reviving effect goes off after, at the utmost, two and a half miles of additional march, and sometimes much before this; then the previous languor and sense of exhaustion not only return, but are sometimes more intense, and if alcohol is again resorted to its effects now are less satisfactory.

*Lauder Brunton. in "The Lancet."

Its reviving power is usually not so marked, and its peculiar anesthetic and narcotizing influence can only be distinctly traced. The men feel heavy, dull, disinclined to march, and are less willing and cheerful. It is clear, then, that alcohol is not a very trustworthy aid; for supposing a commanding officer, having marched twelve or fourteen miles, and desiring to cover ten more miles, finds his men weary, and, not being able to halt and feed them, orders an issue of spirits of an amount sufficient to revive but not to depress. The first effect will be good, but in less than an hour his men will be as weary as before, or probably more so. If he then reissues the spirit within so short a period of time it is certain that in the case of many men, perhaps the majority, the marching power will be lessened (p. viii). Even the reviving power of the first issue is not always so considerable as might be supposed, and, indeed, I have been surprised to find how little good effect it has sometimes produced. It appears to me, therefore, that spirits, as an issue, should be kept for emergencies, as when after great fatigue a sudden but short exertion is required, or, when a march being ended, there is great depression and failure of the heart's action, such as occurs when men have been thoroughly wetted during an exhausting march. To give strength to the men during the march, when the usual food cannot be taken, the meat extracts and coffee are both better than spirits (p. ix). The first Appendix shows how unanimous the soldiers who were experimented upon were in assigning a great superiority in reviving and sustaining power to the meat extract over the spirit. The meat extract can also be repeated over and over again without injury, indeed with benefit. Coffee, again, is also very reviving during fatigue, and has the great advantage of quenching thirst much better than the meat extract, but it requires to be well made and to be palatable, which is not always easy to ensure in forced marches (p. x)."

In his report Professor Parkes distinguishes sharply between *facts* and *opinions* (p. 28). The chief facts are:—

1. Entire abstinence from alcohol did not make the men more sickly as a whole or more disposed to malarious fever (p. 28).
2. The marching powers of teetotallers were good. The evidence is against the usefulness of rum during marching.
3. The reviving effect of the rum when given at the end of the day was strongly spoken to (p. 31). Under exhaustion after great exertion alcohol will quicken the heart and act for a time as a restorative, though it may be hurtful or not useful during the actual period of exertion. The general feeling of warmth caused by

alcohol and the temporary strengthening of the heart's action were also, no doubt, succeeded by a slight anesthetic effect, making the sleep rather more profound. 4. The evidence of one or two of the men is that they marched better when rum had been issued on the previous evening. 5. Some of the evidence indicated the greater power of digestion given by the rum and the increased appetite given by somewhat changing the monotony of the food. Such appear to be the main *facts* brought out by the evidence (p. 32.)"

The opinions of the different witnesses were rather various, and therefore I may perhaps state shortly my own opinion founded on the facts. The use of alcohol in the body is like the use of a bill in commerce which may enable a merchant to tide over a financial difficulty by enabling him to make calls upon his capital in order to meet his present wants. If the call is simply temporary the bill may tide him over a crisis and will thus be most useful, but if his reserves are insufficient it will only hasten bankruptcy. In like manner alcohol enables a man to call on his reserves of strength and may enable him to make a spurt which he could not do without it. But if the exertion is to be long continued it simply accelerates exhaustion. After the exertion is over and the man is too tired to eat, the alcohol will help to call up his reserve strength and enable him to eat and digest better than he could without it, so that the increased assimilation of the evening meal and better sleep following it may enable him to march better next day. During exposure to cold in a healthy man the cutaneous blood-vessels contract and the blood is thus prevented from circulating over the surface and becoming cooled by the external cold. This protective mechanism sometimes continues to act after the necessity for it has ceased, and not only keeps the surface cold after the person has entered a warm room, but prevents the blood from conveying the external warmth to the internal organs. Alcohol dilates the cutaneous vessels, and by allowing warm blood from the interior of the body to circulate over the surface it causes a pleasant feeling of warmth when the external air is cold, and may also produce coolness by evaporation of sweat from the skin during exposure to heat. If the exposure to cold is short and slight, no harm may be done, but if the exposure is long continued and the external cold is great the skin is warmed at the expense of the vital organs and death results. For this reason the men who cut down timber in the Canadian forests in winter, knowing that intoxication means death, remove temptation by prohibiting spirits entirely, or as Sir Anthony Hope (quoted

by Parkes, p. 15) says, "It is an inexorable rule that all drinks found in the camp are destroyed." Meat extracts and coffee when they can be obtained are not liable to the same objections as alcohol, and Parkes has carefully drawn attention to their useful qualities.

In trying to sum up one is obliged to return to Parkes's statement (p. viii) that alcohol "requires when used at all to be so with a full knowledge of its mode of action." Such a knowledge as this can hardly be possessed by combatant officers, but it may and should be possessed by medical officers, and therefore a spirit ration to soldiers should not be issued haphazard, but only on the order of a medical officer.

UNITED KINGDOM MEAT IMPORTATIONS

In the latest annual report of the medical officer of health for Liverpool, it is seen that the importation of frozen and chilled meats still continues to increase. The population of the United Kingdom has increased nineteen per cent. in twenty years, and as the production of home-grown beef is practically stationary, the demand for imported supplies has become greater year by year. It is not so many years since the United States was the largest supplier of beef and live stock to Great Britain. The imports amounted to 251,590 tons in one year. In 1913, owing to the enormous increase in the population of the States and the decrease in the production of cattle, the imports had fallen to about 800 quarters of beef, and 10,000 head of cattle, all representing 3,316 tons. The United States, themselves, have become free importers of Australian and South American meats. England re-exported, during 1913, 6,621 tons to the United States. Practically all the supply of chilled meats for the United Kingdom has been drawn from the Argentine, now amounting annually to about 260,801 tons. The presence of foot and mouth disease in various parts of that country has somewhat interfered with this trade from that source. Great Britain recognizes that the opening up of the United States to the Canadian producer will seriously interfere with the Canadian meat traffic to the home country. Their fears in that direction are well grounded as only 328 tons were received in 1913, as compared with 583 tons in 1912.

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COMMENT FROM MONTH TO MONTH

Canadian Physicians have responded nobly to the call of the mother country. Up to the first of April it was estimated there were serving abroad in various capacities, with the armies in the field, in the base hospitals, in the navy, no less than three hundred Canadian physicians. In addition to those the University of Toronto General Hospital, McGill University Base Hospital, Queen's, Laval, have gone. Some thirty to forty volunteered to serve in Serbia; and at the request of the War Office, at least thirty-five Ontario physicians have gone to do their part with the British armies in Northern France. A conservative estimate would place the number of Canadian physicians in Europe at between five and six hundred. Added to that number many are on the list of applications to serve, so that up to the present it is impossible to find positions for all who are ready and anxious to go. Soon there will be need for physicians at home for the returned wounded and convalescent. In almost every city and town the profession stands willing to aid the dependent ones of

those who are fighting abroad for the cause of civilization and humanity.

The arrangements which have been made for the prevention of disease amongst the troops are remarkable. These were never so thorough in any previous war in history. All the advances in scientific medicine, in every department thereof, have been brought into use; and if one is to judge from what has been achieved so far, the profession of medicine stands to come well to the front in the outcome of the gigantic struggle.

In any glory which may redound to the profession of medicine, the profession of nursing will participate. It is proving that there is much self-sacrifice in that profession. The fathers and mothers who have given their daughters for the care of the sick and wounded are doing as much as those other fathers and mothers who have given their strong and healthy sons for the fight.

What may not a hundred years bring forth! In the battle of Waterloo no surgeons were allowed on the battle-field. It was only officers of high rank who, when wounded, were carried from the field and received surgical attention. The soldier lay where he fell, and only received surgical attention when the battle was finished.

By the middle of the century the surgeons had dressers to assist them; and it is historic how Florence Nightingale, after breaking down the barriers of red tape, departed for the Crimea with some forty nurses.

The Japanese taught the world the value of prevention of disease in the soldier in the field. But preventive medicine today goes much farther than they did. There is a well-organized fight to keep the soldier fit to fight. Not the least of the prevention measures has been the inoculation against typhoid fever, which inoculation, Osler states, has been done in 99 per cent. of the British army, and that in spite of strong agitation against it by the antis. Practically all Canadians have been inoculated.

A new feature in this great war is the Sanitary Service Company. They look out for a safe water supply by chlorination. They keep the camps sanitary. They even follow the men into

the trenches. Truly much has been done. There is yet much to do. It is the duty of every man to help in every way he can.

Nor must we forget that many American physicians and surgeons have rendered able and faithful service. Amongst these may be mentioned Dr. George W. Crile and Colonel Gorgas, as well as Carrel. A true sanitarian, a true scientist, and a true physician, Dr. Gorgas may be looked upon to clean up Serbia and stay the ravages of typhus. The hope of the world will at least go with him.

VINEGAR AS AN ANTISEPTIC

M. Loir and M. Legangneux in an interesting paper lay stress on the important part played by fresh vegetables in the dissemination of typhoid fever, and have made a study of the value of vinegar as a destroyer of the typhoid bacillus. It has long been known that Eberth's bacillus is susceptible to acidity. In wine it rapidly disappears. Dr. Gaillard has shown that the addition of every kind of alcoholic drink to water results in an almost immediate diminution of the number of contained microbes. All the pathogenic varieties are destroyed by an admixture of equal parts. The typhoid bacillus is more sensitive to white than to red wine, the former being usually more acid. The authors have made numerous experiments to determine the degree of acidity required to destroy Eberth's bacillus in water. They find that 20 grammes of vinegar to a litre of water kills the typhoid bacillus in an hour and five minutes. From this a practical inference may be drawn concerning salads. After washing the salad as usual, detaching each leaf, it should be put into water acidulated with 10 grammes of vinegar to the litre and remain immersed in this liquid for about an hour and a quarter. All vegetables ordinarily eaten uncooked may be subjected without any inconvenience to the same process.—*The Lancet.*

Editorial Notes

HON. DR. ROLPH

Trained at Cambridge University, where, as Dent tells us, "he was recognized as a young man of very remarkable and precocious intellectual powers," he became at an early age a member of the Bar of the Inner Temple, London; he was also a student of Sir Astley Cooper's, and attended Guy's Hospital, later taking the M.R.C.S., England; called to the Bar of Upper Canada in 1821, he was the fourth Bencher in the Province. He had the unusual if not unique distinction of practising both law and medicine concurrently, and of qualifying for orders in Divinity; while as a popular politician he ere long secured a seat in the Legislative Council. With marked courage he dropped law in 1832, when he had the reputation of being the most eloquent pleader at the Upper Canada Bar, and devoted himself to medicine—and politics. He was commissioned a member of the Medical Board of Upper Canada the same year (1832).

Dr. Rolph lived in troublous and stirring times and was a prominent figure on the stage of political and public life at a critical juncture in the history of our country, when men counted for much and were all too few. There were, however, giants in those days, and he was one of them. Joined with other reformers of like mind, whose goal was popular and representative government, he was one of the leaders in the fight against autoeracy and entrenched privilege in high places. It became expedient, and, indeed, necessary for him to live abroad for a few years, but he was soon re-habilitated upon his return to Canada in 1843.

He could not keep out of public life, and was shortly in the Legislature; and from 1851 to 1854 he was a member of the administration. As is the case now and then of some other great men we wot of there is a fly in the pot of ointment, and one recalls that the Honourable Doctor, while head of a voluntary school, was credited with using his influence as a member of the Cabinet in order to put an end to the Faculty of Medicine of the University of Toronto, which, as history shows, was in a state of desuetude for thirty-five years, until it was revived in 1887.

Dr. Rolph's career teaches the value of erudition and versatility to one who aspires to a high position in any profession, and not the least in medicine.

He had a subtle brain which could cerebrated easily without disturbing the vegetative functions—a truly Gladstonian quality to be envied. As a public speaker he had a lucid and ornate style with the added charm of a voice of silvery intonation.

It was, however, as a pioneer teacher of medicine, and later, and for many years, as the most prominent medical educationist of the country, that Dr. Rolph became most justly celebrated. During a series of years before the rebellion he had had a number of private students whom he coached and trained, and two of these (H. H. Wright and J. H. Richardson) followed him to Rochester when he was living there in exile.

By a natural evolution Rolph's School of Medicine began to take shape shortly after his return to Toronto in 1843; and assisted by a few others, notably Dr. Joseph Workman, Dr. Rolph's efforts were soon rewarded by the great success of his school, which became a medical centre for students for over a quarter of a century. Incorporated in 1853 as the Toronto School of Medicine, Rolph's School was later and for many years the Medical Department of Victoria University; and the Doctor held office as Dean till early in 1870, passing away from this mundane sphere in October of the same year.

It is peculiarly appropriate that this portrait of such a master should be presented to the Academy by one who, as Dean of Trinity Medical College, played well his part for so many years as a leading teacher of medicine and most successful head of a school with such an honorable record amongst the educational institutions of this country.

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VACCINATION

Most of us must sometimes have wondered how far the vaccination of infants affects the type and epidemic periods of smallpox in this country, and to what extent our protection against epidemics in future will be influenced by the diminution which is taking place in the systematic vaccination of children. As a matter of history, the general adoption of infancy vaccination produced a marked change for the better in the epidemiological facts of smallpox; the disease ceased to be endemic, generally prevalent, and often fatal amongst children, and became rarer in its visitations and more and more one from which the principal sufferers who remained were adults. It does not necessarily follow, however, that under modern methods of dealing with smallpox reversion to an unprotected child population would entail reversion to eighteenth century prevalence. Again, it is beyond question that the protection of infancy vaccination, which as regards attack continues for several years, and as regards severity of illness lasts well into adult life or even to advanced age, has been priceless in past decades, when the population was running relatively large

risks of exposure to infection. But looking at more recent experience, can this protection be considered so important a factor now that epidemics are so far apart and our health authorities, with the aid of emergency vaccination, can deal with them confidently and certainly when they arise? Such questions, of course, owe most of their importance to the purely artificial position brought about by legislation. Parliament has never attempted to prevent epidemic smallpox by vaccination. Had it done so the law would have required general and compulsory re-vaccination; or, if only a single vaccination could be insisted upon, it would at least have shifted the compulsory age to young adult life, as has often been proposed. Since the first Vaccination Act all official systems of vaccination have related, with greater or less efficiency, only to the vaccination of the infant, and have been determined quite as much by political as by medical or epidemiological considerations. So far as these systems have promoted vaccination they have consistently received support from medical opinion, and when regard is had to the many thousands of people who have owed their escape from attack by smallpox to their vaccination in infancy, and to the many others who owe to the same cause the fact that when attacked by smallpox they have not suffered severely or been seriously disfigured, medical action in the matter has been justified and fruitful for good. But, meanwhile, outbreaks of smallpox, when they occur, are dealt with by an increasingly efficient system applicable alike to those who have been vaccinated in infancy and to those who are unprotected. Epidemics are kept under by administrative measures which secure the prompt detection of cases and their removal to hospitals where they are surrounded by well-vaccinated persons who do not—it would be no exaggeration to say who cannot—contract smallpox, and are there kept till their infectiousness is over. Those who have been in contact with the cases before isolation are sought out, watched, and vaccinated wherever possible, any who develop smallpox being treated at the earliest possible moment in the same way as the first cases.

The system has steadily developed and many circumstances have combined to produce its continual improvement. The fact that smallpox hospitals have themselves been associated with the spread of smallpox when placed in populous neighborhoods has been recognized, and properly isolated sites are now chosen. The system of compulsory notification, the interchange of notifications between health officers, the telephone, the motor-car, and all that these imply, have made the tracing of contact and suspected cases

possible in a way neither imagined nor imaginable twenty or thirty years ago. The staff available in our local health departments has grown in numbers and efficiency, while vaccine lymph can now be made and stored in practically unlimited quantity and be supplied at the shortest notice. As finality in these methods has not yet been reached, and other improvements will, no doubt, be made, it has now become quite arguable that administration on present lines should suffice to keep epidemic smallpox within small dimensions, whether the country has been well vaccinated in infancy or not, and that so long as administration remains good and people consent to be vaccinated in emergency, systematic vaccination may cease without serious consequences. This is no doubt the popular view, and its danger, paradoxically, lies in the fact that a good deal can be said for it. It must be remembered that even the best schemes of administration may break down, and should the breakdown occur with smallpox in a virulent phase, an 1871 type of smallpox for example, the result among a totally unprotected community may be much more serious than that of any local breakdowns of which we have had recent experience. As the behaviour and occurrence of smallpox is full of surprises, it is only fair that parents should be encouraged to protect their children from risk, while the more children and adults there are in the population who possess the protection of vaccination and revaccination the better the security of the community against smallpox and the better for the individuals who are protected. For such reasons we think most medical men would say that, notwithstanding altered conditions of recent years, it would still be advisable for the state to strengthen its vaccination laws, or if politically this is impossible, at least not to weaken such methods as remain for promoting systematic vaccination.

At the present moment it is useful to indicate in such obvious terms as the foregoing the position of medical science to some modern aspects of practical vaccination problems; and a book which has just appeared, written by Dr. C. K. Millard, the medical officer of health of Leicester, calls for notice in this connection. In some respects Dr. Millard takes what we believe is an exceptional view of the vaccination question. He would do away with systematic infancy vaccination as soon as possible, arguing that though it may be good for the individual it is actually prejudicial to the community, as it results in the presence among adults of cases of smallpox which are so mild that they are not easily recognized, and consequently go about and spread infection. We are not sure that this contention is complete on its epidemiological

side. Previous vaccination or previous smallpox are not the only causes of mild and scarcely recognizable attacks of the disease. In epidemics of certain types, such as those which have lately occurred in the United States and in Australia, the infection is so attenuated that an abundance of very slight cases has been found among the unvaccinated. If Dr. Millard's argument were sound, however, it would still hardly constitute a sufficient reason for advising a parent that his child should not be vaccinated; the whole force of the argument to be placed before him lies in the power of vaccination to protect the individual. On these and other matters the contentions and speculations in the volume are worth study and reflection. The reader, however, must be prepared to find scientific questions mingled with a considerable dose of provincial vaccination controversy, and if he is to get pleasure from his author he will have to enter into and appreciate the latter's pose. This is the position of the just man—we had almost written the only just man—to whom insight has been given to see the "vaccination question" in its true perspective, and to balance between those who are called "pro-vaccinists" and "anti-vaccinists." In these matters the hero of the book is a special conception of Dr. Millard, an anti-vaccinationist, free to carry on all his propaganda against vaccination, if only he will admit that vaccination has a protective value against smallpox. As most anti-vaccinationists spend their time in contesting this very point, the position is occasionally a little bewildering, and by those who have no great interest in the anti-vaccinationist the balancing process may be found a little tedious. After all, it has been the "pro-vaccinist" doctor and not the anti-vaccinationist who has called in the resources of modern science and invention to aid in the suppression of small pox, and it is hardly reasonable that every one of the doctor's actions which does not involve the inoculation of lymph should be put in the scale to weigh "against vaccination."

FOOD, FINGERS AND FLIES

Easily remembered, and catchy, "food, fingers, and flies," are the three principal ways in which disease germs are carried from person to person. Foods which are eaten raw, since thorough cooking destroys disease germs, are the most important which carry disease. But foods may be infected in the kitchen after cooking. Foods like oranges are safe, as they are peeled before eaten. Water and milk are particularly dangerous, sewage con-

tamination in the case of water and human contact in the case of milk, unless pasteurized, being the two prime evils. Contact between people is another way. Fingers stand for all sorts of ways in which human excretions may be exchanged. The fingers go often to the mouth and nose where in measles, whooping-cough, diphtheria, scarlet fever, pneumonia, tuberculosis germs are almost constantly present, and even in the healthy. In coughing and sneezing fine spray is thrown out from the mouth and nose. The germs have been frequently demonstrated in the spray. Drinking-cups and spoons and other things have been convicted. Insects are the third common way in which disease germs are spread. Flies are possibly the most important germ carriers in any community. Children, particularly, should always be made to wash their hands and teeth *before* eating.

WEIGHT AND MEASUREMENTS OF GERMAN SOLDIERS

Before the war, the average weights and heights of German adult men who were considered fit for military service by the army medical authorities were as follows: Average height, 5 ft. 3 in.; average weight, 143.3 lbs.; chest measurements taken with the arms evenly extended, close under the nipples in front and close under the angles of the shoulder blades behind, average inspiration, 35 in., average expiration, 32.3 in. This gives a maximum difference between inspiration and expiration of 2 3-4 in.; girth, 29 1-2 in. Whether those standards are being maintained at the present time among the new levies of the German army might be interesting.

WHAT THE SANITARY COMPANIES ARE DOING AT THE FRONT

Comparatively speaking, but little is heard at home of the work done by the Sanitary Section out at the seat of war. Yet we venture to say no more important Section exists, and that its influence has been very potent in securing the clean bill of health which is recorded by Sir John French in his valuable but too infrequent despatches. Now and then, however, the veil is lifted, and we are permitted to catch a glimpse of what is being done. We do not get this information from the ordinary war correspondent—if such an individual can be said to exist—but from letters of those in actual service with the forces. Some of the most illuminating letters that have come under our notice are