The Menace of Birth Control

DR. DAN MCDONALD, North Sydney.

IT is sad to think that in this so-called period of enlightenment and progress it has become a necessity for me to read a paper bearing on this subject before a convocation of the doctors of my native province. The lay advocates of this pernicious practice claim they have the sympathy and support of the medical profession. Realizing the splendid attributes of the average and normal man in our profession I refuse to accept the claim of any support coming from our profession to help the advocates of birth control.

During the past twenty-five years it is strikingly noticeable that in any social or economic movement the doctor was made, to use a homely and understandable phrase "the goat". Let me take as one example that wide spread movement, namely, state prohibition of the use of alcohol; that little temperance organization, with its many resolutions, helped to frame prohibitory acts, asking the medical man of the community to prescribe who should or who should not be permitted to use alcohol, thus placing the whole responsibility for the carrying out of this act upon the medical man's shoulders. Knowing of the conditions which arose during the carrying out of that act I view with a great deal of suspicion the effort that is now being put forward by misguided people to give a glamour of respectability to their efforts to popularize birth control.

Let us go back a step and look into that which caused the dismemberment of Greece and Rome. Deliberate interference with the natural consequences of the exercise of the marital privilege is not nearly so modern or so novel as most of its advocates think. The article on Birth Control in the February edition of the Nova Scotia *Medical Bulletin* would have us think otherwise. Prof. C. E. Stangeland in his "Pre-Malthusian Theories of Population" [1] clearly pointed out that the Greeks viewed marriage as an institution to furnish the state with inhabitants and citizens, without whom it could not exist. In the time of Aristotle and Plato this theory of population restriction was prevalent, but it was not until the later period of disorder and tribulation of the industrial and commercial population of Athens, that it gained considerable prominence. This was the period immediately preceding the decadence of Grecian civilization. Similiarly with Rome. The popular idea, as Polybius has pointed out, was a love of display and idleness. He said, "The most they consent to do is to have one or two children whom they may leave rich and seated in the lap of luxury." From the 5th century B. C. to the present day may seem a far cry but at different periods and with varying prominence, have the fear of over-population and the cry for population control appeared. From the history of these great nations, it is well known that the moment natural laws are disregarded, that moment the family life is undermined, the economic greatness of the state perishes and it falls depopulated and wasted. It is proven repeatedly in history that any process which destroys the family,

1. **C. E. Stangeland,** "Pre-Malthusian Theories of Population," p. 18, New York, 1904.

destroys the state, because the family is the state. It is needless for me to refer to the disintegration of more modern states.

May I be permitted to ask you to view more closely the more dangerous and calamitous consequences that would result from the carrying out of this abominable practice. First I will deal with contraception. Can you conceive of a recently married man and woman beginning a new life, having all the sympathy, affection and intelligence necessary to begin that life in the proper spirit, stooping to the question as to how to limit the number of their offspring? Can you, for a moment, consider it proper conduct to begin this new life with the prepared idea of prevention or interruption of conception? The very idea of such is degrading to the sense of right and wrong, not to mention grave psychiatrical and neurological disorders which often result. I have before me at this moment a man but recently married who sidled through a partially open door, furtively approached me and asked for information as to a method for the prevention of conception. Mark him well. He entered the marriage state shirking the responsibility of raising his offspring.. He would make a mistress of his own wife and he the paramour. Is this the type of union that is to carry on the ideals and splendid record of the people who have gone before us?

Now that the world is faced with depression and problems which it finds difficult to solve, the advocates of birth control claim that their theory will solve the unemployment situation. Let me tell these people that we had unemployment and depression when we had *not* one-quarter of the people that we have in the world to-day and that unemployment and depression do not depend upon the number of people in any country. It would be unfortunate and certainly not a solution for its problem for any country to destroy life to relieve a transient depression. Is there a man within my hearing who would advocate or encourage his recently married daughter or sister to practice birth control? From my own experience I have found that the couples who have practiced contraception or interrupted pregnancy in its early stages impair their good health and sterility often results. The violation of a natural law is followed by a reflex punishment and the wife in the case is a frequent subject on the gynecological table. This act destroys the ideals and weakens what is noble and best in man. The modern inception of the idea was first found among the pleasure-loving people of our country who wished to enjoy the liberties and freedoms of this life without subsequent responsibility.

I will now briefly point out the economic aspects of this idea of contraception. In the article on Birth Control, page 76 of the Feb. edition of the Nova Scotia *Medical Bulletin* reference was made to the imminent danger of population outstripping its food supply. The statement without going beyond the bounds of charity and ordinary courtesy, is entirely wrong. Allow me to refer to several thickly populated countries. The Federal Farm Board of the United States have recently approximated the total acreage now under cultivation as 20 per cent. of the total potential acreage. One of the objectives of the "World Grain Parley" which is being held in Rome, is to reduce the world's wheat acreage, for which purpose delegates from forty-six countries are convocated. In the U. S. 365 million acres are now under cultivation whereas 608 million acres remain available for use. China, a very thickly populated country has about one-third of the land under cultivation with over a half billion acres left which may be cultivated. Then we must also take into consideration improved methods of cultivation, crop rotation, the substitution of mechanical

power for animal power, the use of better fertilizer, etc., also the modern preparations of synthetic foods. So by the application of these processes the planet is capable of supporting a population measurable only in astronomical figures.

The present unemployment may not be rightly explained in terms of over-production nor is population restriction its solution. Unemployment is an excess of job-hunters over jobs which excess can be removed by reducing the number of job-hunters; this happy fantasy is surrounded with a pleasing aura of plausibility. Lionel Robbins[2] and Sir William Beveridge have shown that unemployment is a by-product of industrial change and maladjustment and the view that attributes every appearance of unemployment to over-population deserves nothing but contempt. This theory of over-population as an explanation of unemployment is popular with the followers of Malthus but even A. M. Carr-Saunders,[3] an ardent Malthusian, recognizes the unsoundness of the explanation of unemployment in terms of over-population. May I quote Dr. Robert Kuczynski,[4] noted economist of Washington, D. C., who says emphatically, "I even venture to say that if one set out to *increase* unemployment in this country for the next fifteen years he could find no more efficient means than birth restriction on a very large scale." For how is it possible, one may ask, that fewer children would not mean a general economic relief when those who have only one child can afford a better living than those who have three or four? This is true to a very limited extent. John Smith, with one child, is economical—better off than other people with more children, but if the rest of the community should also have one child per family then Mr. Smith would starve. In other words, a man may enjoy economic comfort on an increase in population if he does not contribute to this increase himself and provided the rest of the community do not follow suit. The Federal Farm Board of the United States has recently announced an over-production of wheat to the extent of three hundred million bushels. The fault lies not in the over-production, which, to even the most feeble-minded is poor economics, but to the fact that the heads of the government have failed through maladjustment and mismanagement.

What will be the result if society were in the throes of population decline—a remorseless contraction of the consuming market, a decline in the margins of profits in the great bulk of industries and commercial centres. Building operations will undergo shrinkage which will not arrest the downward pressure upon rents. The inevitable consequence of this development will be lessening of the mortgages and similar securities. The result of all this will be a material decline in wages and the scale of living will go down. But this is not all. A declining population results in a disproportionate piling up of people in the upper age groups. The proportion of people over forty will increase. This will mean a great increase in the number of dependents in whole or in part on their relatives or charitable institutions which will result in an elaborate old age pension scheme. The effect of this accumulation of fiscal burden means

2. **Lionel Robbins,** "The Optimum Theory of Population", pp. 125-126.

3. **A. M. Carr-Saunders,** "The Population Problem; A Study in Human Evolution," p. 312.

4. **Dr. Robert R. Kuczynski,** Annals of the American Academy of Political and Social Science, July, 1930.

a heavier burden on men and women of the most productive ages, with a consequent deferment of marriage and thus a still further reduction in birth rate, with a resulting destruction of the whole economico-political structure put together through the years and a period of declining efficiency, a far greater menace than the "over-crowding" predicted by the advocates of the prevention of births.

I will conclude with a brief discussion of the medical opinion regarding birth control. The medical profession is often recklessly quoted in support of one or other side of this much controverted subject. But definite and emphatic opposition to this theory of birth control has been advanced by many of the leading medical experts of the world, gynecologists neurologists and psychiatrists both in America and Europe. But to date, there has not been a single definite pronouncement either for or against birth control by a single authoritative medical body or society. The Federal Council of Churches of the United States, after a continuous study of this problem for some years have come to the conclusion: "It is known," says the Council, "that the medical profession is divided." By what curious twist of logic the Council leaps from the admission that medical opinion is divided to the conclusion that contraception is to be given guarded approval is difficult to comprehend. It feels obliged to point out that in the light of present knowledge, a certain element of uncertainty still remains, and then quaintly adds that married couples should welcome children—should they come. How welcome those children would be after all else failed. With what great and joyful expectation the mother would anticipate the arrival of a child whose conception she has tried every possible means to prevent.

The so-called "Doctors Bill" proposed by Senator Gillett of Mass. in favor of the dissemination of literature regarding birth control in the States was promptly and emphatically repudiated by the American Medical Association. Some doctors will say that due to the physical condition of the woman, pregnancy may interfere with her physical and mental well-being. But on the other hand, even the strongest advocates of birth control cannot deny the fact, that in the light of present knowledge, the means which may be taken for the prevention of conception are far from being one hundred percent efficient, the range in fact, varying from 30% to 80%. This implies an extremely important element of uncertainty and danger to the woman concerned.

In the section devoted to correspondence in the Nova Scotia *Medical Bulletin* of May last, I read a letter in which reference was made to the investigation conducted by the Christian Churches of America. I will read for you the three reasons for upholding birth control, advanced by that body as indicated in the letter.

1. It may be morally right in certain circumstances.
2. Some form of "effective control" of families is necessary.
3. There should be some sex union between husbands and wives as an expression of mutual affection without relation to procreation.

As to the first reason I will dismiss it by reminding you of the up-and-coming physician who said that it may be appendicitis and then on the other hand it may not be. With regard to the last two reasons they are too beautifully indefinite to disturb. What a delightful and uplifting sentiment is suggested in the third pronouncement. I will once more refer to the article on birth control in the Feb. issue of the *Bulletin* in which the writer bases part of his argument on the necessity for limiting the number of insane and diseased

and suggests birth control as a solution for this problem. But so would the segregation of those unfit to propagate and it would not be accompanied by the very important element of dangerous consequences to which I have already referred.

A cross section of the medical profession, both of America and Europe, may be taken in an effort to arrive at some responsible and concrete viewpoint of birth control. Eleven members of the British National Birth Rate Commission have made the following condemnation of contraception: "Medical evidence has been given that all unnatural modifications of marital association and all artificial contraceptive methods, by mechanical or chemical contrivances, if habitually employed by normally constituted individuals, are harmful."

A well-known Netherland gynecologist, Dr. M. A. Van Bouwdizk-Bastiaanse, declared contraceptive methods a failure from the viewpoint of medical hygiene, mentioning as examples of serious consequences, cancer of the neck of the womb, sterility and in some cases death. He adds that the dangers resulting from the methods of contraception are far greater than those connected with pregnancy and child-birth.

Professor Sellheim of Leipzig University, in an address which he delivered as Chairman of the German Congress of Specialists on Women's Dieseases, at Leipzig in May, said: "Nearly every method to prevent pregnancy, has, at least as far as woman is concerned, a not inconsiderable injurious effect upon her health. Nature can't be fooled. Continuous but vain irritation of the woman's sexual organs makes the woman more or less subject to illness in the abdominal tracts and not infrequently sterile."

F. J. McCann, M.D., famous English surgeon and President of the League of National Life says: "The injurious effects of different contraceptives are at last appearing in medical literature. . . . All known methods of contraception are harmful to the female; they only differ in being more or less so."

Dr. Sigismund Peller, Viennese gynecologist, is unequivocally opposed to birth control. In a recent survey of a thousand physicians in the United States, among whom were many of the leading gynecologists and obstetricians of the States, it was learned that the greater percentage of these men were vigorous in their condemnation of this mal-practice while the rest were very reluctant to express an opinion. Drs. William Graves and Donald Macomber of Harvard are known to condemn, on medical grounds, the prevention of pregnancy, as advocated by professional contraceptionists.

I could go on indefinitely quoting these leading physicians of the world, but, I fear, over enthusiasm in this regard has carried me beyond my time limit. I will finish by leaving with you a question which you may meditate for the rest of your lives and pass on to your descendants *ad infinitum*. Admitting that this theory has all the advantages that its advocates claim it has, by what method, in the name of High Heavens, can this fantastic, iniquitous theory be administered?

*Read at the 78th Annual Meeting of the Medical Society of Nova Scotia, at Truro, July 9th, 1931.

Why Rome Fell

DR. H. W. SCHWARTZ, Halifax, N. S.

AT the July meeting of the Nova Scotia Medical Society, we were told that indulgence in Birth Control was the cause of the downfall of Rome. This was not the first time one had heard this very questionable theory advanced with the positivenes of proven fact. Undoubtedly, it is intended to leave in our minds the idea that Birth Control, as eugenically applied and advocated to-day, is an identical thing, and its practice may be expected to yield the same disastrous results.

So eminent a scholar and philosopher as A. J. Balfour sums up the situation for Rome in the following paragraph taken from his lecture on "Decadence."

> "It is in vain that historians enumerate the public calamities which preceded and no doubt contributed to the final catastrophe. Civil dissensions, military disasters, pestilences, famines, tyrants, tax gatherers, growing burdens and waning wealth—the gloomy catalogue is unrolled before our eyes, yet it does not in all cases wholly satisfy us; we feel that some of these diseases are of a kind which a vigorous body politic should easily be able to survive, that others are secondary symptoms of some obscurer malady, and that in neither case do they supply us with the full explanations of which we are in search. Consider for instance, the long agony and final destruction of Roman Imperialism in the West, the most momentous catastrophe of which we have historic record. It has deeply stirred the imagination of mankind, it has been the theme of great historians, it has been much explained by political philosophers, yet who feels that either historians or philosophers have laid bare the inner workings of the drama? Rome fell and great was the fall of it. But why it fell, by what secret minds its defences were breached, and what made its garrison so faint-hearted and ineffectual—that is not so clear.

Prof. Sir Ronald Ross, when speaking of the part Malaria may have played in this great tragedy, said:—

> "The student of Biology is often struck with the feeling that historians, when dealing with the rise and fall of nations, do not generally view the phenomena from a sufficiently high biological standpoint. To me, at least, they seem to attach too much importance to individual rulers and soldiers, and to particular wars, policies, religions, and customs; while at the same time they make little attempt to extract the fundamental causes of national success or failure."

That this unknown should be searched for and theories advanced as to its probable nature, is quite right and proper, but in doing so to compare infanticide and abortion (the only forms of birth control possible at that time) with modern methods of prevention of conception, more especially when applied as an eugenic measure, is most misleading.

It is quite possible there may be something in this theory. Neglect of the home and shirking of parental responsibility is no trivial matter. We must, however, try and avoid falling into the error of comparing the best of the best days with the worst of the worst days, and forgetting that there were probably ideal homes in Rome when it was at its worst, and wretched homes when at its best. Nevertheless, it is not unreasonable to think of the decline as a something affecting all departments of life, and that both the morale and the moral life of the people had fallen to a low level.

Rome's trouble was of a very gradual onset, the fatal illness of prolonged duration and is recorded not in terms of years but in that of centuries.

> "Her young men were killed in her endless wars. Her farmers were ruined by long military service and by taxation. They either became professional beggars or hired themselves out to rich landowners, who gave them board and lodging in exchange for their services, and made them "serfs," those unfortunate human beings who are neither slaves nor freemen, but who have become part of the soil upon which they work, like so many cows, and the trees. The Empire, the State, had become everything. The common citizen had dwindled down to less than nothing."...."The Story of Mankind" by H. Van Loon.

It therefore seems to me that any deliberate depopulation measure was an effect or reaction, provoked by economic conditions rather than a basic cause. To mistake a sign or a symptom for the disease is not good enough. We must search for a pathological change sufficient to explain the fever, the pain, the tenderness, the rigidity, the nausea.

One will now direct your attention to the biological theory, which attempts to make such a diagnosis that whenever and wherever a typical group of symptoms present themselves the same tissue changes may be suspected.

Charles Darwin said that if there are no means by which to

> "prevent the reckless, the vicious, and otherwise inferior members of society from increasing at a quicker rate than the better class of men, the nation will retrograde, as has too often occurred in the history of the world."

Frances Calton, referring to "the rates with which the various classes of society—classified according to civic usefulness—have contributed to the population at various times, in ancient and modern nations," said, "there is strong reason for believing that national rise and decline is closely connected with this influence."

Professor Karl Pearson said, "The inexplicable decline and fall of nations, following from no apparent external cause, receives instant life from the relative fertility of the fitter and unfitter elements combined with what we now know of the laws of inheritance."

Dr. C. W. Saleeby, commenting on the preceding quotations goes on to say,

> "keeping in mind these various expressions of one great idea, let us re-consider one of those phenomena of history, which no historian can be accused of neglecting; that phenomenon is war. This has ever been the historian's delight. But while war is one of the most important factors in history, a dominant reason of its importance has hitherto escaped all historians. Their interest is in generals and armies and battles; in treaties of peace and terms of conquest; in short, in its political results. The new History will inquire into all the racial consequences of war. If the historian learns that the flower of the nation's youth has been destroyed, in a victorious campaign, he may think the fact worth reckoning with, as well as the circumstance that the indemnity demanded amounted to so many dollars. Perhaps it is always of some interest to the philosopher to observe the individual—or the nation—who exchanges life for gold and his certain fate. Consider now the case of Imperial Rome. The immediate instrument of Empire was of course military force. There was always some "little war" proceeding on the confines of the Empire. There was a persistent selection from decade to decade and century to century of the most competent and physically capable men for military purposes.
>
> A distinguished American thinker, a Professor Jordan, has lately suggested that we have here a biological key to the problem of the fall of Rome. The best were chosen for soldiers, one may say, that *those that were not good enough to be soldiers, were left to be fathers.* The best stocks were gradually exhausted; of which, perhaps, the strongest proof is the fact that the "Roman" legions ceased to be recruited from the Roman people. When the process

of the survival and perpetuation of the worst had continued long enough, the race had degenerated into that Roman mob which demanded "bread and games," upon whose heads their Empire came crashing down, as all empires will, upon their living foundations when those foundations decay.

Thus in the light of the supremely important truths which we associate mainly with the name of Darwin, modern thinkers are becoming more and more to believe that the great historical tragedies, like the fall of Rome, are due to the operation of what may be called *reversed selection* under which those individuals to whom Nature would allot the privilege of parenthood, are treated as food for powder, or are swamped by the multiplication of individuals of both sexes from whom in a natural state the supreme privilege of parenthood would have been withheld. In the early days of a nation, such a process cannot possibly be permitted; moreover, it is held in check by the mere fact that the weakly children do not grow up to become fathers and mothers. It is when success, if attained, that the quality of the race comes to be forgotten as the dominant factor of its permanence. Thus among many savage peoples to-day, who have no powers except those inherent in the individuals composing them, the principle that the culture of the racial life is the vital industry of any people, is recognized and acted upon. Marriage must be the privilege of those who have proved themselves worthy members of the tribe.

In short, in our modern study of history, we are coming down to basal biological fact, and especially to that universal and immeasurably potent fact, termed heredity, in virtue of which the principle of the selection of the best for parenthood, the principle of the new science of Eugenics or race culture, is conceived as a political ideal compared with which all others are trivial. We come back, indeed, to the golden words of Ruskin, who tells us that the essence of all government is "the production and recognition of human worth, the detection and extinction of human unworthiness." Those of us who believe in these principles, and who incline to the view of Ruskin that "the beginning of all sanitary and moral law is in the regulation of marriage," are fully entitled to look backwards into history to ask whether the biological truths upon which these ideas are based, truths applicable to all forms of life whatsoever, are not also illustrated in the events of human history. It may thus be that we shall learn deeper lessons from the past than any which have hitherto been drawn. We may be absolutely assured that such lessons must be drawn, could we learn the truth, from a fact so amazing as the utter ruin of the greatest empire in history."

The decline of Rome was a long, long process, but this present civilization is likely to tread the self same path unless we change our habit of thought. The characteristic that future historians will probably note will be that of the comparative swiftness of its decay. Our civilization has more to contend with than had that of Rome. *Warfare* has become many times more destructive. *Modern medicine* makes the keeping alive of the unfit no small part of its humane mission. *The Christian Church* has yet to have its conscience aroused to the criminality of encouraging indiscriminate reproduction.

Is it not a startling paradox that two of the great pillars of our civilization should at the same time be its grave diggers?

Responsibilities and Relationships Involved in Working Out an Effective Health Programme*

MISS ELIZABETH L. SMELLIE, Ottawa.

I BELIEVE I am speaking to you as board members or administrators of individual institutions whereas you are being kind enough to listen to a nurse executive, a type of liaison officer, continuously in touch with local associations and their nursing personnel in an advisory, professional capacity in eighty-three Victorian Order centres throughout Canada. While helping the local associations through our regional supervisors, exceptional opportunity is offered of assisting in linking them up with the National Office, of demonstrating to them the value of such affiliation, of organization on a fairly uniform basis and of the necessity of maintenance of a high standard of service both as regards personal and professional qualifications, if the workers in the field are to be fully effective.

My knowledge of hospitals from the inside has been as charge nurse in undergraduate days, night supervisor in a small Western hospital as the only graduate on duty, Matron overseas, and Assistant to the Matron-in-Chief in the administration of military hospitals in Canada from 1918-20.

Latterly, my opportunities of observation have been from the outside looking in, and rather as a seeker after the finished product. From that angle I shall later venture to make a few remarks.

To you who are board members may I say now, that my relationships with our public-spirited members of national and local committees throughout Canada have taught me much, and one thing above all others, that the professional person has a definite responsibility to help the laymen see the professional side, whether she be the hospital superintendent or the director of a nursing service. The professional head is bound to benefit from getting the point of view of those using, supporting and in some cases influencing the supply of future recruits to the nursing service. It must be remembered too that board members are, therefore, in a position to educate the public and to speak for the community at large as regard their attitude toward the hospital and the nursing service. In speaking of the nurse, of course, one thinks of her as the co-worker and essential adjunct to the practicing physician or public health administrator. As Dr. Cabot says:

"I cannot draw any line between nursing and medicine. I have tried many times to do it, but I cannot say where the doctor's job begins and nurse's stops. In this service in which I cannot help identifying myself with you, the first thing that I see as characteristic of it and not characteristic of most other employment in which your friends or my friends are engaged, is that there is no limit to what you are expected to do."

What usually seems to happen when people are approached to act as board members, is a prompt assurance that there will be nothing to do unless to attend an occasional meeting. This is a great mistake. Why might they

*This was the paper presented by Miss Smellie, Superintendent of the V. O. N., at the meeting of the Hospital Association in Windsor, last June.

not be chosen because of a special capacity, as representatives of an individual group, and would not rotating memberships sometimes help? Miss Mary Gardner suggests three points for guidance of board members of public health organizations which are generally applicable: the substance of these is:

1. A realization that important work lies before them to which they must expect to give their serious and personal attention.
2. An understanding that the work must be entered upon with minds hospitably inclined to new ideas, new methods, new developments, because of the danger of limitation to growth by the rigidity of preconceived ideas.
3. An appreciation of the fact that a board is not an isolated group of people working alone for better health, but an important link in the great chain in the public health movement and that the strength of the whole is its strength as well.

"Nor does the board's responsibility rest with the association. The whole health situation of the community must be understood, for health agencies are dependent on each other for the achievement of their full measure of service."

Insofar as membership in particular on a hospital board is concerned and where a training school is involved, there is an additional responsibility beyond the provision of the necessary care for the patients. That is, as regards the professional preparation, supervision and instruction of the undergraduates; and as to their housing and general physical welfare if they are to take the best possible care of the patients entrusted to their care. The first training school for nurses at St. Thomas' Hospital, London (to which Hospital Miss Nightingale devoted the national gift presented to her after the Crimean War) was established, not to furnish nursing service for the Hospital, but solely for the education of nurses. The school had a separate economic foundation distinct from the Hospital. Its service proved so useful to the Hospital that before long other institutions began to adopt the new idea of training schools, but to establish them, not as separate educational enterprises, but as working departments under their own management with a student as a sort of apprentice.

The primary idea then has frequently been lost sight of and the second responsibility of board members, previously referred to, as regards the requirements of the student nurse, is frequently overlooked if not wilfully neglected. Many institutions are maintaining training schools from which nurses are graduating who have met the practical needs of the hospital from the institutional viewpoint, but who, from the point of view of adequate training and supervision, are not actually fully-qualified nurses when they emerge from that hospital. They may even on account of overwork and crowded quarters be less fit physically to assume their duties than they were when they entered hospital, in addition to being handicapped by having had an inferior training. The tendency has been to increase the number of probationers as the number of beds increase, without any thought apparently as to responsibility beyond the present needs of the hospital. The school must have some responsibility surely, as at the present time there is a great deal of unemployment among private duty nurses. It is cheering to learn from someone closely in touch with the hospital situation in one of the provinces, that, becoming more acutely aware of the needs of the training school and having regard to the present economic depression, several hospital boards of smaller institutions, having

studied this matter carefully, have come to realize that to provide adequate teaching facilities and supervision for undergraduates, is undoubtedly necessary, but not sound from the economic viewpoint and that it appears to be indicated to be less expensive and to the advantage of everyone concerned to employ a selected graduate staff for general duty, which means, of course, eventually doing away with their training school. One hospital with one hundred beds, decided themselves that they could not afford to maintain a training school. At the present time organizations outside are being deluged with applications for duty from nurses unable to secure work.

Within a year we will have the report of Dr. Weir's survey and more accurate knowledge of the general situation throughout Canada as regards nursing service than we have at the present time. Nevertheless, even now from personal experience we can assure you that a great many applicants, particularly from the smaller schools, we can not possibly employ even though some of them may have managed to pass their registration examinations in their own province. The reason for this is that many of the smaller hospitals and indeed some of the larger ones, give nurses a very limited experience and yet have no arrangement for other affiliations. What the Victorian Order and other public health organizations are looking for is the graduate of the recognized school with sufficient number of beds and daily patients to ensure a good general training. This neither she nor her hospital can claim unless it includes sufficient experience in obstetrics, pediatrics and commuicable disease. (More and more, too, we are looking for the nurse who has had some training in mental hygiene). Unless a nurse has had experience in maternity work, in dealing with children, and has a working knowledge of the specific means of preventing disease, she can not be fully effective in her work outside and her practice must necessarily be limited. A great many of our nurses formerly flocked to the United States. Now they are obliged to remain at home, and the hospital launching a nurse on the community, improperly trained and possibly adding to the number of the unemployed, is assuming responsibility which eventually must reflect unfavourably on the board and superintendent of that institution. Conditions can not be improved unless by action of such bodies as this, urging regular inspection of training schools and of hospitals by well-qualified people. Do not for one moment confuse the issue by thinking of or quoting statements as to the woman who is "a born nurse" or "a good practical woman." There is undoubtedly a place in the general scheme of things for such an individual. We are speaking now of the fully qualified nurse. Neither, surely can one be labelled an idealist who is engaged daily in endeavouring to meet the practical needs of a large number of communities throughout Canada.

True, no amount of training will prove adequate if fundamentally the nurse is not a woman of character, intelligence and capability. There must be something to build upon. Good home training and sound educational background is a fine beginning. Here Nova Scotia has the advantage and a tradition to uphold. The superintendent of the hospital is not always allowed a free hand. It is not always possible to detect the weaknesses of individuals during the early or probationary period and it seems much more difficult to dispose of the services of a nurse when she has got beyond this period, so that she is sometimes allowed to get by with the idea that eventually she may prove fit for some other type of work and to the outsider this strange thing happens that the nurse is graduated when the institution is not pre-

pared to employ nor yet to recommend to another organization. What a cheerful outlook for the patient or for the organization to which she applies.

In public health work, the type in which there are now increasing opportunities, we want first of all the good hospital training as a basic foundation. The best additional qualification is the year's post-graduate public health training. We wish to get all these nurses we can secure for responsible positions. While Nova Scotia was one of the first provinces to put on public health training at the University, there has been no course here now for a number of years. In the meantime, however, many of your local committees having been educated to the point of demanding the nurse with public health training, the result has been that we have had to import nurses from other provinces. You know of the bequest and public-spirited action of your own Mr. Crowe. We prefer to employ the regional (not necessarily the local) nurse provided she is properly equipped.

When that day comes, that along with curative procedure, both medical students and nurses become familiar in their under-graduate work with the normal individual and the preventive aspect of disease, there will be less necessity of additional special training of precisely the same type.

In our own organization because we have not had suffiicnet public health graduates, we established, in Montreal, three months' periods of intensive training to equip staff nurses for bedside nursing and health teaching in the homes. This can never take the place of the other, but it helps to equip the staff nurse. The average graduate nurse is of little use to us until she has had practical experience in visiting nursing work under supervision.

Now providing hospital boards and administrators have worked out their own salvation, have a representative, active board, a good advisory committee to the training school, a hospital up to a certain standard, how do they feel with regard to their relationship to the community? Too often hospitals, just as do organizations, become centralized to such an extent that there is danger of their sense of community responsibility being dulled. What is their relationship toward the public generally, the medical profession at large, the public health officer, the public health nurse or social worker? How close is the follow-up in the home when the maternity case leaves the hospital, or the surgical case, the mother who has to return home for family reasons and who still needs a dressing? Or does the health worker outside make such visits to the patients whether she is to care for them later or whether they are entering hospital? What about facilities for caring for the chronic or incurable case, or the tuberculous patient in the community? Personally one likes to visualize in the future the hospital as the health centre, from which radiates all the health work in that centre or county,—a local health centre linked up with the workers of other agencies representing health, social, governmental agencies and public-spirited citizens. Dr. Winslow gives us the ideal to work towards, I believe, in these paragraphs from "The New Leadership"—"There is room—there is urgent demand—for a larger synthesis, for the application of group thinking between the groups themselves which make up the community as a whole. Lindman reminds us that institutions 'become social dangers when they proceed without a science or a philosophy.' The directors of nursing agencies must have a science and a philosophy and they cannot work it out safely for themselves and by themselves. The health agencies of every community should be knit together into a health council so that they may jointly think out their problems and jointly plan, in conference with the

health officer who is ultimately responsible for the whole health programme of the community, what their own part in that health programme should be.

"Finally, the health programme itself must be integrated with the wider social programme of which it forms a part. Here, as in the smaller field within the organization, it should be not a question of votes and victories, not a display of force or of the wisdom of foxes, but a creative group planning for the common good. Royce's principle that the test of our philosophy is the largeness of its loyalties is still sound to-day."

COMMUNITY DOCTORS AND PUBLIC HEALTH.

(Toronto Telegram).

Although Parliament gave short shrift during the present session to a proposal to nationalize medical services, a community system which might easily assume greater proportions has taken firm root in Western Canada. In rural districts of Saskatchewan and Manitoba, where doctors were few and far between and where practitioners found it difficult to make a living, there are numerous cases of physicians being engaged by municipalities and paid out of public funds. The system had its start ten years ago. There are now twenty-one physicians employed full time in this way, and seventeen part time, their services covering thirty-two rural communities.

The doctors are paid $4,000 a year, which, in many cases, is more than they made before. Freedom from financial worries is said by several to have improved the quality of their professional services. Immunizations for scarlet fever, smallpox, typhoid fever and diphtheria have materially increased since the plan was put into effect.

The farmers pay for the doctor in taxes on their real estate, the cost per family running from twelve to sixteen dollars. To discourage summoning the doctor for trival causes, fees are sometimes allowed for first calls. Small fees are also charged for minor operations. Drugs are paid for by the patient.

There seems no reason why the plan should be confined to rural districts. Both patients and doctors benefit under a system which guarantees the doctors, fees and assures medical services at a reasonable rate. The development of the co-operative plan, whether municipally or otherwise, has interesting possibilities.

It is with profound sorrow that we anounce the death of our late Preident, Dr. Charles C. Brace, on August 26th, nineteen hundred and thirty-one.—*The Denver Chemical Manufacruring Company.*

Venereal Diseases from a Public Health and Social Standpoint

J. K. McLeod, Sydney, N. S.

TUBERCULOSIS and cancer are generally looked upon as two of the most serious health problems the profession has to deal with. I think, probably the Venereal disease exceeds even these in importance for it is so widespread, so difficult to control and difficult to cure in a satisfactory manner.

Owing to the nature of the disease and the manner in which patients are infected the disease is hidden from the family and from the public. I think it is generally conceded that venereal disease, with its complications and serious sequelle, is the greatest killing disease of which we have any knowledge. No organ of the body is exempt from the infection, and the brain and spinal cord, in so many instances, become infected that patients end either in the asylum or become permanent paralytics. In years gone by houses of ill fame and what are commonly known as street-walkers were counted largely as the cause of these diseases, but now the disease spreads largely through those, who are morally and physically impure and who infect innocent victims. Maids in our families, entrusted with the care of children are often the cause of spreading the disease to innocent children.

In the City of Sydney the government, as elsewhere, established a clinic, in the neighbourhood of a thousand cases, the large majority of whom are not of the low type, we sometimes expect these cases to be, several being under ten years of age. These young cases of course, are congenital and were not known to be infected until blood tests were made. Besides these, doctors treat many cases of which we never hear. It is said that 10% of the population through cities are infected. This will give some idea of the prevalence of the disease and the seriousness of it from a public health and social standpoint.

Under the circumstances what should be done in this connection? The governments of almost every civilized country have established venereal free clinics which have done a great deal of good, not only in the treatment of the disease, but also as educational centres. Many cases come for treatment now which formerly received none and it is rare indeed, at the present day, to see the open cases of syphilis which were seen so frequently in general hospitals, forty or fifty years ago. But further steps should be taken towards the control of this disease by a follow-up service similar to that in tuberculosis, where every case is known and every case under treatment. In addition, those who deliberately infect others, should receive such severe punishment as such conduct deserves. Education in homes, schools, church and through welfare associations and from the press, until the public are thoroughly informed of the dangers of these vile diseases and the method by which they are spread.

Cripple Children

IN case someone does not voluntarily comment upon the appointment by the Medical Society of Nova Scotia of three of its members to the Board of Management of the Nova Scotia Society for Cripple Children, the writer wishes to congratulate the Society upon its action. It was good policy, good business, as well as being of distinct community service.

One is prompted to ask the question as to what should be considered as adequate medical attention and adequate community care in this connection. It is not always easy to ask pertinent questions, sometimes it is even easier to answer than to ask.

In a recent issue of the BULLETIN reference was made to the many phases of this general question and the desirability of just such an organization as that recently organized. We must remember, however that the expression "prevention is better than cure" is applicable to many forms of modern welfare work. This is emphasized in the title name of this Society in the use of the word "Cripple", instead of the generally used term "Crippled". As a matter of fact the Medical Profession would be failing in its duty to itself and the people of Nova Scotia if we did not point out that our present handling of this situation should concern itself in prevention, as well as cure, care and treatment.

If we were writing a studied article or treatise on this general subject it would be roughly divided and considered under three general heads,—(1) The finding of present crippled children. (2) The care and treatment of the cases. (3) How to lessen the supply.

Even the first cannot be handled in a haphazard manner; it should be carried on in a systematic way, to be complete. Under the second head we have made very considerable progress, but we are falling woefully short in covering the entire number of cases. This is particularly true as regards care and training after active treatment, including manual training and general education. Yet the trail is well blazed and when various agencies co-operate under the direction of the Department of Health, financed proportionately by province and municipality, we shall make rapid progress.

If adequate care includes the lessening of the yearly supply of cripples there are two essential things to know (1) The causes which produce the crippling and (2) the prevention or treatment of these causes.

In Canada, speaking generally, the deformities of crippled children are chiefly due to infantile paralysis, tuberculosis, congenital deformities and rickets. Their relative importance is thus estimated:—Infantile Paralysis 40%; Tuberculosis 30%; Congenital deformities 15% and other causes 15%. These percentages vary according to climatic, hereditary, economic, social or other conditions of living. Having in mind these conditions in Nova Scotia we probably have a larger rate for the cases due to tuberculosis and rickets. It is stated, moreover, that 65% of cases due to these causes can be prevented. When we get this far the Examiner will give us a good pass mark. What should we stand for along these three lines?

Infantile Paralysis.

There is still much to learn as to how the disease is communicated, but our chief handicap is in finding these cases in the early stages. Throwing

aside all ideas of false modesty, or false ethics, is the profession doing all it can to get the people to consult the family physician for what may seem like a trivial indisposition? If consulted does the doctor give the case serious attention? Does he chide the mother for undue anxiety? Does he laugh at her fears so that next time she is ashamed to call him? The epidemics in Saskatchewan in 1927, in Winnipeg in 1928, in Ottawa in 1929 and in Nova Scotia in 1930, have conclusively proved that convalescent serum brought about a great diminution in the number of deaths and the nearly complete elimination of permanent paralysis. Care during the convalescent period is of course, very necessary.

Tuberculosis.

In this instance the bacilli come from two sources, (1) other human beings who are themselves suffering from tuberculosis and (2) from milk from tuberculous cattle. The first needs the very hearty support by the profession and of all existing agencies operating to-day in every civilized country for the prevention of tuberculosis. In Nova Scotia this is under the direction of the Department of Health and should be greatly extended into the homes of the people, where the enemy is strongest.

The cases of crippling resulting from infection of bovine origin can be so nearly eliminated, that it appears necessary to speak a little more fully on this score. This is illustrated by the results noted in the Children's Hospital of Toronto. "Of the patients admitted to the hospital, suffering from Tuberculosis of Joints, between 10 and 15 per cent. acquired their disease from infected milk. The prevention of this entire group is easy as pasteurization of milk is a public health measure which is practised in all large centres. But in many of the smaller centres, and in practically the whole of the rural community, there is no pasteurization of milk. It is from these sources that cases of bovine tuberculosis come. All of the above mentioned cases in the Children's Hospital came from centres outside the City of Toronto, and from communities where milk was not pasteurized. No cases of bovine tuberculosis came from the City of Toronto where pasteurization of milk has been enforced for many years. It is, therefore, obvious from this that the establishment of accredited, or tuberculosis-free herds, throughout the country is absoltely necessary *where pasteurization is not enforced.* While progress is being gradually made in this direction it is a tedious and expensive procedure, but, when completely established, it will be one of the most potent factors in checking the spread of tuberculosis which arises from this source, but will also do away with all tuberculosis in dairy herds, with its great attendant economic loss." Attention need not be directed to this particular phase of the question were it not for the claims that have been fostered by persons, more or less concerned with the production of milk, that pasteurization was unnecessary and inefficient. Medical opinion should be pronounced in this particular. The future may open up something along the lines of immunization.

Rickets.

When the Nursing Health Service in Nova Scotia becomes fully developed, with natural sunshine and "bottled sunshine" in food and cod liver oil, there should be no cases of rickets in this Province, to add its quota to our present number of crippled children.

Adequate Community Care of Crippled Children involves general education of the people and the co-ordination of the activities of all agencies under the direction of the medical profession. S. L. W.

Expensive Quackery

That the *Bulletin* will continue to denounce the quack and his quackery goes without saying. If the Provincial Medical Board cannot protect the public from this self-styled "Doctor"; if the Medical Society of Nova Scotia cannot expose these fakirs; if it is not the business of the Department of Health; if the public insists upon being fooled every once-in-a-while; yet, when times are hard as at present, that the small town of Kentville should give such characters a thousand dollars to be fooled for a week, we are not surprised to read the following in a recent issue of the Kentville *Advertiser*:—

We Slipped Here.

"Kentville's dignity and her boasted march of progress were upset quite seriously last week when we slipped on a ripe banana peeling in the form of a medicine man and travelling comedian, known to the many hundreds of patrons at Webster Field as "Doctor Hill." "Dr." Hill's show was good. At least it would have been considered good in a hick mining town fifty years ago,—although it seemed a bit out of date in a progressive, modern town in the year 1931. "The Doctor" not only had a medicine which would cure neuralgia, deafness, indigestion, rheumatism, sore feet and scores of other ailments, but he also carried with him two black comedians of assorted sexes who kept the crowds in good humour while Hill extracted the dollar bills from their pockets. The black ones were assisted by an assortment of local talent.

Business was good while it lasted and it lasted all week. One prominent citizen, with watch in hand, counted fifty-five one dollar bills going over the counter for the 'medicine' in seven minutes of time. It is said that this quack took more than $1,000.00 from the local crowds during the week he was here. Naturally the medicine was 'fully guaranteed or your money back' (!) and miraculous cures were effected. One man who had not heard for forty years received his hearing after rubbing a bit of the stuff behind his ears. In addition to the staple 'medicine' this miracle man had for sale his famous 'passion flower', which according to advance notices had all the efficacy of monkey glands in renewing youth and virility without the expense and trouble of surgery. On the final day 'in appreciation of the generous patronage of local people' the stuff was put up at the bargain price of three for one dollar instead of one dollar per bottle as before.

It is sad to contemplate that the government of this province will permit this kind of humbuggery to be carried on and it is equally sad that the mayor and councillors of Kentville should feel the necessity of granting permission to this man to carry on his trade within the town limits. Our town council is made up of singularly sincere and intelligent men, but we cannot help but feel that they slipped up in allowing this fakir to practice at the expense of the over-credulous in this town and district."

With all our organization, we must recognize that ridicule in the Public Press is the most potent weapon to protect the people, but it puts us in a small place.

The Nova Scotia Medical Bulletin

Official Organ of The Medical Society of Nova Scotia.

Published on the 5th of each month and mailed to all physicians and hospitals in Nova Scotia. Advertising forms close on the 15th of the preceding month. All Mss should be in the hands of the Business Editor on or before the 10th of the month. Subscription Price:—$3.00 per year.

VOL. X OCTOBER 1931 NO. 10

SPECTRO-PHOTOMETRIC DIAGNOSIS OF CANCER

This editorial was submitted on August 20th, and it is greatly regretted that through ignorance the business editor held over this timely article from the September issue. S. L. W.

SOME English papers of the latter part of July were all agog over a development in this field which is charged with wonderful potentialities. For some time, attention has been called to work being done by Dr. G. T. Bendien of Zeist, Holland, and one of the statements made was that he was diagnosing cancer by examination of the blood. Cognizance was taken of this by The British Empire Cancer Campaign, and Dr. Piney, secretary of its Investigation Committee was sent over to investigate. With him went thirty-eight tubes of blood serum—sealed and numbered—which had been collected from persons suffering from different conditions, including diabetes, rheumatism and cancer, as well as some taken from normal persons. These were submitted to Dr. Bendien who in due course reported five of the number to be cancerous. A sealed envelope containing the diagnoses of all the different bloods was then opened, when it was found that the cancer diagnoses were correct in every respect.

The *British Medical Journal* for August 1st confirms the above and shows that the technique consists of two parts. The first is a flocculation method in which serum is precipitated with various mixtures of acetic acid and sodium vanadate, the precipitate is dissolved in 2% sodium bicarbonate solution, which is then submitted to spectro-photometric examination. From a series of spectrograms a curve is plotted, and it is on such a curve that a diagnosis is made. The B. M. J. states Dr. Bendien's view as being that cancer is a local disease which can only develop in the presence of a specific abnormality of the serum, and that he has expressed the hope that it may be possible to elaborate a therapeutic method capable of causing such abnormal serums to become normal and unsuitable for the growth of carcinoma. It gives, as of very considerable interest, the fact that Dr. Bendien has not been able to discover any such specific properties in the serum of sarcoma cases. Further investigation is being undertaken at the Cancer Hospital, London.

It is also of interest to note that this is another case where a practitioner in medicine has been able to make valuable contribution to Medical Science as a result of researches carried on while still engaged in practice. It is stated that he received some help from the famous Zeiss firm in the matter of the use of a laboratory and scientific instruments, and this combination of Dutchmen and scientific instruments reminds us of that other Dutchman—van Leeuwenhoek, pioneer in microscopic investigation—to whom modern Medicine is under such tribute. That the work of this later Dutchman will be found to be as susceptible of development as was that of the earlier, will be fervently hoped.

N. H. G.

THE REFRESHER COURSE.

IF numbers attending at the various clinics and lectures is a fair criterion, the Dalhousie Refresher Course this year was not the success it has been in the past, or should have been. Perhaps the reason for the small attendance resided in the fact that there were no outside lecturers. The committee in charge did try to get outside men, but when it was finally found impossible to obtain those on whom they had set their choice, it was too late to secure others. They did feel, however, in view of the following that the local clinicans had had in previous years, that a purely local effort should draw a reasonable attendance. Such was not the case.

When the University took up this matter several years ago it had the following concepts in its mind. It felt, first, that since it contained the only medical school in the Maritime Provinces, it owed a duty to the physicians of those provinces to offer something in the way of post-graduate instruction. It seemed to the men who activated the movement that the practitioners of the three provinces, and particularly of Nova Scotia, could draw benefit from such instruction.

In the year of its inception the course given was purely a local effort, but the following year the members of the committee organizing it decided to bring in prominent outside men to enhance its value. The crowded lectures of Dr. W. W. Chipman that year confirmed them in this view. But unhappily there are few Chipmans in this world. It was inevitable that other lecturers would lack his great gifts and mind and voice, and that in consequence the packed houses of that year would never be repeated. This year, unable as has been shown, to obtain outside men, they decided to stand entirely on the local effort. They felt that surely the men who had taught such a large proportion of practitioners of this province, could give a post-graduate service that would be acceptable to them.

There is a feeling among the teachers in the Medical School that if this refresher course is to continue as a healthy effort, if it is to develop the best that is in the local facilities, it must become a purely local effort. They feel that just in so far as they depend upon outside men to carry the weight of the course, and to act as its sole drawing card, just in so far will the local effort prove less than it could and should.

The whole matter of medical post-graduate work in the province, and particularly as it affects the refresher course, is to be taken up at an early meeting of the Medical Faculty of the University. It is intended that by giving this important matter more discussion and perhaps more planning,

the annual course can be so improved that it will stand on its own feet without outside help, and will become purely an offering by the University to the practitioners of the province.

Naturally the BULLETIN is interested in this matter. The Editors would be glad to hear from its readers any suggestions they would care to make as to how the refresher course could (from their personal point of view) be improved, and any criticisms of it which have occurred to them.

H. B. A.

DALHOUSIE OPENS.

THE report of the Dean of the Faculty of Medicine presented at the opening meeting of that faculty a few days ago contains some facts which are of considerable interest to us:

I. That out of several hundred applications received for entrance into Medicine, 48 only were accepted; that of the many applying for advanced standing two only were admitted—into the second year, and that the total registration is now 180.

II. That at the Dominion Council examinations of this year and last year, of the respective graduating classes writing there were no failures.

III. That the authorities of the Saint John General Hospital have agreed to take four final year students for six month periods of student internship.

The growth of this institution during only a few years has been quite phenomenal—from a position of relative obscurity to one of first rank. The Maritimes might well be proud of this position, and it is because of that and because it is so intimately connected with the profession and people of this province that the BULLETIN takes cognizance of this faculty meeting and of those items of the Dean's report, with their individual significance as well as their collective support of our premis.

More and more is this school supplying the medical needs of this province, and probably of the sister provinces of the Maritimes, and in direct proportion to that growth is, or should be, the growth of our interest as a profession in the quality of the material supplied to us. Dalhousie is singularly blessed in the raw material that it has to draw from. Truly "the lot has fallen unto her in a fair ground." But it is important that from that raw material she "lay hands suddenly on no man but make choice of fit persons. . . ." That errors in choice have been made and will be made no one will doubt, but a consideration of the Dominion Council examination successes must indicate that if mistakes were made early in the selection of men, they were corrected before the final year, and further, that those that survived Dalhousie's ordeals must only have been the fit.

The success of Dalhousians in other countries, in competition with men of other schools, of which there is evidence a plenty, lends further support to her claim for progress, and now the acceptance of her students by the authorities of that splendid institution at Saint John must be regarded as further testimony of the same sort.

This Saint John matter very properly works two ways, in that it is also evidence of progress in Saint John. It is now generally regarded as an axiom that the institution that is not a teaching one is not as good as a similarly equipped institution that is. Certain it is that the man who teaches should be all the keener for his teaching. The BULLETIN would then congratulate

the Saint John Hospital on this forward step, associated as it is with such potentialities for good.

Perhaps such fulsome praise for the position of the school is not without potentialities for mischief. No one need entertain any fear on that score however, for, even if our Maritime inferiority complex were not sufficient, there was evidence at that faculty meeting of such a degree of wholesome dissatisfaction as would save her from the dangers of complacency.

President Carleton Stanley is in harness and making very favorable impressions. It is to be hoped that his regime will see equally important developments in this medical centre. On behalf of the profession of this province the BULLETIN welcomes him to his most important post with all good wishes. Excelsior Dalhousie!

N. H. G.

We congratulate Dr. Carl H. Smith on receiving his commission as Flight Medical Officer in the Royal Air Force Medical Services, he being one of two selected in Canada to receive this appointment. Dr. Smith sailed for England on Friday, October 2nd, where he will take a nine months' course. Since this appointment requires high medical standing and the best recommendations, it is considered a high and coveted honor. This will leave a splendid opening in Berwick. For full particulars write General Secretary, The Medical Society of Nova Scotia.

TREAT PATIENT FIRST.

It has been said that medicine is made up of common sense and experience. The former is essential if one is to benefit from the latter. The practitioner is most likely to arrive at a correct diagnosis by means of an orderly method of examination, intelligent use of ancillary means of investigation, avoidance of bias, and the application of general principles derived from his own experience. If for a moment I may be didactic, I would say, Do not be satisfied with a diagnosis unless it explains all the symptoms, and if you have any doubt do not hesitate to say so. Even in the presence of the most difficult case we are not helpless; the whole of our art is not in diagnosis—certainly not from the patient's point of view. The patient seeks relief from his symptoms, and I recall the remarks made by the late Professor Leech in introducing a course of therapeutics: "Relieve the symptoms, make a diagnosis, treat the disease."—(Julius Burreford, M.D., London).

Department of the Public Health
PROVINCE OF NOVA SCOTIA

Minister of Health - - - HON. G. H. MURPHY, M.L.A., Halifax.

Deputy Minister of Health - - - DR. T. IVES BYRNE, Halifax.

SPECIAL DEPARTMENTS

Tuberculosis	DR. P. S. CAMPBELL	Halifax
	DR. C. M. BAYNE	Sydney
	DR. J. J. MACRITCHIE,	Halifax
Pathologist	DR. D. J. MACKENZIE	Halifax
Psychiatrist	DR. ELIZA P. BRISON	Halifax
Supt. Nursing Service	MISS M. E. MACKENZIE, R.N.,	Halifax

MEDICAL HEALTH OFFICERS ASSOCIATION

President	DR. T. R. JOHNSON	Great Village
1st Vice-Pres.	DR. M. J. WARDROPE	Springhill
2nd Vice-Pres.	DR. A. E. BLACKETT	New Glasgow

COUNCIL

DR. F. A. O'NEIL	Sydney
DR. R. L. BLACKADAR	Port Maitland

MEDICAL HEALTH OFFICERS FOR CITIES, TOWNS AND COUNTIES

ANNAPOLIS COUNTY

Braine, L. B. W., Annapolis Royal.
Kelley, H. E., Middleton (Town and Co.).
White, G. F., Bridgetown.

ANTIGONISH COUNTY

Cameron, J. J., Antigonish (County).
MacKinnon, W. F., Antigonish.

CAPE BRETON COUNTY

Densmore, F. T., Dominion.
Poirier, G. J., New Waterford.
MacDonald, N., Sydney Mines.
McLean, J. A., Glace Bay.
McLeod, J. K., Sydney.
O'Neill, F., (Louisburg & C. B. Co.)
Murray, R. L., North Sydney.

COLCHESTER COUNTY

Charman, F. F., Truro.
Havey, H. B., Stewiacke.
Johnson, T. R., Great Village (County).

CUMBERLAND COUNTY

Bliss, G. C. W., Amherst.
Drury, D., Maccan (County).
Gilroy, J. R., Oxford.
Henderson, Chas. S., Parrsboro.
Rockwell, W., River Hebert, (M. H. O. for Joggins).
Withrow, R. R., Springhill.

DIGBY COUNTY

Dickie, W. R., Digby.
Weir, A. F., Freeport (County).
Belliveau, P. E., Meteghan (Clare Mcpy).

GUYSBORO COUNTY

Brean, H. J. S., Mulgrave.
Elliott, H. C. S., Guysboro (County).
McGarry, P. A., Canso.
Stone, O. R., Sherbrooke (St. Mary's Mcpy.).

HALIFAX COUNTY

Almon, W. B., Halifax, N. S.
Forrest, W. D., Halifax (County).
Payzant, H. A., Dartmouth.

HANTS COUNTY

Bissett, E. E., Windsor.
MacLellan, R. A., Rawdon Gold Mines, (East Hants Mcpy.).
Reid, J. W., Windsor, (West Hants Mcpy.).
Shankel, F. R., Windsor, (Hantsport M. H. O.).

INVERNESS COUNTY

Chisholm, A. N., Port Hawkesbury.
McNeil, A. J., Mabou (County).
Ratchford, H. A., Inverness.

KINGS COUNTY

MacKinnon, H., Berwick.
Bishop, B. S., Kentville.
Burns, A. S., Kentville (County).
DeWitt, C. E. A., Wolfville.

LUNENBURG COUNTY

Davis, F. R., Bridgewater (County).
Donkin, C. A., Bridgewater.
Morrison, L. N., Mahone Bay.
Zinck, R. C., Lunenburg.
Zwicker, D. W. N., Chester (Chester Mcpy.).

PICTOU COUNTY

Blackett, A. E., New Glasgow.
Day, F. B., Thorburn (County).
MacKenzie, S. G., Westville.
Stramberg, C. W., Trenton.
Sutherland, R. H., Pictou.
Whitman, G. W., Stellarton.

QUEENS COUNTY

Ford, T. R., Liverpool (Town and Co.).
Smith, F. P., Mill Village (Mcpy.).

RICHMOND COUNTY

LeBlanc, B. A., Arichat.

SHELBURNE COUNTY

Brown, G. W., Glark's Harbor.
Churchill, L. P. Shelburne (County).
Fuller, L. O., Shelburne.
Banks, H. H., Barrington Passage (Mcpy).

VICTORIA COUNTY

MacMillan, C. L., Baddeck.

YARMOUTH COUNTY

Blackadar, R. L., Port Maitland, (Yar. Co.).
Lebbetter, T. A., Yarmouth.
O'Brien, W. C., Wedgeport.
LeBlanc, J. E., West Pubnico (Argyle Mcpy.).

INFORMATION.

The Provincial Public Health Laboratory provides free diagnostic services for the entire Province. Free examinations are made of blood, cerebrospinal fluid, cultures, smears for gonococci, sputum, urine, faeces, pleural fluids, pus, water, milk, brain tissues for rabies, as well as throat, ear and prostatic swabs. Physicians desiring this service should address their communications to, Dr. D. J. MacKenzie, Public Health Laboratory, Pathological Institute, Morris St., Halifax.

Physicians desiring serums and vaccines should address their communications to the Department of Public Health, Halifax, N. S.

THE CANCER PROBLEM.

DR. J. W. S. MCCULLOUCH, Toronto; in Canadian Public Health Journal.

THE recent announcement by the Premier of Ontario of his intention to establish a Royal Commission for the investigation of cancer treatment has given high hopes to those interested in the control of a grave public health problem.

There is some conflict of opinion as to whether the apparent alarming increase in the incidence of cancer is a real increase or whether this increase is due to better diagnosis, more accurate records or to an increase in the number of persons of the cancer age. Whether or not these factors suffice in accounting for the increase, the fact remains that in 1929 there were 8793 recorded deaths from cancer in Canada, and that the affection, as a "killing" disease has now usurped the place of tuberculosis and stands second in this category. Moreover, since there are estimated to be 2½ or 3 times as many cases as deaths, the number of cancer cases in Canada cannot fall far short of 25,000 a year.

Cancer is usually an insidious disease. In its most common form—cancer of the alimentary tract—early diagnosis, the most important of all factors in the cure of the affection, is difficult, and treatment is correspondingly unsatisfactory.

According to our present conception, the cancer cell at the outset is a normal cell which has acquired, for some unknown reason, the power of rapid proliferation, and is able to influence neighboring healthy cells to follow its riotous example. This power of rapid and repeated division of the cancer cell is probably the fundamental basis of its successful control by modern measures. The rapid proliferation of the cancer cell is its weak spot; because of this weakness, a cancer is more amenable to treatment than otherwise.

The control of cancer involves methods of prevention and methods of cure. The preventive measures may be summed up briefly under early diagnosis, early observation and treatment of so-called precancerous condition, and education of the public in the avoidance of causes—of local irritation. While there is no certainty that irritation actually causes cancer, there is ample evidence that such irritation is frequently followed by cancer. Examples of this are seen in the prevalence of cancer of the surface of the body, of the alimentary tract, the cervix of the uterus, the rectum, etc. As an exciting cause of cancer there seems no doubt that local irritation is a prominent factor. Public health education in respect of cancer is of similar importance to education in other public health fields. The public, and even many of the doctors, are woefully ignorant of the simple facts respecting malignant disease. The control of tuberculosis dates its beginning from the days when voluntary societies and health agencies first instituted the anti-tuberculosis movement. A similar movement is needed in cancer control. If the public is told the truth about preventable diseases, a marked step will have been taken in their control.

Since the general practitioner is usually the first one to see a suspicious case, much depends upon his alertness and ability in early diagnosis. This and the early observance and treatment of precancerous conditions are of the utmost importance in the reduction of cancer mortality.

The cure of cancer involves the use of surgery, the X-Rays and radium. Most important in the treatment is early diagnosis. This is relatively easy in cancers of the surface of the body, of the skin, lips, mouth and throat. Diag-

nosis of internal cancer is increasingly difficult the deeper one goes. Of all auxiliaries in diagnosis of internal cancer the X-Rays is the most valuable.

With early diagnosis surgery remains the chief measure of treatment in cancer of the internal organs such as the intestines, the stomach and the uterine body. Combined with the use of X-Rays and radium, surgery offers, in early cancer, a high proportion of cures.

For cancer of the surface of the body, the skin, lips, tongue, mouth and throat, the cervix of the uterus and in some cases of rectal growth, the use of radium is the most modern and effective treatment. Its effect is similar to that of the X-Rays, but, with the machines in use at present, X-Rays are less effective than radium. Radium and X-Rays appear to have a selective action on the cancer cell probably because of the active proliferation of that errant body. The satisfactory use of radiation involves high expense, and the most skillful technique. For these reasons it is a treatment for hospitals in large centres of population and not one for the great mass of physicians. The phenomenal advances made in the technique and results of radiation treatment since the beginning of the century seem to give promise of still greater accomplishments in this direction, and it is gratifying that the government of Ontario has decided to make the subject one of careful enquiry in order to minimize as far as possible, future errors in cancer control."

In an address to the Members of the Union of Nova Scotia Municipalities, The Hon. Dr. G. H. Murphy, Minister of Public Health for Nova Scotia, emphasized the need for the control of tuberculosis. Taking as his slogan "*The Health of a Nation is the Wealth of a Nation*" he stated that it has always been found to be good political economy to look after the physical welfare of any nation. Whilst the mortality from tuberculosis was decreasing yet the drain upon the best lives of the Province was still too great, and a more agressive and effective policy to control the disease must be instituted. We must tackle the case of the "spreader" either by isolation or by proper and systematic nursing in the home. Continuing he stated, that he would like to develop the nursing services of the province along the lines of the County Unit System. "We shall have to spend more money on the work, and I am not in a position to tell you at the present moment where we are going to find it, but I am not in any great doubt that means shall be found."

He touched upon the work of the Training School at Truro which is making valuable citizens of some of its inmates.

Cancer he stated, was claiming almost as many lives as tuberculosis, and the Department hopes in the near future to have a fully developed radium Clinic at the Victoria General Hospital which will be made available to the people of the Province. Along these same lines he announced that arrangements were being made to place the Public Health Laboratory at the service of the various hospitals of the province, so that all suspected tissue might be examined free of charge.

The housing situation was mentioned as an aid to the work of the Department, but in closing he stated that he could not hope for any measure of success unless he had the assistance of the whole Province, and that he and the Department earnestly looked for the closest co-operation of everyone. From the attentive manner in which the address, or rather, the heart to heart talk was received, there is no doubt that this will be given.

To the Hospital Superintendents and the Medical Profession
of the Province:—

I desire to draw your attention to a re-arrangement in the services rendered by the Provincial Pathologist, Dr. R. P. Smith. Dr. Smith has been taken over by the Department of Public Halth, to which Department he will now be directely responsible instead of to the Board of Commissions of the Victoria General Hospital. This change does not effect in any way the status or work of the Public Haelth Laboratory under the direction of Dr. D. J. MacKenzie, nor does it disturb the relations of Professor Smith with Dalhousie University. It is necessary to employ an extra Technician but with this exception there is no change in Professor Smith's relationship to his assisting staff. The object is to bring Dr. Smith in more intimate touch with the Pathological requirements of the smaller hospitals of the Province. Beginning October 1st, 1931, all specimens of tissue sent through any of the hospitals, will be examined free of charge. The arrangement is to be the beginning of an effort to attack the Cancer problem. Making tissue examination more accessible, will, we believe tend to earlier diagnosis and consequent earlier treatment. With our present knowledge of the disease, these two factors, EARLY DIAGNOSIS AND CONSEQUENT EARLY TREATMENT, are primary fundamentals.

We trust this arrangement may make the hospitals feel freer to use every resource which the Department can offer to enhance their own efficiency and promote the best interests of the health of the Province.

Yours sincerely,

GEORGE H. MURPHY,
Minister of Public Health.

Halifax, N. S.,
26th Sept., 1931.

Communicable Diseases Reported by Medical Health Officer.
July 22nd to Aug. 12th, 1931.

Disease	July 22	July 29	Aug. 5	Aug. 12	Total
Cerebro-Spinal Meningitis	....	....	....	2	2
Chickenpox	1	....	5	....	6
Diphtheria	1	3	....	1	5
Infantile Paralysis	....	....	....	....	....
Influenza	2	....	1	1	4
Lethargic Encephalitis	....	....	....	....	....
Measles	....	2	....	....	2
Mumps	....	1	....	1	2
Paratyphoid	....	....	....	1	1
Pneumonia	1	....	....	....	1
Scarlet Fever	6	1	1	2	10
Smallpox	....	....	....	....	....
Typhoid Fever	....	....	....	1	1
Tuberculosis-Pulmonary	1	....	1	....	2
Tuberculosis—Other Forms	1	....	....	....	1
V. D. G.	....	2	2	....	4
V. D. S.	1	....	1	....	2
Whooping Cough	2	1	....	2	5
Totals	16	10	11	11	48

The Medical Health Officer

DR. R. L. BLACKADAR, Port Maitland, N. S.*

THE matter of Preventive Medicine has made very wonderful strides during the last ten years. For a long time held to be the domain of extremes, it is now recognized by the laity to be a very important phase of the many activities of a progressive government. The old idea that one's health is a matter of only private interest, has been superseded by the realization that, "No Man Lives Unto Himself."

The Great War demonstrated the fact that certain diseases could be prevented and others controlled, and instruction, along the lines of prevention, and of other conditions causing illness, certainly gave a great impetus to the study of preventive medicine and the practical application of the knowledge gained to ordinary living conditions.

The public to-day are somewhat informed as to the advisability of personal attention to their own health from a preventive standpoint. This is shown by the interest of a group of people business and professional who have periodic examiations made, monthly and tri-monthly, and reports given to their physicians if there be discovered the least trace of pathological condition. This is alright from the purely personal standpoint.

The great advantage of Public Preventive Medicine lies in the control of disease as affecting a community, a country, a province and must necessarily come under a directing force which has the power to inflict penalties upon the non-observances of its regulations, which have been established for the purpose of preventing the spreading of disease and thus we have our directing authority the Minister of Health, his Deputy and the Medical Health Officers.

The advisability of the existence of this central authority with its officers, is now recognized by the public as being their guarantee in the protection of their health. Let us briefly consider the Medical Health Officer, as functioning in our municipalities and for which he receives a "retainer" of $100.00, for in no other light can this sum be considered.

His weekly duty is to forward to the Deputy Minister of Health a report of all communicable diseases received. For no Health department can effectively prevent or control disease without the knowledge of when, where and under what conditions cases are occuring. He acts as advisor to the Municipal Board of Health and inaugurates the necessary control over disturbing local public health conditions. The public to-day demand efficient control over epidemics and there is to be seen that a preventable Public Health sense has been created, which is in great contrast to the helpless attitude of previous years and as well does it win confidence in the Public Health Organization.

The carrying out of any further work is prevented on account of lack of funds under municipal control. Some of the matters which should be considered by the Medical Health Officer of a county are, in addition to actively directing the control of a situation already present, he must go further and inaugurate preventive work, in order to guarantee the public protection from

*Read at the Medical Health Officers' Association, Truro, July 7, 1931.

that danger which they are unable to secure themselves and the work demands trained men. A survey must be made of the community health. This means examination of our school children, their surroundings, the school house and in many instances their homes. A check up on tubercular cases as well. The conditions surrounding the production and handling of milk which has now its increment of dangers to Public Health, such as Septic Throat, etc.

The inquiring into the conditions surrounding the sales of food, which now due to the great increase of Roadside Booths, renders inspection necessary. Tourists camps and camp sites must be checked up now. So many use the camps that proper sanitary conditions must be furnished. These are some of the activities that the Medical Health Officer must take care of.

It is unnecessary for me to draw your attention to the large number of people—tourists who come down to Nova Scotia to spend their well-earned vacations. That there is a very great number is shown by the fact that last year in round numbers 75,000 people passed through the Port of Yarmouth. Our proximity to the population of the American Eastern Seaboard—the close communication by splendid steamers, the opening of a half million dollar hotel at Yarmouth and the building of three additional steamers by the Eastern Steamship Lines for 1932, show the confidence of the transportation companies in the future of Nova Scotia as a Tourist resort. It is estimated that these tourists leave an amount of money amounting to several millions of dollars. The enormous expenditure on our Highway is one which the government feels justified in making, not only for our own necessity, but to furnish the necessary facilities for tourists.

In addition, we have our efficient Police Patrol that our own Public may be protected and that a sense of security be given the tourist travelling in our province, and we also have the hearty co-operation of the Public in our safety in connection with our motor traffic. Our Government has anticipated the situation and are able to guarantee a practically perfect service in this respect and have spent large sums of money in advertising these facts, while at the same time directing the attention of the tourist that Nova Scotia is "The Playground of America."

As an example of American Public Protective Health Care, their Public Health Service requires a complete analysis made of the water furnished to the steamers running into Yarmouth. Thus periodic analysis of Yarmouth town water source and supply is required and furnished to the United States Health Department for reasons evident to you all. The American Tourist has a well trained sense of Health protection as a result along these lines which have been carried out for many years. In the cities from which we draw a large proportion of our tourists, the presence of any contagious children's disease more particularly Diphtheria, Scarlet Fever, etc., arouse great alarm and unrest among them, due to lack of confidence in our Health functioning preventive measures.

Let us consider for a moment upon what points we may guarantee that protective health measures have been taken.

1. We can guarantee them milk free from Bovine Tuberculosis.
2. That our population is quite well protected against Smallpox.
3. We should be able to guarantee that our school children have been adequately examined and properly attended to, for in many cases the tourists children mingle with our children.

4. That our camping sites and tourists camps are safe. That the articles offered for food at our road-booths are kept fit for human consumption and those selling them in good health. In other words that a complete sanitary survey has been made. By the word "Sanitary" I mean all that is embraced by the term, not only control but prevention.

The attitude of the Government and the transportation companies compels one to conclude, and I think rightly, that the tourist business is one of the great factors in our economic life. As you are aware, it is estimated that three hundred million dollars were spent in Canada by the tourists last year, and Nova Scotia's position is such as to warrant her to expect a large share of this new and rapidly growing business.

The carrying out of a Health Programme cannot be done under the existing Municipal arrangement. The Public Health Work is of the very greatest National Importance and must be carried on as a national work. There must be a whole time Medical Health Officer for each county so that the work may be expertly carried on. Public Health is a matter of supreme National importance and as such must be financed as other great national projects are financed.

Goodwill in business is a very tangible something that holds customers even when the heads of the business change. Although it is not entirely transferable, because personality enters largely into the matter, it is still a valuable asset. Present day competition seriously threatens the establishment of a permanent clientele which can be transferred from firm to firm under the heading of "goodwill."

The *Bulletin* has frequently expressed the opinion that medical practices could not be bought and sold to-day as formerly; a new doctor could buy some real estate, but buying the *practice* was another and totally different matter. Perhaps some of the reasons are due to changing conditions of general practice in these modern times, in particular we refer to the ease with which patients in the country can consult town or city doctors and be admitted to the larger hospitals. The change may be necessary owing to death, advancing age, physical infirmities or personal or family reasons, after perhaps, many years of faithful service. Should not the successor in this instance, get all possible consideration from the clientele of his predecessor? Possibly there might be a little more official supervision of such transfers to avoid competitions where the amount of practice was limited. We even venture to suggest that such transfers should be governed by the strict ethics of our profession in our relations to each other and to the public.

On the other hand, often the public appear to feel aggreived when a doctor after five or ten years of faithful service, wishes to do post-graduate work and settle in a larger field. But why? Their own sons and daughters and the members of other professions do these same things. Why is it right for them and wrong for the doctor?

Think it over.

Bulletin Library

DR. S. L. WALKER, Halifax, N. S.

(Unless otherwise indicated, the opinions herein expressed are the personal ones of the writer, being in no sense official and differing opinions will be gladly noted in this Department.)

EARLY MEDICAL HISTORY.

THE BULLETIN republished, a year or two ago, that remarkable historical Essay prepared by the late Dr. D. A. Campbell of Halifax, as it appeared in the *Maritime Medical News* in 1904. Until one has tried to write ordinary local Medical history he cannot appreciate the time and patience that Dr. Campbell devoted to recording the great amount of information he presented in this Essay. We are reminded of this upon reading recently, in the Liverpool *Advance*, the following reference to an early practitioner in that section of our Province. The article is headed "Early Days in Liverpool", and is as follows:

> "The fine grounds on which the present Church of England Rectory is built was purchased by Dr. Andrew Webster, who began the practice of Medicine in Liverpool about 1790.
>
> His parents of English ancestry were among the early settlers of the State of Maine moving there from Salisbury, Mass.
>
> Andrew moved to Liverpool with his brother James. Col. Perkins frequently refers to the Dr. in his diary. He practiced in the style of the day with much bleeding and many poultices, but was highly esteemed. He built the house, which, when he passed away, became the Church of England Rectory. It is now an excellent mansion, has been considerably renovated and is of a fine Colonial type.
>
> Dr. Webster married Ann, daughter of Joseph Barss, a name famous in privateering days. Mrs. Webster died and he later married a daughter of Hallet Collins. Dr. Webster's daughter, Martha, by his first wife married in 1833 John Carten, a well educated Irishman. It was an elopement, the young lady dropping from an upper window to the young man waiting below.
>
> 'Farmer Smith,' who conducts the well known Rainbow Haven club in the *Herald* is a grandchild of this union.
>
> Dr. Webster was related to the celebrated American orator and statesman, Daniel Webster."

This reference is made because the writer was requested, some months ago, to advise if this Doctor Webster was an Empire Loyalist. Dr. Campbell wrote thus of Dr. Webster:—

> "Dr. Andrew Webster came to Liverpool from Orono, Maine. In 1811 he married Ann, daughter of John Barss of Liverpool. One of his daughters married John Carten. Dr. Webster practiced in Liverpool for many years, and must have been a general favorite, if one may judge by the number of babies who were named after him. He died on August 10th, 1855, aged 77 years. He was not related to the Kentville or Yarmouth Websters."

The article we have quoted throws some additional light on this subject but does not fully clear up the situation. Dr. Webster was born in 1778, yet it is stated that he began practice in Liverpool in 1790—an unusually early age. This is mentioned to bring out some of the difficulties of the modern

historian. There are always discrepancies in dates, etc., which make a positive statement by the present day writer an impossibility.

There is also a further difficulty that this influx of citizens of the United States were not all Simon-pure Empire Loyalists. But where and how should the discriminating line be drawn? Moreover, what difference does it make? They all came to Nova Scotia because they preferred to live under the flag of Old England. The same conclusion applies to the Barss family into which Dr. Webster married. It is our opinion that descendants of this family are fully entitled to inclusion in any United Empire Loyalist Association.

But if you have ever thought that writing medical history was a soft job, a cinch, please forget it.

S. L. W.

ROBERT BURNS.

Abstracts of Current Public Health Literature, published by the Federal Department of Health, has a review of Dr. H. B. Anderson's address recently delivered before the Toronto Burns' Society. The conclusions drawn as to the cause of his death appear reasonable. The review by Dr. J. J. Heagerty is as follows:

"In an address delivered before the Toronto Burns' Society, the author discusses Dr. James Currie's biography of Burns, which has created the impression that Burns was a man of dissolute habits and died of chronic alcoholism. Currie met the poet once, and then for a few moments only, on the streets of Dumfries, and has been obliged to rely upon hearsay evidence and whatever he could glean from John Syme, with whom Burns was intimate. The dependability of Syme as a witness has been shown to be doubtful, yet it is almost wholly upon his opinion that Currie based his explanation of the cause of the poet's death.

Critical examination of the evidence submitted has brought to light many inaccuracies and misstatements which lead to the conviction that Dr. Currie, unwittingly, but nevertheless grossly, misrepresented the habits and character of the Scottish poet.

The number of poems and letters of the poet are certainly inconsistent with a life of drunkenness and debauchery, but a positive denial of alcoholism as the cause of death must be based upon an intelligent interpretation of medical data, and it is upon such a basis that the author has built up his evidence to show that Burns did not die of alcoholism.

Numerous references to the poet's death which have been collected from his writings and which are to be found in Allan Cunningham's "Complete Works of Burns," show quite clearly that Dr. Currie's opinions were based upon insufficient and unreliable information and prove conclusively that Burns died of rheumatism and heart disease—practically a life long condition.

While it is true that the poet often attended convivial gatherings and was given to occasional excesses as was the custom of the times, yet we have the testimony of men of unimpeachable character which exculpates him from the charge of habitual drunkenness. Rev. James Grey, minister of Dumfries at the time, says, 'The truth is, Burns was seldom intoxicated,' and Mr. Alexander Findlater, his superior officer in the Excise, states emphatically: 'I have never beheld anything like the gross enormities with which he is now charged,' and Dr. Copland Hutchison adds: 'I lived in Dumfries during the whole period that Burns lived there. I was much about and saw him daily, but I never saw him the worse for liquor. He might drink as much as other men but certainly not more.' All of which shows that Burns was not a chronic alcoholic. Death from chronic alcoholism at the early age of thirty-seven years is most exceptional.

We are told by the poet's brother Gilbert that Burns at the age of fifteen was the principal worker on his father's farm, and even during that youthful period he suffered from dull headackes and, at a later period of his life, from palpitation of the heart and a feeling of fainting and suffocation in the night time—symptoms indicative of cardiac involvement,

and, which the author shows—created in the mind of Burns the ever-present thought of an early and sudden demise. His letters to his father and friends express this fear: 'I am taken extremely ill with strong feverish symptoms. . . .embittering remorse scares my fancy at the gloomy forebodings of death.'

On January 31, 1796, the poet wrote: 'The autumn robbed me of my only daughter, a darling child,. . .I had scarcely begun to recover from the shock when I became myself a victim of most severe rheumatic fever and long the die spun doubtful, until after many weeks of a sick bed, it seems to have turned up life and I am beginning to crawl across my room.' He was ill from October until the following January, so that the attack was quite evidently a severe one. A little later he wrote to Dr. Maxwell: 'Rheumatism, cold and fever have formed to me a terrible combination; I close my eyes in misery and open them without hope.' Again, in a letter to Cunningham he says: 'In these eight or nine months I have been ailing, sometimes bedfast, sometimes not. For the past three months I have been tortured with an excruciating rheumatism which has reduced me to nearly the last stage. Pale, emaciated, so feeble as to occasionally need help from my chair.'

As the author points out, 'one need not look for a full and accurate description of his case; but it is remarkable that in his correspondence the symptoms Burns describes and the information he furnishes are sufficiently definite to place the diagnosis of his disease beyond reasonable doubt.'

When Dr. Currie wrote his biography, the cause of rheumatism was unknown, and the relationship between rheumatism and heart disease only dimly realized, and it was only to be expected that Dr. Currie should have overlooked it. Had he our present-day knowledge of pathology, he would in all probability not have mentioned alcohol at all as a causative factor in Burns' death.

While there is no doubt that alcoholism plays an important part in shortening life, yet few medical men, if any, have ever seen a man die of chronic alcoholism at the age of thirty seven years. All medical men will agree with Dr. Anderson, who has presented so excellent a treatise upon the subject, that although all clinical data that one would wish in order to make a clear diagnosis is not available, yet the evidence brought forward, coupled with our present-day knowledge is quite sufficient to convince physicians that chronic alcoholism was not the cause of the poet's death.

Dr. Anderson has earned the gratitude of the literary world for his painstaking study of the life-long physical suffering and those pathological factors that brought about Burns early demise."

BULLETIN OF THE ACADEMY OF MEDICINE—TORONTO.

The value of this publication to the Medical Profession in Nova Scotia is chiefly noticed in the lectures, post-graduate or otherwise, that are published in almost every number. The July, 1931 issue on the *Bulletin* desk has, as its opening article, an address by William Goldie, M.B., on the "Management of the Infirmities of Old Age."

What is old Age, and when does it begin? is rather a complicated question. Why should it be regarded as a laudable ambition for anyone to attain? Yet our natural desire to avoid premature death, makes it a very practical question. In this connection, it is noted that a usual answer in life insurance as to the cause of death of parents and grandparents of *Old Age* or *Senility* has gone by the Board. It has been abundantly proved from the records of the past 150 years that these answers are most unreliable and of little value. For actual life insurance purposes this reply is of most misleading character unless after the age say, of what, after 60, 70 years,—or 75 years? There will be exceptions, of course, as some people at 50 are older than others at 65 or 70. Is there any rule that can be accepted as a guide in this particular? We are really not in a position to give a definite answer to this inquiry. We must

again resort to the compromise statement, that in some cases it is earlier than others and each individual case must be judged on its own merits.

Here comes the great responsibility of the physician, for he can only answer from his knowledge of the patient or the applicant for insurance. Can the official examiner of an Insurance Company approve of such statements without personal knowledge?

Most applicants for insurance will tell you that their parents, perhaps, and their grandparents usually, died about 70 or 80, or more years of age, of old age; when in all probability they died of cerebral hemorrhage, pneumonia, or some other condition likely to show itself in that period of life. Would it not be better for the Company to obtain the official death certificate in cases of this kind? These are now usually available in case of any death in Canada since 1900. But most of these deaths are in those where past damage as well as natural decay, have lessened the effectiveness of organs or tissues of the body, which leads to new diseases and invaliding conditions.

But we started this article for the purpose of noting what Dr. Goldie says are general rules that should be observed by those entering the so-called Old Age periods:—

"**Work and Exercise** must be limited to what can be undertaken just short of production of fatigue, unease, breathlessness, violence of heart action, etc.

No sudden, violent or prolonged effort should be undertaken, especially after a meal.

But do not go to the extreme of putting a patient to bed because of a physical finding when no effort syndrome is present. Exercise may be defined as the doing of something requiring a different co-ordination than the usual work, and should be stopped before tiredness and at the time the person feels the stimulation and would like to carry on.

Exercise gives the best results when it is associated with an interest or hobby or when it results in evidence of something done."

2. **Rest** must be increased by remaining in bed for nine to twelve consecutive hours and by lying down for five to thirty minutes two or three times a day, before the onset of tiredness or discomfort, as a five minute rest before tiredness is better than two or three hours after.

3. **Sleep** is less necessary than prolonged rest, but when lack of sleep is felt and accompanied by restlessness and fuss, treatment is necessary and when successful in cases of arterial disease brings surprisingly beneficial results.

Sleep is best promoted by preventive and indirect means. Excitement, mental stimulation and the use of tobacco should be avoided for at least one and one-half hours before bedtime, though the effect of these may be counteracted in certain people by lying in a hot bath for twenty or twenty-five minutes. The under-nourished frequently respond to small quantities of nourishment at bedtime. Some will secure sound and prolonged sleep after the taking of Aspirin and Soda Bicarbonate. The majority of cases of arterial disease respond best to Whiskey. When a sedative has to be used repeatedly, the combination of Codeia Phosphate gr., ½, Luminal gr. ½, Veronal gr. iii, every other night will be found to be the most successful with the least reaction, except in the presence of a falling blood pressure.

4. Diet regulation is a subject upon which one hesitates to touch, so many are fads and fixed ideas that exist among the profession. Apart from special

cases such as certain affections of the pancreas, liver and bowel, certain general rules may guide us—

(a) Nourishment should be limited enough to reduce overweight and then be maintained to prevent gain of weight.

(b) The food should be fresh and of the type supplying all necessary vitamins.

5. **The fluid intake** should never be increased above the normal amount unless there are clear cut reasons for an increase. The actual requirements over the fluid in the food is only twelve to fourteen ounces, yet patients without special faults are found to be taking one hundred or more additional ounces to the detriment of their circulation, kidneys and tissues.

6. **Regulation of bowel evacuations** would require a monograph, hence only a few general points in practice will be touched upon.

If the bulk of content, the digestion, the bacterial flora, etc., etc., are within normal limits, the evacuations should be one a day and be followed by a very definite sense of satisfaction.

To have several evacuations in the day, if not arising from long established habit, is more abnormal than having only one in three days. A patient may have three evacuations a day yet be several days late and in consequence be in grave danger if abnormal decomposition takes place.

The habit of going at a fixed time should be established.

7. **The amount and type of clothing** must be determined by the individual but the garments next the skin should be changed and refreshed daily, and the shoes and stockings twice daily. The latter is the more important, for experience teaches that there is no other simple measure which gives so much comfort and sense of rest. Besides doing this, it decreases the incidence of congestion of the nasal mucous membrane and relieves it when it occurs and thus aids to lessen the frequency of "colds". We know very little about the functions of the skin, yet the longer one is in practice the greater the impression that it has an importance far beyond being a cover and heat regulator.

Local failures of circulation in the various tissues and organs are familiar to all, with the varied signs and symptoms according to the tissues affected and the suddenness or the amount of circulatory failure.

A common symptom is the occurrence of cramps of the skeletal muscles, especially in the legs. These cramps may be slight and transient or so severe as to be as agonizing as Angina Pectoris and accompanied by shock and followed by several days of prostration.

The immediate use of Whiskey—with or without Nitroglycerine, brings prompt relief. As a preventive measure Whiskey and Digitalis (m xv-m xx) at bedtime may be used indefinitely or until other measures have improved the general and local circulation.

Sleeplessness, dizziness and head distress are probably the most frequent symptoms of arterial disease with local failure of circulation in the head.

I have spoken of the methods of dealing with sleeplessness, but I wish to emphasize the usefulness of whiskey except in the case of a few people who respond unfavorably, and to call attention to the effect of the Barbuturic Acid Compounds and combinations in controlling sleeplessness, fussiness, dizziness, etc., and in bringing about an unlooked for change in the circulation. There are repeated records of the effect of these compounds on the circulation

usually accompanied by warnings as to the severe reactions in cases of low blood pressure or falling blood pressure. With small doses, just sufficient to produce restfulness, such as the combination of Codeia Phosphate gr. ½ Luminal gr. ½, Veronal gr. iii, every other night, and when no other drugs are administered, there is a gradual change in the capillary bed reactions in the skin. The response to stroking becomes more prompt, more normal in appearance and rapid in recovery, i.e., there is little or no delay in the appearance of the red streak, the color is normal and the fading nearer to the normal time. This reaction is accompanied by a general improvement in color and the patient's statement of a sense of well-being.

This reaction is frequently noted after the ordinary cardio-vascular mixtures have failed, but my impression is that the combination of the two brings the better and more prolonged effect with or without a fall in the diastolic pressure.

In some cases the improvement is just as dramatic as when the failing heart, not responding to other medication, reacts promptly to Morphine.

Apart from the aches and pains arising from chronic infection, there are aches and stiffness, evidently related to changes in local circulation and in local or general chemistry which yield frequently to the Cincophen group and Alkalies; sometimes to quick changes from Alkalies to Acids and Acids to Alkalies; and the use of Iodine and Throid Gland.

I have only outlined the problems of this period and touched upon relief measures which can be widely supplemented from your experience, and in closing I wish to emphasize, that although the old age period is one in which "damage done" and "natural decay" become evident, one is never justified in taking the stand that "He is an old man. What can you do?" "She is breaking up." "Telephone me if you think I can do anything for you." This period calls for your best in diagnostic skill and "art."

One must always rouse from the dulling effect of a continuous puzzle and renew the attack, especially by putting aside the old history and taking another as though the patient had never been seen before.

Only by the adoption of such an attitude can one hope to solve the problems, and from these put in force preventive measures in the earlier decades to ward off those damages which cause most of the discomforts and the majority of deaths in the later decades."

ESPERANTO.

We are not sure whether or not there ever has been, or will be introduced, a language that may be used and understood by all the different races of people. Perhaps this was a hope in the minds of some people when efforts were made to introduce such a language style as we have indicated above. Perhaps it is, or is not at this time in the oblivion entirely, and we are not so sure but what its sponsors had in mind may not have been both possible and desirable.

This brings us to note that there should be some language which doctor and patient, or the doctor, and the public could mutually talk and understand. Perhaps the pendulum is swinging in this as it does in most things that are really of value, a little too far one way, and then a little too far in the other direction. There was a time not long ago when the physician, in talking with

his patients, or with the relatives of his patient, would use medical terms almost exclusively. He seemed especially happy if he could employ Latin expressions. It may have been natural for him to do this, for he was following his teachings, and furthermore, he probably liked to do it since to him it seemed to indicate great wisdom. Instead of accomplishing his object of impressing these with wisdom, however, it probably increased the uncertainty and mystery concerning medicine in the minds of individual patients.

When the public began to demand a certain amount of information regarding disease and its prevention, the Medical Profession were required to adopt a new language, one that the laity could, or thought they could fully understand. The natural tendency was for the doctor to use a mixed language, inspired by his own scientific knowledge and his conception of what the public could understand regarding it. When he undertook this duty he was very much handicapped by the charlatan and the irregular practitioner who knew little, or nothing, about the scientific facts, but did know the language in which the general public were accustomed to express their thoughts. The question is then naturally raised,—is the medical man to-day properly educated to convey actual information to the public about the prevention of disease and the promotion of good health in a language which the men, women, and children of the Province will understand?

There is no question whatever, but that it is the duty of the Medical Profession to give information to the public that will be helpful in establishing a more confident and intimate relationship between the public and the profession, and will convey to them the necessary information along proper health lines.

As yet in our own immediate field we are not aware that there are very many of the Profession that do so adapt themselves in the use of language that will convey their own scientific knowledge in terms that will be plainly understood by men, women, and children generally. Perhaps this is a field for our doctors to cultivate if they are to co-operate in the general health education of the public. This may be accomplished by a greater freedom in expressing their opinions in a way in which they will be best understood. As a matter of fact the great medium between the Medical Profession and the public in health matters has been the Public Health Nurse. This is because she has been especially trained in the way of giving such advice as the people will fully understand and can fully carry out.

In case anyone would think that perhaps the Editor of the *Bulletin* is giving expression to thoughts of this nature of his own account, we are using the suggestions that were all found in a Presidential Address that was recently given before the American Association by Dr. Judd of Rochester, Minn. The idea conveyed in his address emphasizes the obligation that the Medical Profession has for the community at large, and some of the preparation that is needed in order that he may best discharge this obligation.

A portion of Dr. Judd's Address reads thus:—

> "The organization of all medical activities in each state, so that the Public Health Association, State Medical Association, and all other associations and auxiliaries are under the one head helps greatly to co-ordinate all medical activities. This scheme brings the medical profession to assume this leadership, but it is also its solemn obligation to direct all medical activities.
>
> Society must be made to realize that organized medicine is perfectly able to control and operate its affairs without the help of the government or other outside organizations and that it can do so to the advantage of every one concerned."

The *Bulletin* has received the 1931 to 1932 announcement of the University of Western Ontario, London, Canada, of its Faculty of Public Health. The University may well be proud of the training that it is giving leading up to the degree of Dr. P. H. Besides full descriptions of the regular course very suitable information is given regarding post-graduate courses, this class of teaching being much more in evidence in Canada at the present time than ever before. The University conducts also a very full and complete course for the certificate of Public Health Nurse, in which it is expected that in the near future there will be a great increase in Nova Scotia of the numbers employed.

The *Medical Journal* of the University of Western Ontario, recently completed its first volume with a clear balance sheet as to its finances. "This was due in part to the generosity of"—, naming a number of members of the Alumni who made special contributions. Mention is made of this in order to remind our readers that it costs money to print a journal; that the members of the Medical Society of Nova Scotia pay less than, 50 cents per year to make up the *Bulletin* deficit; that the *Bulletin* would be self-sustaining and making a profit if some doctors would assist it in getting some more advertising. If you will not make literary or scientific contributions to the *Bulletin* why not assist in securing advertising?

USE YOUR DOCTOR.

Probably all physicians in Halifax have been receiving copies of "Civic Health", a little magazine published in the United States in the interests of good and safe milk production. Here it is endorsed and distributed by a local Dairy Company, Halifax, N. S. For some months we have noted in it articles of authority and merit that the profession should cordially endorse. But as far as the *Bulletin* is concerned, it is giving no publicity without some material reason; in common with physicians generally, the *Bulletin* must make a livelihood. However, this appears to be an exceptional case, and physicians have them every day of their lives, so why not the *Bulletin*?

"Use your doctor! That's what he is for. He has spent thousands of dollars on equipment and education, and years of time in study and practice, just to be ready to meet your need when you call upon him. All his resources, the accumulated knowledge of centuries, are at your command. But he cannot render this service unless you go to him.

Have you ever asked yourself why you do not make more use of this man's experience to promote the welfare and happiness of your family? Is it the cost that has deterred you? But are you *sure* the cost is prohibitive?

Why not talk with him to-day and find out? Tell him frankly just where you stand. Perhaps he can set a flat rate for supervising the health of your family for the coming year, barring accidents and severe illnesses and the like, of course. And you two can agree upon a method of payment that will not make the service a financial burden.

Then, when the baby is fretful, or you find a cold coming on, or the wife feels all dragged out, both you and she will get expert advice before the trouble gets a good start just because you have paid for it and have the service coming to you. Neither of you will hesitate for a full year to call at the doctor's office or over the telephone for the advice you need to put each member of the family on his feet again, as the occasion demands, and without wasting time or money.

Under such circumstances you will feel free to use the doctor as he should be used; as a consultant on every matter pertaining to the health and happiness of the household. Through him, you and your family will have the happy, useful, abundant life that should be yours."

HIS DAY IS PASSING.

We read a striking paragraph in the July, 1931 issue of the *Canadian Public Health Journal* that we are going to quote. The speaker was Senator the Hon. Gustave Lacasse, M.D., giving the Presidential Address before the Ontario Health Officers' Association in May of this year. He was considering the medical care of indigents and took the startling attitude that the doctor who is a poor collector is a contributing factor to indigency. But the doctor who goes night and day and never sends a bill is rapidly disappearing,—his day has passed. Referring to this the Senator said:—

> "May I be permitted, here, to add that the medical profession at large has itself to blame also for the existence of such acute conditions in certain instances. Too many doctors, for the sake of personal popularity, or through misunderstood generosity, neglect to collect their legitimate earnings. They may be praised a great deal for so doing, and called most charitable men, but I do say that no father of a family at present can feed his children on a diet of pretty words and saintly glory. Furthermore, the medical man who is too lenient along the line suggested above—and here is the main point insofar as this study is concerned —is unfair, not only to himself, but to his confreres and to the public at large, because the people he spoils sooner or later will become public charges on the community.
>
> I hasten to make a reservation here and say that all physicians must be charitable to a very large extent, but the point I am trying to make is that they must dispense charity in a very judicious and discreet manner, because too many people have been exploiting the profession regularly, and some step must be taken to do away with this evil. In the long run, it is in the interest of the public itself, for the public pays for the establishment and maintenance of all charitable institutions."

STATE MEDICINE.

At the last meeting of the American Medical Association in Philadelphia, the *Record*, a leading daily, published two editorials that were favorably quoted by the *Bulletin* of the Medical Society of the County of Kings, N. Y. in its last issue, the following being under the above heading.

"The prospect of State Medicine has caused alarmed protests among the physicians meeting here in the convention of the American Medical Association.

Dr. William Gerry Morgan, of Washington, president of the Association, discussed bluntly the movement to socialize and nationalize the healing art. He warned that such a trend will be even more disastrous to the public than to the medical profession.

The sentiment (for State Medicine) is as yet a sentiment without profound conviction.

The most potent antidote for this trend is for each of us, individually, to strive to render the highest and most efficient type of daily bedside service which modern scientific medicine teaches us.

Dr. Morgan is clear-sighted in not attacking State Medicine as "socialistic," "degrading" or on other vague grounds.

The antidote he mentions reveals a clear understanding on his part that if State Medicine does come, it will be forced to come through a lack of ability in the loosely organized profession to render complete service.

Conversely, if medicine *itself* can improve its service, can become efficient, universally available. It need have no fear of State Medicine of publicly supported doctors, of physicians as State employees.

One of the admirable things about the profession of late years has shown through its special studies, its research into the cost of medical care, its thorough discussions of new methods of service.

In demanding that the profession solve the State Medicine problem, not by calling names, but by *giving more to the people*, Dr. Morgan is working in that same helpful spirit, is heading for that type of progress which means continued success, for the doctors individually, and for the nation socially."

SANE OBSTETRICS.

In reading a recent number of the *A. M. A. Journal*, the above heading, the title of an address with subsequent discussion caught our fancy. There is hardly a school of thought but what is right to a very considerable extent, yet in the end these schools lead to very different conclusions. Various teachers and practitioners in Obstetrics are radical or very conservative. But there are times when one or the other should be heeded.

It therefore, appealed to us that for a teacher or leader, Sane Obstetrics is a desirable object. This paper was read before the recent Annual Session of the A. M. A. Association, having been prepared by Doctors Epstein and Fleischer of New York. We therefore, venture to quote the conclusions of said paper:—

"1. The expectant mother should have the benefits of 'Sane' obstetrics, rather than conservative or radical obstetrics.

2. Such 'sane' obstetrics can be maintained within the sphere of the incompetent though sincere physician and of the competent though over-enthusiastic physician, by education of the former as to his limitations and of the latter as to the limitations of his modus operandi.

3. The full cognizance by these two groups of the 'obstetric risk' as an actual reality rather than a mere fantasy will temper their judgments, so that the incompetent will not plunge where angels fear to tread, and the over-enthusiastic will not belabor the expectant mother with heavy artillery where diplomacy will serve better for her ultimate salvation.

4. The obstetric risk in this study shows that: (a) The morbidity risk in operative obstetrics was to that in nonoperative obstetrics in the ratio of 5:1. (b) The mortality risk in operative obstetrics was to that in nonoperative obstetrics in the ratio of 30:1. (c) The total infant mortality risk in operative obstetrics was to that in nonoperative in the ratio of 3.6:1, (including spontaneous deliveries of macerated fetuses, premature infants and monstrosities).

5. The mother of to-day is as fully equipped, mentally and physically, to undergo the hardships of labor as was the mother of yesteryear. A sound realization of this fact, together with a full cognizance of obstetric risk, will diminish the search for new fads to shorten labor, and thereby result in a diminished maternal and infant morbidity and mortality."

THE CANADIAN DEFENCE QUARTERLY.

The July issue of this interesting and valuable Quarterly completes its 8th Volume. The *Bulletin* has made reference to several articles in the last two Volumes of interest to R. C. A. M. C. and Ex-C. A. M. C. Officers, and doubtless many of these are constant readers of this Quarterly. For a few years many members of the Medical Profession in Nova Scotia were quite intimately connected with the army and a considerable number have many years of such

service to their credit. Nor have we any assurance that the future holds any exemption for our sons and daughters from similar services. We have all, doubtless, been impressed with the fact that army service calls for specialists, but each must be more or less conversant with the service as a whole. The chain is only as strong as its weakest link and present R. C. A. M. C. Officers need to keep in touch with the many questions that are discussed in such a Journal as the *Defence Quarterly*.

The Present Volume appeals to us chiefly on account of two editorials. One of these is the delightful intimation of the independence of the Editor and the Editorial Board, as far as the Department of Militia and Defence, or any other controlling agency is concerned. Specialized journals and official journals find it very difficult to maintain this independent attitude for obvious reasons. The attitude taken by the *Quarterly* is thus expressed.

> "May we take this opportunity to explain our own attitude towards the editorial page? We feel that fact without deduction, and argument without conclusion, are like bread without butter; edible but extremely uninteresting. It is to initiate this interest, as the imperative preliminary to thought, that we have, at times, deliberately resorted to an aggressive and provocative style.
>
> We have not the slightest desire to force any reader to accept our views. On the contrary, by expressing our own thoughts as forcibly as we know how, we are deliberately angling for an expression of opinion from any reader who may disagree with us.
>
> If we cannot promote thought we seek to provoke it."

A similar idea has dominated the editing of the *Bulletin* for a number of years and is its best guarantee of continued success.

However, the main point to which we would draw attention is the attitude of the *Quarterly* Editor towards the Cadet Corps Movement which was prompted by the passing of a Resolution at a recent meeting of the Ontario Education Association which was as follows:—

> "Be it resolved that we oppose cadet training in our schools and urge that it be replaced by physical training under the control of civilian authority."

Now we are wholly in accord with this independent Editor in condemning such poorly reasoned action by a very intelligent body, which *reason* should chiefly influence. There are far too many single minded people in the world, running around loose, preaching this and that faddism, with eyes blinded to everything else. Much of this is found in modern philanthropic and social welfare work, we have seen it in Nova Scotia, churches and service clubs being the chief stamping ground.

How simple it seems to cry "Peace, Peace", though there is no such thing and conclude that Cadet Training, Military Camps, etc., are an abomination unto the Prince of Peace! Where is one to draw the line? Possibly some of these Faddists will draw the line next against Boy Scouts, Girl Guides, because they have distinctive uniforms suggesting of the army! No one wants war, not even for defence purposes, but in time of peace prepare for war is a precept as necessary to-day as ever in the history of the world. The Editor quotes Mr. Wickham Steed, an eminent English journalist, who said:—

"Go ahead, keep up your corps and teach your boys to love peace so much that they will be ready and fit, if need be, to fight and die for it. There may still be some pretty fierce police work to do before war is so thoroughly beaten, and the spirit of war for profit or glory is so wholly cast out, that the creation of peace can begin."

Hospital Service

OFFICERS OF THE HOSPITAL ASSOCIATION,
1931-1932.

Honorary Presidents:	MAJOR W. A. FILMORE, Amherst; MAYOR MCCONNELL, Sydney.
President:	L. D. CURRIE, LL.D., Glace Bay.
Vice-Presidents:	REV. H. G. WRIGHT, Inverness; SISTER RITA, Glace Bay.
Secretary-Treasurer:	MISS ANNE SLATTERY, B.A., R.N., Dalhousie Health Centre, Halifax.
Executive Committee:	OFFICERS and SISTER IGNATIUS, R.N., Antigonish; OTIS WACK, Windsor; DON C. SINCLAIR, New Glasgow; W. K. ROGERS, Charlottetown.

MISS F. McDougall and Miss A. R. MacDonald of Antigonish have been added to the Public Health Nursing Service of Nova Scotia for the Central and Eastern Divisions of the Province.

Col. H. B. Tremaine of Windsor has been appointed a member of the Payzant Memorial Hospital Board, in place of Mrs. Tremaine, deceased.

Miss Mary Campbell, V.O.N., Halifax, spent a short vacation in July at her home in New Glasgow.

Miss Helen Murphy of Sydney, a recent graduate of St. Joseph's Hospital Glace Bay, who was successful in passing her examinations as a Registered Nurse in Nova Scotia, is a niece of the Hon. G. H. Murphy, Minister of Public Health for Nova Scotia.

Cumberland County is organizing to assist in the good work of Highland View Hospital by forming Ladies Aid Branches in various Communities in the County. Pugwash has joined the list with Mrs. A. F. Macaulay as the local President.

Contrasting with the early days of the hospital service to the Labrador of Dr. Grenfell, Miss Ferris of Saint John, a nurse associated with this work, plans on using an airplane as her means of transportation from one place to another. When planes get suitable stabilizers (or whatever it is that is indicated), so they can land in back yards we suppose they will be used by country practitioners.

The Hospital situation in Kentville is still quite unsettled. The present difficulty is a difference of opinion between the Kentville Hospital Association and the Town Council, as to property rights to land recently expropriated by the Provincial Government. We still venture the opinion that Kings County has now more hospital service than is actually required. Why not establish a Health Centre instead?

Boston City Hospital has been ordered to discharge its nurses who are not duly sworn citizens of the United States according to this newspaper despatch:

> Boston, Aug. 20.—Fourteen alien nurses, employed at the City Hospital, were ordered discharged to-day in a letter received by Superintendent John J. Dowling, of the Hospital, from Mayor James M. Curley. Dowling said the order would go into effect immediately.
>
> The order was in accordance with a decision of corporation Counsel, Samuel Silverman, who said the employing or appointing of such persons was a violation of the provisions of the general laws.
>
> The move to oust the nurses, many of whom come from the Maritime Provinces, was started by the city council which requested Mayor Curley to have them discharged on the ground that many nurses, citizens of the United States, were unemployed.
>
> Mayor Curley, in a letter ordering the discharge, said: "To my mind, it is a source of sncere regret that the question has been raised in the case of nurses and student nurses employed at the City Hospital. The list as submitted to me by the hospital authorities, with the exception of three in the total of 14 have all taken out their first papers, declaring their intentions of becoming citizens of the United States. The pleas that the employment of this fine group of women deprives citizen nurses of the opportunity for employment does not ring true, and even were it true, it would be difficult to justify the severity of the punishment meted out in view of the long training and exceptional character of service which they and other women coming from the same portions of the world have given the city of Boston.
>
> "The question having been raised, however, the opinion of the corporation counsel as submitted, leaves no other course open to you other than to order the immediate discharge of these 14 nurses."
>
> Superintendent Dowling said alien nurses were employed because it seemed that students and nurses from Boston and New England did not take keenly to nursing.

Newcastle *Advocate*:—Miss Helen E. Hivey who was recently appointed superintendent of the Mirimachi Hospital, arrived here on Monday and commenced her duties on Tuesday. Miss Hivey is a graduate of the Yarmouth Hospital, Yarmouth, N. S., and has done post-graduate work in Boston and Providence and is a registered nurse of Rhode Island. She was for four years superintendent of the Training School for Nurses at Kings Memorial Hospital, Berwick, N. S., and before coming here had been doing V. O. N. work in Sackville.

A *Sydney Post* news item states that Miss Jean MacKenzie of Rear Christmas Island recently passed the examinations of the Registered Nurses' Association, securing the third highest rank. It further adds,—"Miss MacKenzie graduated with honors from St. Joseph's Hospital last year carrying off a number of prizes,...and she was accorded also the privilege of delivering the valedictory address." The only possible comment is,—"that it served her right."

Correspondence

Dr. S. L. Walker,
Secretary N. S. Medical Society,
Halifax, N. S.

Dear Doctor Walker:—

I should like to call your attention to an incident that should be of interest to the Medical Society of Nova Scotia. A white man, Dr. Hill, and his two colored companions are at the present time touring the Annapolis Valley and intend, no doubt, to tour Nova Scotia, putting on free shows and selling quack goods to the public.

I am sorry to admit he was allowed to remain in Kentville the week July 27th to Aug. 1st, relieving the populace upward of one thousand dollars in that short time.

He went from here to Middleton and I suppose intends to carry on this business until the rigorous weather prevents him from performing out of doors.

Thought I would just call your attention to this matter as the Medical Society might like to take some steps to prevent this piece of quackery from going on.

Yours very truly,
T. A. KIRKPATRICK, M.D.
Kentville, N. S.,

Dr. S. L. Walker,
Halifax, N. S.

Dear Doctor:—

The 1931 issue of the *American Medical Directory* has just been issued. In this the tabulation of the number of physicians in the various provinces is given, and I was surprised that since the issue of the last edition in 1929 every province shows an increase except Nova Scotia and Yukon, a decrease of 28 and 2 respectively being shown.

I think you have at some time decried the departure of N. S. men to other parts, and this proves your assertion. I append the table, which shows that Canada now has 10,176 physicians:

	1929	1931		
Alberta	585	588	3	Increase
British Columbia	671	720	49	Increase
Manitoba	573	601	28	Increase
New Brunswick	262	275	13	Increase
Nova Scotia	464	436	28	Decrease
Ontario	3,959	4,028	69	Increase
Prince Edward Island	63	63		No Change
Quebec	2,065	2,764	159	Increase
Saskatchewan	557	577	20	Increase
Newfoundland	114	117	3	Increase
Yukon	9	7	2	Decrease
	9,802	10,176	314	Total Increase

Very truly yours,
J. WILSON,
Manager, J. B. Lippincott Company.

OBITUARY

LEONARD MILTON MURRAY, M.D.,C.M., McGill University, 1900, Toronto.

WHILE dressing for dinner, August 8th, 1931 at his home in Toronto, Dr. L. M. Murray formerly of Halifax, died suddenly. Dr. Murray was born in Truro, the son of a real Scot, Angus Murray. He was one of a large family who all became distinguished citizens although they mostly removed from Nova Scotia. The oldest member of the family, as we recall them, was Professor Daniel Murray for a time at Dalhousie, but for many years Professor of Mathematics at McGill. A younger brother was also a member of the medical profession.

Dr. Murray received his early education at the common and High Schools of Truro. He studied medicine at McGill, graduating in 1900. He soon after began practice in Halifax and later married Miss Ella Seeton of this city. In his professional work in Nova Scotia his specialty was for laboratory work and he was both city and provincial bacteriologist, in addition to a very substantial general practice. It will also be recalled that he was prominent in medical society work, in community, social and civic affairs.

Upon his return from overseas, where his work was of a very high quality, he located in Toronto where he has resided ever since. Here, too, he became prominently identified in the medical and social activities of Toronto University and the City of his adoption. Having devoted much study to Cardiac conditions he became shortly a leading Consultant and lecturer along this special line.

He is survived by his wife and one daughter who were, at the time of his passing, on an extended visit in England.

PATRICK MOCKLER KIRWAN, M.D.,C.M., Dalhousie, 1920, Tor Bay, Nfld.

A despatch from Saint John announces the passing of Dr. P. M. Kirwan. He had joined the C. N. S. Lady Hawkins on August 15th and at 3 P. M. on the 17th he was found dead in his cabin bed. He was born at Malagash Cumberland County 32 years ago. Both he and his brother Philip, who died some two years ago were of a roving disposition and seldom remained long in one place. Yet after life's fitful fever they, too, sleep well.

The death occurred recently of Mrs. Charlotte E. Lawrence of Hantsport. She was a lady who was very widely known in Nova Scotia and elsewhere and had a very large circle of friends. She is survived by a daughter Mrs. Sutherland, wife of R. H. Sutherland of Pictou, to whom members of the profession will extend sympathy.

Dr. John Stewart of Halifax attended the funeral of the late Rev. Ephraim Scott, in New Glasgow on August 12th, 1931.

Many members of the medical profession in Nova Scotia were grieved to learn of the sudden death August 23rd of Miss Margaret Martin, R.N., Superintendent of the Payzant Memorial Hospital, Windsor. It is stated she was stricken by cerebral hemorrhage while walking across the lawn from the Nurses' Home to the Hospital and died almost immediately.

Miss Martin was born at Mulgrave some 56 years ago. She graduated from the Training School of the Victoria General Hospital, Halifax in 1898 and had much experience both in private and institutional nursing in Nova Scotia New York, Cuba and Virginia. In 1922 she became Superintendent of the former 15-bed hospital in Windsor that is now a 50-bed hospital. The Medical Staff and Hospital Board are fully aware that much of the progress made by the hospital has been due to the intelligent interest and conscientious work of Miss Martin.

It is said that Miss Martin was a strict disciplinarian, but was popular with the nurses, admired by the Medical Staff and Hospital Board, and had many social friends in the Town of Windsor. At the Funeral Service in Christ Church, Doctors Reid (J. W.), Keddy, Morris, Bissett, Shankel and Reid (A. R.), were pall bearers. Interment took place at Mulgrave, the remains being accompanied by several members of the Hospital Board. Miss Martin is survived by two brothers both resident in Mulgrave.

Thirty-one years ago in the *Bridgetown Monitor*, Dr. W. W. Chipman was congratulated upon securing his B.M.,C.M., from Edinburgh University, incidentally, winning one of three gold medals given that year at the University, two scholarships and several internships. He was particularly prepared to make this fine showing by being born in Bridgetown and graduating from Acadia with Honors in 1890. Upon returning to Canada he was taken on the staff of the Royal Victoria Hospital, Montreal, where he served for thirty consecutive years, only retiring last year from the Professorship of Obstetrics and Gynaecology in McGill University.

Personal Interest Notes

DR. J. J. Hagerty of Ottawa and party were recent visitors in Cape Breton. Dr. J. W. Egan of Sydney was one of their hosts and took the party to Louisburg, a visit of great interest to all historians. The reason Dr. Hagerty was dependant largely on local courtesy in getting around, was because he had an auto accident between New Glasgow and Mulgrave which put his own car fully out of commission. Better luck next summer, Doctor!

The *Bulletin* learns that Dr. O. R. Stone of Sherbrooke has removed to Bridgetown. For some time Dr. Stone for purely family reasons has been desirous of making a change, but it was very hard to break the very cordial relations that he and Mrs. Stone had established in Sherbrooke in all phases of local activity. We are not yet advised as to who will replace Dr. Stone in this extensive field.

Dr. F. P. Smith, Mill Village, Queens Co., was seriously ill for a time in August, but has made, we are glad to learn, a good recovery. While the illness closely followed his election to Honorary Membership in the Medical Society of Nova Scotia at the recent meeting in Truro, the doctor assures us there was no connection between the one and the other.

Will readers of the *Bulletin* please note that some of our so-called news items are months old, but some are quite up to date. Please think a moment, and size up the situation and *could you do any better*? Remember many items in the October issue were written the second and third week in August when the Secretary was arranging for his six weeks' trip to the West Indies.

Dr. McKenzie McLeod, George Street, North Sydney, brother of J. K. McLeod, Medical Health Officer of that city who has retired from active practice for a number of years, received a call recently from E. W. Beatty, President of the Canadian Pacific Railway. As far as can be ascertained, Dr. McLeod is the only living member of the party in Parliament which brought the C. P. R. into existence in the years 1881 and 1882.

Following a meeting of the Executive of the Medical Society of Nova Scotia on August 13th, Dr. A. S. Burns of Kentville who had been a patient in the Victoria General Hospital for a couple of weeks was able the next day to return to his home. He reports a very considerable improvement of his disabling neuritis.

An announcement in a Halifax paper states that Dr. R. S. Shlossberg is opening an office on Barrington St., for the practice of eye, ear, nose and throat diseases. Dr. Shlossberg who was on the medical staff of the N. S. Sanatorium, has many friends here who will wish him every success.—(*Kentville Advertiser*).

Dr. P. A. Tickton of Brooklyn, spent some six weeks in July and August in clinical work in Toronto and Detroit.

Following a request from the Honorable Dr. E. W. Montgomery regarding the proper fee for toxoid administration, the Executive Committee of the Medical Association of Manitoba, at a recent meeting decided that the maximum fee for rural schools be $1.50 per child and for schools of 10 or more $1.00 per child unless under exceptional circumstances.

Grace Before Fish.

Lord give me Grace to catch a Fish
So large that even I,
When talking of it afterwards,
May never need to lie.

Dr. Clyde Marshall, formerly Provincial Psychiatrist and now on the staff of Yale University, spent his August vacation in his native Province. At the same time he made a number of examinations for the Children's Aid Society.

Dr. C. E. Gass of Sackville, N. B., accompanied by his family spent a short vacation in August in Tatamagouche. Dr. Gass was for several years in partnership with Dr. Murray of that place and he often visits his former friends in that section of Colchester County.

Mopping Up.

A few weeks ago the doctors of Nova Scotia gathered at Truro in annual conference of the Nova Scotia Medical Association. This week the undertakers of the province are meeting at the same place on a similar errand. Completing the work started by the doctors, one might say. (*Exchange*).

Dr. S. L. Walker, Secretary of the Medical Society of Nova Scotia and Business Editor of the *Bulletin*, spent the month of September as Ship's Surgeon on the Lady Hawkins, Canadian National Steamships, on her regular trip to the West Indies.

The *Annapolis Spectator* says:—"A big medicine man with a negro entertainment is showing in the rink field this week. He is from Chatham, Ont." This is the same party to which the *Kentville Advertiser* called attention as noted in the *Bulletin*. Yet some one suggests there is no need of health publicity in Nova Scotia. That this medical fakir will lift from the pockets of the people in and around Annapolis, as he did in Kentville, good negotiable currency in these hard times should be the concern of everybody—even the members of the medical profession and town and Municipal Councils.

"Homo sum: humani nihil a me alienum puto."

The above is suggested as a suitable motto for a medical society, for surely nothing that touches human welfare is foreign to us. Yet how often the question is raised, 'what business have we to do with this or that matter?' Particularly have medical societies declined to discuss matters of *human welfare* as being outside their legitimate sphere of action. Nor has the Medical Society of Nova Scotia been free from this tendency. Why should this or that Committee function when the matter is clearly one for the Department of Health, the Tuberulosis Commission, the Provincial Medical Board, the Hospital Association, the Red Cross or some other of the many organizations

engaged in human welfare work? Simply because as members of the medical profession we are human, and that which touches human welfare can never be foreign to us.

Dr. Melvin MacNeil, Dalhousie '28, has received an appointment for one year at the Evans Memorial for Clinical Research and Preventive Medicine, Massachusetts Memorial Hospital, Boston.

Dr. Hugh O. Blauvelt, Dalhousie '18, is at present resident at the North Middlesex Hospital, London, England. Dr. Blauvelt was successful in obtaining the Fellowship of the Royal College of Surgeons, England, last year.

Of the Dalhousie medical graduates of 1931 hospital appointments are held by the following: Dr. C. M. Bethune, Victoria General Hospital, Halifax; Dr. Donald Campbell, Charity Hospital, Cleveland, Ohio; Dr. D. A. Forsyth, Hillcrest Hospital, Pittsfield, Mass.; Dr. A. A. Giffin, Nova Scotia Sanatorium, Kentville; Dr. D. M. Grant, Camp Hill Hospital, Halifax, N. S.; Dr. F. C. Jennings and Dr. W. J. Murphy, Saint John General Hospital, Saint John, N. B.; Dr. R. K. Muir, Ottawa Civic Hospital, Ottawa; Dr. E. F. Ross, Montreal General Hospital, Montreal.

Dr. F. A. Minshull, Dalhousie, 1930, has purchased No. 28 South Park St., Halifax and will begin practice in Halifax at that residence. Presumably he will specialize in paediatrics.

On the afternoon of the 29th of July, a class of nurses was graduated at the Nova Scotia Hospital with appropriate ceremonies. Rather unusual interest attached to the ceremony, as it was the first occasion in which the Minister of Public Works did not preside. Formerly, the hospitals maintained by the government of Nova Scotia were associated with the Department of Public Works, but upon the creation of a Ministry of Health, the hospital was placed under this ministry, and later the general administration was entrusted to a commission. At the recent exercises, Mr. John S. Misener, vice chairman of the Board of Commissioners, presided, and Mr. William R. Powell, another commissioner, presented the diplomas and prizes. Hon. Dr. Murphy, Minister of Health, gave an interesting presentation of the new order of things, and complimented Dr. Lawlor on his efficient superintendence of the large institution of which he is in immediate charge. Dr. W. H. Hattie addressed the graduates. After the ceremony the guests inspected the hospital and then repaired to the lawn where refreshments were served.

C. A. M. C. REMINDERS.

In the presentation of flags recently to a Church in Liverpool interesting events of the early days of August, 1914 are recalled. The very first medical unit to be organized in Canada which proceeded overseas was the No. 1 Canadian Casualty Clearing Station. This was organized by Colonel F. S. L. Ford of Liverpool and was recruited in Queens County. Among those who enlisted and left Liverpool on August 20th, 1914, and went overseas, we note the following:—Major F. S. L. Ford, Captain G. W. MacKeen, Captain C. H. Dickson, Captain W. A. Pickup, Captain G. B. Peat, Captain W. T. M. MacKinnon, with the usual number of N. C. O.'s, and men.

The full ceremony from start to finish was most brilliant and inspiring. The flags presented to Old Trinity Church for safe keeping were that of the Red Cross and the Union Jack, each flew over this unit in France and Belgium in the Great War. In addition to the presentation of flags, a tablet was placed in the Church as a gift from Colonel Ford and was unveiled by him. The inscription is as follows:—

To the Glory of God
and
in proud remembrance
of the Officers, Nursing Sisters,
Non-commissioned Officers and Men
of
The First Canadian Casualty Clearing
Station
Who died for their Country in
The Great War
1914-1921
This Red Cross and this Union Jack
Which Flew over them in France and
Belgium
are gratefully dedicated
Presented by Col. F. S. L. Ford, C.M.G.
The first officer commanding.

We noted among the visitors and guests a number who were also connected with the unit at some time including with others, Lt.-Col. F. S. L. Ford, Captain John Stewart, Col. John Stewart, Capt. Bruce Kelly, Col. J. A. Sponagle, and a number of Ex-Nursing Sisters.

The occasion was further made memorable by the address that was given, by Canon Shatford, the special preacher for the occasion, taking for his text the words from the Songs of Solomon, "And His banner over me was love." He, himself, being an Army Chaplain of outstanding ability and popularity, his dramatic display of the silk Union Jack, which he carried folded in his vest pocket at the Front and used by him as an alter cloth at the celebration of Holy Communion, was not only dramatic, but was intensely impressive as he unfolded the theme of his text.

The *Bulletin* is indebted to the *Liverpool Advance* for the particulars of this most interesting function and many of our readers who were associated with different medical units in France, will, we feel sure, enjoy reading this little report.

S. L. W.

Dr. J. J. MacRitchie (Med. 1911) has been appointed to the Provincial Department of the Public Health in the capacity of a Divisional Medical Health Officer.

Dr. Seymour G. MacKenzie (Med. 1914) has been appointed to the staff of Camp Hill Hospital, Halifax.

Dr. Charles MacLean Jones (Med. 1930) after a year's interneship at the Royal Victoria Hospital, Montreal, has been appointed roentenologist to the Halifax Infirmary.

Dr. Edward Ross Davies (Med. 1924) has been appointed Acting Assistant Medical Superintendent of the Nova Scotia Hospital, Dartmouth. Dr. MacKay has had previous psychiatric experience at the Brandon Hospital, Manitoba, and has also had a period of interneship at the Henry Ford Hospital, Detroit.

Dr. Reuben Samuel Shlossberg (Med. 1928) has returned to Nova Scotia after a period of graduate study spent in Chicago, and is now located at Halifax.

Dr. Douglas Fraser Macdonald (Med. 1929) after two years at the Henry Ford Hospital, Detroit, has returned to his native province and has located at Yarmouth.

Medical Practitioners are reminded that we have on hand at the Provincial Laboratory, Halifax, a supply of Convalescent Serum, and they are requested to telephone or wire the Laboratory as soon as cases, or even suspected cases of Infantile Paralysis are discovered.

Heart Conditions Simulating the Acute Abdomen*

By GERALD R. BURNS, M.D.,C.M.,

Demonstrator in Clinical Medicine, Dalhousie University, Halifax.

THIS is a most interesting and vital subject, one upon which may hinge a patient's life. It brings up those finer points of diagnosis the final analysis of which may place the immediate future of the patient in the hands of the internist or the surgeon. I have deliberately refrained from presenting a detailed account of the electrocardiographic or x-ray picture that is more or less typical of the heart conditions under consideration because, in the majority of cases, a diagnosis can be made from a careful history and clinical examination of the patient. In the last fifteen months, I have seen four cases of coronary artery thrombosis which were sent into hospital with the diagnosis of acute abdominal emergency. Moreover, current medical journals in practically every issue report cases of a similar nature. Discussion of these cases is, therefore, not a matter merely of academic interest but one which primarily concerns the general practitioner.

In opening I should like to present three cases which illustrate the points to be taken under consideration.

CASE 1

Mr. B., a farmer, aged 46, was admitted to the Victoria General Hospital, Halifax, on January 20, 1930, complaining of severe pain in the epigastrium. He was in a condition of shock, and was sent into hospital with a diagnosis of a ruptured gastric ulcer.

Personal history.—He had had acute rheumatic fever seven years previously. During the past two years he had experienced increasing shortness of breath and had had several attacks of moderately severe pain in the stomach, which were labelled acute indigestion, and for which he was placed on a dietary regime. Two days before admission he was suddenly seized while walking with a severe colicky pain in the epigastrium which required large doses of morphine for relief. This attack was repeated the following day while he was in bed and he was rushed to hospital as an abdominal emergency.

Physical examination.—On admission to hospital the patient was cyanosed, in great distress, and complaining of steady severe pain in the epigastrium. The abdomen was distended, the percussion note was tympanitic throughout, the upper abdominal muscles were rigid, but not board-like, and there was tenderness along the right subcostal margin. There were râles at the bases of both lungs. The heart was somewhat enlarged to the left; no murmur or friction sound was detected. The arteries were soft; pulse rate was 140 with a tic-tac rhythm, and regular; blood pressure, 112/42. The leucocyte count was 18 000. A diagnosis of coronary artery thrombosis was made, which was proved correct the following morning by obtaining a characteristic electro-cardiographic picture.

CASE 2

Mr. J., a farmer, aged 45, was admitted to the Victoria General Hospital on November 3, 1929, complaining of severe pain below the sternum.

*A post-graduate lecture delivered before the Lunenburg-Queens Medical Society, and published in the *C. M. A. Journal.*

History of illness.—On the previous evening he had noticed a burning pain below the sternum and pains across the back and shoulders. Several hours later he was seized with a violent pain below the sternum and was sent to the hospital with the diagnosis of an "acute abdomen."

Physical examination showed a well developed male who appeared to be in agony. There was a slight cyanotic tinge to the lips, lobes of the ears and finger tips; the respirations were hurried and grunting. The abdomen was moderately distended, and the upper abdominal muscles were tense, but no tender point could be made out. The heart was not enlarged on percussion; the pulse rate 90, regular and full; a to-and-fro friction rub was heard over the pericardium. The arteries were soft and elastic; blood pressure 120/170. The lungs were clear. The leucocytes numbered 14,000. A diagnosis of coronary artery thrombosis was made, which was later substantiated by the electrocardiographic picture.

CASE 3

A farmer, aged 46, was admitted to hospital with the following history.

History of illness.—For the past two years he had had severe attacks of epigastric pain, coming on about once a month without apparent cause and relieved by vomiting. The pain had been getting worse during the past two weeks. He localized the pain below the ensiform cartilage, and described it as sharp, increased by coughing or exertion and by a meal heavier than he was ordinarily accustomed to taking. It was usually worse at night.

Physical examination showed the heart to be enlarged to the left. There was a presystolic murmur at the apex of the heart, as well as a thrill. The arteries were thick and tortuous; the blood pressure 195/136. The liver was enlarged and its margin tender, and there was slight spasm of the upper abdominal muscles.

It is to be noted that the pain was worse at night, and this, combined with other symptoms, would make one think of gall-stones or duodenal ulcer, but what is of more importance is the fact that the pain was made worse by exertion and also that there were unmistakable cardiac findings. After several days' rest in bed, the attacks were less frequent and were relieved by nitroglycerin.

The diagnosis of angina pectoris was made.

Thrombosis of the coronary artery is by far the worst offender in the class of cardiac conditions which may offer some difficulty in differentiation from acute abdominal conditions. James B. Herrick has classified the cases as follows: (1) Cases of instantaneous death, in which there is no death struggle, the heart beat and respiration stopping at once. (2) Cases of death within a few minutes or a few hours after obstruction. These are the cases that are found dead or in the death agony by the physician. (3) Cases of severity in which, however, death is delayed for several hours, days or months, or recovery takes place. (4) A group that may be assumed to exist, embracing cases with mild symptoms, for example, a slight precordial pain, ordinarily not recognized, due to obstruction in the smaller branches of the arteries.

It is with the third group of cases that we are particularly concerned in this discussion. This form of coronary thrombosis may be described as an attack of angina, with unbearable pain, which is not relieved by amyl nitrite, but only eased by repeated large doses of morphine. Frequently there is the fear of impending dissolution. There may be radiation of the pain over the chest and down the arms, which renders the diagnosis obvious, but it is those cases in which the radiation is abdominal, or in which the pain is limited entirely to the abdomen, that are apt to be erroneously diagnosed as abdominal catastrophes. Because of the sudden onset of the pain, and its presence in the upper abdomen, the surgeon is called in and finds it difficult to explain the rigidity of the upper abdominal muscles, the tenderness along the right subcostal margin and the degree of shock that is present. Some of these

cases may go to the operating room with a diagnosis of perforated gastric ulcer, acute pancreatitis or acute cholecystitis, but on opening the abdomen no disease is found below the diaphragm to explain the symptoms.

The coronary arteries are not, as used to be thought, "end" arteries, but the anastomoses may be relatively inadequate, so that occlusion of one of the branches, whether it be sudden or gradual, eventually leads to the death of the muscle supplied by that branch. When the main trunk of the coronary artery is occluded, sudden death results, but occlusion of one of the larger branches is compatible with life. The element of time counts for much in the eventual result. If death is not immediate or speedy, adaptation may occur. Post-mortem findings in the hearts of those who have had agonizing seizures reveal patches of fibrosis in the walls of the heart, and would indicate that the attacks were due to complete occlusion of one of the smaller branches. The area so affected undergoes those changes which are typical of infarction and it is these changes which explain the clinical picture of coronary thrombosis. The infarction weakens the force of the heart-beat, and explains the dyspnoea, pallor, and fall in blood pressure. The presence of the anaemic area accounts for the fever and leucocytosis. Should the infarcted area extend to the epicardium, a localized pericarditis is the result, with the production of a pericardial friction rub and continuous pain. Should the affected area encroach upon the endocardium, a parietal thrombus may be formed, part of which may break off and send emboli to the lungs, brain, liver or spleen. Should the patient survive, the area affected becomes fibrosed and may weaken the wall of the heart. Autopsies have shown aneurysmal dilation and rupture at the site of a previous infarction.

Heart failure, occurring suddenly, may be manifested in several ways. There may be ventricular fibrillation and sudden death; syncope following a rapid drop in blood pressure; pulmonary oedema; or perhaps, and most important, what concerns us here, sudden failure of the right heart, with sudden engorgement of the liver and abdominal vessels. We are all familiar with the tender, swollen liver of chronic heart failure, but this is not to be compared with the sudden stretching of Glisson's capsule and the resulting severe, agonizing pain and tenderness along the right subcostal margin. This is a known factor in the production of pain, and we can add that there must be some unusual distribution of the referred nerve pain through the vagus by means of its communicating branches. In the two cases quoted at the beginning of this paper the tenderness was noted along the right subcostal margin with associated spasm of the upper abdominal muscles; but here there was not the board-like rigidity of the abdominal muscles which one finds in catastrophes of the upper abdominal quadrant.

In the examination of the patient, one of the most important points is that the history of the illness should be unbiased and accurate. Special attention should be given to the family history as regards death from high blood pressure, apoplexy, angina pectoris, and so-called "acute indigestion," or any sickness on the patient's part which may lead up to any of these conditions. A history of pain or distress coming on regularly after eating, or the so-called "hunger pains" of duedenal ulcer, relieved in the first place by soda bicarbonate and in the second place by the munching of a cracker or drinking a glass of milk, rather points to a condition below the diaphragm. A history of typhoid fever would suggest the possibility of cholecystitis, whereas acute rheumatic fever would certainly direct one's attention first of all to the cardio-

vascular system. Most arteriosclerotics complain of undue belching of gas and indigestion, so that a history of these common symptoms would indicate either an abdominal or cardiac crisis. Indigestion and nausea coming on after the evening meal, over a period of weeks or months, are rather suggestive of gall bladder disease.

On examination, the patient may show a tinge of cyanosis about the lips, nose, lobes of the ears and the finger-tips. Should he be in a state of moderate or severe shock he is of an ashen gray colour, owing to cyanosis added to the pallor of the shock. He lies quietly in bed and does not lash about as does the patient suffering from gall-bladder colic; he is afraid to move because of the fear of impending death.

The blood pressure is usually low, or normal, but it must be remembered that there has been a drop from a previously high reading. The pulse is rapid, soft, and may be irregular, owing to fibrillation. The heart may or may not be enlarged. The heart sounds are rapid and distant; a tic-tac or gallop rhythm may be present and usually is of serious omen. The temperature at first may be subnormal, but after twenty-four hours it rises to from 101° to 103° F., and with it the leucocyte count, the average count being between 14,000 and 18,000. In favourable cases the temperature drops to normal within three or four days. A pericardial friction rub is most characteristic of coronary thrombosis. It usually develops after twenty four hours and, when once heard, immediately places the case beyond dispute. It is the characteristic sound compared to the creaking of new leather. Dyspnoea, Cheyne-Stokes breathing, and crackling râles at the bases of the lungs, may be found in moderate and severe forms.

The liver is usually enlarged and tenderness is found along the margin of this organ; indeed the pain along the liver margin may be excruciating. In gall-bladder colic the maximum point of tenderness is usually over the gall bladder itself and radiates to the subscapular area and occasionally to the chest, never down the arms. Moreover, the pain is more spasmodic than the pain of coronary thrombosis, and is relieved by smaller doses of morphine, and bile is more likely to be found in the urine.

A perforated gastric ulcer will cause sudden severe pain in the epigastrium, but the radiation is downwards; the abdominal muscles are board-like and the abdomen distended.

Acute pancreatitis causes severe spasmodic pain in the upper abdomen, shock and vomiting. The upper abdominal muscles are tense, and there is distension of this part of the abdomen.

The presence of fever, leucocytosis, upper abdominal pain and tenderness may help but little in arriving at the correct diagnosis, but the drop in blood pressure, the character of the heart sounds, and evidence of cardiac failure will usually suffice for a correct diagnosis. The electrocardiograph is the final court of appeal, and, in typical cases shows departure of the S. T. wave from the isoelectric line and the inversion of the T. wave. Coronary thrombosis is thus a definite disease entity.

Angina pectoris, a symptom found, as we have seen, in coronary thrombosis, is also, a symptom of general arteriosclerosis with special involvement of the root of the aorta and the coronary vessels.

Angina pectoris is characterized by pain which usually begins over the precordium, and radiates up the sternum and down the inner aspect of the left arm, or sometimes the right arm. It may radiate up the side of the neck

and along the back of the head. The pain is usually excruciating. The patient is afraid to move and is obsessed with the fear of impending death, and the chest feels constricted as with a vice-like grip. In some instances the pain radiates downwards towards the epigastrium and may be referred to this locality alone.

The causes that may determine an attack vary. Commonly it follows some form of exercise or an emotional upset, such as a fit of anger, and quite frequently it follows a heavier meal than is customary. A patient presenting himself with severe pain in the epigastrium after a heavy meal is very apt to be labelled acute indigestion by the unwary; such a diagnosis is really a cloak of ignorance and misses the real underlying condition. The history in such a case is important and will usually bring out some limitation of cardiac reserve. The sequence in such a case is that the sufferer remains immobile and breathless until the pain passes off. He then perspires freely, is dyspnoeic, and complains of fatigue for several days. There may be râles at the bases of the lungs and the sputum may be blood-tinged. The pulse is soft and regular, the heart sounds are distant, the blood pressure remains high. Hyperaesthesia over the site of the pain is usual. An important point in the diagnosis is that such a pain is very often relieved by a dose of one of the vasodilators, such as amyl nitrite, while the pain in coronary thrombosis is not.

The rôle that disturbances of the heart's conduction apparatus may play in simulating acute abdominal emergencies is small, but their ability to do so is recognized. Auricular fibrillation is a condition of disturbed mechanism in which the well-ordered and well-balanced impulses of the pace-maker are replaced by a "circus movement" in the auricles which fling out impulses at irregular intervals that endeavour to pass through the auriculo-ventricular node. The resulting pulse is totally irregular in time and volume. In untreated cases there is a discrepancy between the apical and pulse rates, called the pulse-deficit, which, combined with the irregular pulse, makes the condition easy of recognition. Auricular fibrillation may occur with or without heart failure. In the former case there may be sudden heart failure with the appearance of arrhythmia and consequent rapid engorgement of the liver and abdominal vessels. We have already referred to the rapid engorgement of the liver and sudden stretching of Glisson's capsule as a factor in the production of epigastric pain and tenderness. The rapid congestion of the intestinal tract producing diarrhoea, vomiting, and abdominal distress might well be looked upon as an abdominal crisis, but the inequality of the pulse, the pulse-deficit and signs of heart failure, when noted, would immediately place the guilt above the diaphragm.

Paroxysmal tachycardia is another disturbance of the cardiac mechanism. Its origin is not definitely known. The pulse rate may be roughly speaking doubled, trebled or quadrupled. The attack comes on suddenly, may last a few minutes, hours, days or weeks, and may be attended by epigastric pain. If the heart rate is not excessive the cause of the underlying pain may be difficult of recognition.

The pain in acute fibrinous pericarditis may be referred to the abdomen and present abdominal symptoms which may confound the surgeon and lead to an unnecessary laparotomy. This form of heart disease is very rarely a primary condition; it is secondary to some adjacent focus, usually of a tuberculous nature, in the lungs or mediastinum. The characteristic friction rub is, of all physical signs, the most evanescent and whimsical, and is most notori-

ously overlooked. The abdominal pain is usually due to extension of the inflammation to the diaphragm, and referred to the umbilicus. The history of the onset of the illness, the appearance of the patient (most of these patients lean forward in bed to obtain relief from the pain) and the fact that the pain is made worse by coughing, movement or deep breathing, should focus the examiner's attention on some condition above the diaphragm.

In conclusion, I should like to state that my object has been to draw attention to the fact that at times common cardiac conditions may very closely simulate acute conditions in the abdomen, leading to unnecessary operation and consequent death of the patient. The conditions I have mentioned practically all have more or less pronounced features, in particular cases, fever, leucocytosis, abdominal pain, muscular spasm, shock as well as minor symptoms, such as vomiting, diarrhoea, nausea, belching of gas, etc., rendering the clinical picture very much the same. The second point I wish to make is that a careful history and a careful examination of the cardio-vascular system are of the utmost importance.

Dr. Pepy's Diary.

October 29.—Early to ye office although still under ye tender ministrations of ye masseur and ye blood counter. Ye arm straighteneth out gradually although already it hath a kick in ye wrist and many a laugh up ye sleeve. Ye masseur relateth a tale which showeth ye need of science in evaluating evidence. At a meeting of teetotalers ye speaker hath called for Mr. Elkins in ye audience. Mr. Elkins ariseth and ye following colloquy ensueth:

"Mr. Elkins, how old are you?"

"Sixty-eight years."

"Mr. Elkins, do you ever indulge in spirituous liquors?"

"No, indeed, I have been a teetotaler all my life."

"Ladies and gentlemen, look at this wonderful man, sixty-eight years old. He never took a drink in his life. Will Mr. Thomas stand up."

Mr. Thomas ariseth.

"Mr. Thomas, how old are you?"

"Eighty-one years, sir."

"Mr. Thomas, have you ever used whiskey, beer or wine?"

"I should say not, sir."

"Ladies and gentlemen, look at these two marvelous men. They have never taken alcohol, ladies and gentlemen, witness their healthful condition.

At this moment a voice cometh from ye rear of ye hall, ye same being possessed by an Hibernian with a decided brogue.

"Hould on a minute. Is this a closed meeting or can anyone say a word?"

"This is an open forum, my friend, and we are glad to hear from any one who has evidence to offer."

"Well, sir, me father died six years ago and he was ninety-six years old. He took his first drink of whiskey when he was fourteen years old and he took two drinks every day until the day he died. Well, sir, we buried him and last week they called us up that they were going to move the cemetery and we should come out and dig the ould man up. So we dug him up and we opened up the box, and by golly, sir, he looked better than either one of these fellys that has been standin' up here to-day."

This is, indeed, ye controlled experiment.—(*A. M. A. Journal*).

Presidential Address

DR. W. F. MCKINNON, Antigonish.*

Gentlemen:—

Permit me first to thank the Medical Health Officers' Association, for the honor conferred on me, in naming me President of this important organization. I was absent from the last meeting, so this is my first opportunity to acknowledge my sense of appreciation of their action. It has been customary, and I have been told that some form of address is expected of the President. I trust you will bear patiently with me in the few remarks I wish to make. These will be devoted to some observations on the question of Tuberculosis.

Within the last few years, there has been a marked awakening, on the part of the public, on this most important subject, affecting the public health. In the past, Tuberculosis was looked on as a necessary evil. Its ravages were so great and the difficulties of overcoming the evil so appalling, that any efforts to arouse public interest, with a view of its prevention and cure, invariably met with discouraging results, and hence the medical profession had an up-hill fight. This was largely due to indifference, lack of education, environment and poverty.

Tne disease is insidious, often of long duration, and with many manifestations. Often the immediate friends assume a hostile attitude, refusing to acknowledge the existence of the disease, and giving no co-operation with those endeavoring to combat the evil. Influences, however, were at work. Philanthropic Agencies, including the Red Cross, publicity through the Press, showing the advances made in the treatment and prevention of Tuberculosis, gradually created a favourable public opinion, and in this way, our municipal and governmental bodies were encouraged to lend practical aid to the solution of this grave problem.

In dealing with this question, we have two problems facing us. 1. The cure of the disease. 2. Its prevention. Until a few years ago, practical efforts in dealing with Tuberculosis were confined largely to the treatment of the disease, and in the last ten years in Nova Scotia, noteworthy progress has been made. In 1920 there were 725 deaths, with death rate of 138.3 per 100,000; in 1929 there were 522 deaths, with a death rate of 99.6 per 100,000. Federal Statistics place it at 95.6. This wonderful showing may be attributed to the improved measures adopted. Among these are Sanatorium treatment, home isolation and treatment, with better instruction from visiting nurses, and finally the visiting Clinic. The Sanatorium is, of course, the Summa Bona, in the treatment of this disease. Its great work cannot be exaggerated, and the wonderful results so far attained, may be attributed largely to its work. It has not only sent out cured and improved cases, but it has also given us Missioners, if I may use the term, to carry on the work.

It is unfortunate, however, that only a limited number of cases can be treated at our Sanatorium. The annual death rate in our province is at present about six hundred. It is estimated that there should be a bed for every annual death. At present there are three hundred and thirty-six beds to look after these cases. Those seeking admission often have to wait months before being accepted. In the meantime, the patient's condition becomes worse and worse

*Read before the Health Officers' Association, 1931.

and added to this, we have the psychological effect of this waiting on a certain class of patients. When the patient is finally admitted, often a much graver situation must be dealt with.

If we can have greater facilities for dealing with the incipient case, we are bound to have much more favorable results. At the present time, advanced cases are rarely accepted in our Sanatorium, and a great defect in our system here suggests itself, from the standpoint of presentation.

The question of home isolation and the visiting of properly trained nurses has been developed and too much cannot be said of the good work done in this direction. The visit of qualified and tactful nurses, has shown very practical results, and I have known many instances where the sanitary and general conditions of the home have been greatly benefited by these visits.

The visiting clinic has become an institution in itself. I am at a loss to express sufficiently my appreciation of the good work being done by this clinic. It has done more, in my estimation, to arouse an interest in personal health, than any other factor I know of. The attendance at these clinics is notably increasing. In my own district I get many inquiries weeks before Dr. Campbell arrives. So many cases of an incipient type are examined and placed on treatment, that the future offers great hopes as a result of these visits.

I have been dealing largely, so far, with the detection in methods of treatment of tuberculosis. I wish now to deal with a phase of the question which has not until recently received the practical consideration that it merits. I refer to the chronic or incurable cases of tuberculosis. I feel that if we are to achieve success in dealing with this problem, we must bend all our efforts to meeting this phase of the question. If we could isolate the chronic case where it is necessary, we could go a long way in solving our difficulties. There is no doubt we have here the source of, and the cause of the continued prevalence of tuberculosis.

We can not deal with this disease as we do with smallpox, or diphtheria. We have no immunizing agent that will protect contacts, and therefore the only logical means of dealing with the danger is to remove the cause, in other words, segregate these cases, where it is at all possible. I have in mind a home containing twelve children, two of whom show active, Tuberculosis. They all live in very cramped quarters and there is no way to protect those remaining, unless they removed, and efforts are now being made to carry out this plan.

For these reasons I have been greatly impressed with the policy recently advocated by the Provincial Department of Health, that is, the establishment of annexes to the local hospitals of the province for the relief of the tuberculosis situation. In addition to taking care of incipient cases, which possibly cannot gain admission to the Provincial Sanatorium, it is proposed to segregate the chronic, and thus meet our greatest problem, namely the spread of the disease.

I feel sure that this policy will have a special attraction to the public and be welcomed by many afflicted families. The patients will be near home and friends and not suffer the dread and feeling of banishment among those who are strangers and often unsympathetic towards them, and in this way also many unhappy and hopeless souls will at least be given some measure of relief, and their belief in humanity will not have been in vain. I venture to predict that our vital statistics in a few years will show an improvement that will not only be a source of gratification to the province, but prove its wisdom in its beneficial economic results.

Clinical Experiences With Nupercaine, A New Local Anesthetic

by

NORMAN C. LAKE, M.S., M.D., D.Sc., F.R.C.S.,
Surgeon to Charing Cross Hospital

and

C. JENNINGS MARSHALL, M.S., M.D., F.R.C.S.,
Surgeon with charge of out-patients, Charing Cross Hospital, London, England.

(Abstract from the *British Medical Journal*, March 15th, 1930).

A LOCAL anesthetic should conform with the following desiderata:

1. Practical non-toxicity in relatively large doses and the absence of idiosyncrasy.
2. Rapidity of action in order that the injection itself may be painless and that complete anesthetization of the area may be induced within a reasonable period of time.
3. Good powers of diffusion and penetration.
4. A duration of anesthesia sufficient to enable the most extensive operation to be performed without reinjection.
5. An ideal quality would be a prolonged period of dulled sensibility after the anesthetization proper had passed away.
6. There should be no impairment of tissue vitality or retardation of healing—a fatal defect of quinine and urea hydrochloride, a substance that exhibits the previously mentioned quality to a pronounced degree.
7. The substance should be readily eliminated.

In addition to these physiological properties the local anesthetic should have the following physical characteristics.

1. It should be stable both in the solid and in the dissolved condition.
2. It should be unaffected by exposure to air, or by exposure to heat, for the purpose of sterilization; or by admixture with saline, adrenalin, and such substances as may reach it from the walls of vessels, instruments and syringes.
3. For spinal injection, it would be advantageous for the solution to be effective in such low concentration that the specific gravity could, if necessary, be made lower than that of the cerebro—spinal fluid—that is, about 1006. Inexpensiveness would, of course, be an added attraction.

The anesthetic group in use at the present time (the novocaine group) possesses many of these characteristics and gives on the whole considerable satisfaction. Among the chief disadvantages, however, are the following, the anesthesia, even in conjunction with adrenalin, is not sufficiently long for the performance of some major operations, so that reinjection is sometimes necessary; there is no post-operative anesthesia, indeed sometimes there is abnormal post-operative pain (it must be admitted that this is due usually either to defective hemostasis, which must be meticulous when adrenalin is used, or to the employment of hetertonic solutions); it is liable to destruction by oxidation, is none too stable on heating, and is very labile in the presence of even traces of alkalis. In contrast with cocaine, its action on intact muco us

and other surfaces, such as the conjunctiva, nasal mucosa, and urethra, is lamentably inferior. Its mild vasodilator action is readily counteracted by the use of adrenalin.

The authors have recently tried in a considerable number of cases of all types a new local anesthetic, Nupercaine, made by Ciba. Nupercaine is a quinoline derivative, being the hydrochloride of diethyl-ethylene diamide of alphabutyl oxycinchoninic acid.

It forms colorless crystals soluble in water: the solution may be sterilized without deterioration by boiling. In preparing the solutions, care must be taken that no alkali comes in contact with them. Glass free from alkali should be used, and the saline prepared with doubly distilled water, containing no trace of sodium carbonate or bicarbonate. (Ed. In the meantime, Nupercaine Ampoules containig various quantities and various strength solutions. according to the anesthesia desired, are now on the market, ready for use) However, any cloudiness of the solution which may have been caused by the precipitation of the Nupercaine base by an alkaline solution (or glass containing alkali) is quickly cleared by the addition of two or three drops of dilute HCL per litre.

The following are the outstanding physiological qualities that attracted attention. (1) The extreme degrees of dilution in which the drug is capable of producing efficient anesthesia. (2) The prolonged period of action.

Drs. Lake and Marshall have tested the anesthetic properties of Nupercaine upon themselves, with the following results. The intradermal injection (1 in 2000 without adrenalin) produced immediate and complete insensitivity lasting about two and a half hours. Subcutaneous infiltration (without massage or kneading, which we have found to accelerate induction) was followed by anesthesia in about five minutes, lasting over three and a half hours. In neither case was there subsequent hyperesthesia or dermal change (for example, desquamation). In the intradermic, and to a less extent in the subcutaneous injections, there was an immediate severe hyperemia coterminous with the anesthesia. In the infiltration of a small subcutaneous nerve (perineural infiltration with the same concentration) there was anesthesia in about twelve minutes, lasting over five hours.

Their clinical experiences extend over four months and would appear to support the claims made. The substance has been employed in local infiltration (of the Schleich type), nerve blocks, paravertebral anesthesia, splanchnic blocks, and spinal anesthesia. The concentrations used have been 1 in 2000. It is usually recommended that ten minims of adrenalin (1 in 1000) to each ounce of local anesthetic solution is the appropriate dose.

In the considerable number of cases now dealt with, they have observed no evidence of toxic effect, either general or local. There has been no undue tissue reaction and no impairment of healing after any local infiltration. Thiersch grafts removed under subcutaneous infiltration (1 in 2000) take in a perfectly normal manner. There has been no evidence of neuritis or impaired conduction after any nerve block.

When due attention is paid to the special points to be observed in all operations under local anesthesia—for example, avoidance of traction on structures attached outside the infiltrated field—the procedures could be carried through without giving pain to the patient. Phenomena of sensory dissociation are quite frequent, painful sensation always being lost, but that of pressure and touch sometimes being retained. This, of course, is commonly

observed in all forms of local anesthesia, although never to the same startling extent as with small spinal injections. Post-operative anesthesia was uniformly seen, varying from three to six hours. This admittedly falls short of the ideal, which would have a duration of several days; but nevertheless it is sufficient to confer a very distinct advantage.

Amongst others, the following list of cases in which Nupercaine has been used, would indicate the practically unrestricted scope for the product. Finger operations (infiltration of root); Dupuytren's contracture (wrist infiltration and ulnar and median block); simple subcutaneous tumours; diagnostic removal of glands; oral anesthesia for radium (lingual and dental nerve blocks); scalp anesthesias, Thiersch grafts, sympathectomy, herniorrhaphies, varicocele and hydrocele operations, anal operations, simple mastectomy, ventriculography, colostomy. Among the more extensive procedures are: gastroenterostomy, gastrostomy, appendcectomy, cholecystectomy (with a localized splanchnic block in addition), gastrectomies, thyroidectomies, pituitrectomies. In these, general hypnotics have, in addition, been administered—hyoscine or morphine.

While Nupercaine can be claimed to show a distinct advance on previous local anesthetics in its application to infiltration and nerve-blocking anesthesia, there can be no doubt that its greatest attraction lies in the special advantages it confers in spinal anesthesia. These are the duration of action and the low specific gravity of effective solutions.

The authors summarize their paper as follows:

"Weight for weight, Nupercaine is less expensive than novocaine, and when the dilution is taken into account (0.075 to 0.05 per cent. as compared with 0.5 per cent.), it is very much cheaper. Contrasted with ether and gas and oxygen the cost per patient is infinitesimal.

As a result of our experience we are led to conclude that Nupercaine marks a definite advance over existing local anesthetic substances, and particularly we believe that it promises to mark a very considerable advance in spinal anesthesia.

Of the Dalhousie medical graduates of 1931 hospital appointments are held by the following: Dr. C. M. Bethune, Victoria General Hospital, Halifax; Dr. Donald Campbell, Charity Hospital, Cleveland, Ohio; Dr. D. A. Forsyth, Hillcrest Hospital, Pittsfield, Mass.; Dr. A. A. Giffin, Nova Scotia Sanatorium, Kentville; Dr. D. M. Grant, Camp Hill Hospital, Halifax, N. S.; Dr. F. C. Jennings and Dr. W. J. Murphy, Saint John General Hospital, Saint John, N. B.; Dr. R. K. Muir, Ottawa Civic Hospital, Ottawa; Dr. E. F. Ross, Montreal General Hospital, Montreal.

Members of the medical profession in Canada as well as elsewhere, will regret to learn that Lord Moyhihan of Leeds recently suffered an irreparable loss by fire in the burning of his office. All his papers were kept there; all his books, all his records of patients; a multitude of letters; copies of first editions of all his publications; manuscript of new books and papers. Also there was destroyed some valuable pictures of great surgeons.