

Feeding The Dionne Quintuplets

The January Journal of the Canadian Medical Association contains a detailed account of Dr. Allen Roy Dafoe, of his management of the famous Dionne Quins, during the first year of their lives.

They were kept in incubators until each one reached the weight of six pounds.

A mixture of oxygen 95% with carbon dioxide 5% was given to them for the first three months, as a stimulant. Once a day they were given an oil bath.

Anaemia, which early developed, was treated by small doses of ferrous chloride.

Sun light and fresh air were early and frequently utilized in the program with excellent results.

On the first day they were given every two hours 10 or 15 drops of warm water with an eye dropper. Every two hours on the second and third days, each had from 30 to 60 drops of a mixture containing 7 ounces of milk, 13 ounces of water and one ounce of corn syrup.

From the fourth day until October 19, they were kept on breast milk. They were then placed on a mixture of cows milk and Dextrin-Maltose. After a few days evaporated milk was substituted for cows milk with the addition of lacto-bacillus acidophilus.

This formula was used until the children were one year old.

At the second month they were given vitamin D in the form of viosterol.

The first solid food was used on October 26th in the form of Pablum, which was given daily from that date.

Assorted vegetables and fruits cooked and strained were also used in the diet.

The nutritional improvement in the children was satisfactory throughout. Their management by Dr. Dafoe reflects great credit on his professional skill.

The world justly applauds him on his success.

MODERN HOSPITALS

(Winnipeg Free Press)

They have become centres of health teaching, not only through their outdoor clinics, but through their social services which, when advisable, follow their patients to their homes. They have become a part of the educational system of the country in the education of at least two of the professions. The growing science of bio-chemistry which every year discloses new wonders is turning its eyes toward the hospitals. The hospitals are becoming, if they are not already there, highly important medical laboratories.

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"Oh, Mother!" said little Nellie, who had been taken to see her twin brothers for the first time, "did you order two?"

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The Organization of a Community Hospital for the best of Service*

CHANNING FROTHINGHAM, M.D.
Boston, Massachusetts

IT was suggested to the trustees of the Faulkner Hospital by an eminent surgeon about thirty-five years ago that in building that hospital the experiment should be tried of making provision for the admission of private patients. It is difficult at the present time to realize that it is only since the twentieth century started that hospitals began to be used by all the citizens of a community irrespective of their financial status. The result is that at the present time each community needs a hospital for certain of the medical and surgical problems of all of its citizens. Such a hospital I like to speak of as a community hospital. One should realize that such a hospital is quite in contrast with the large hospitals devoted only to charity patients or to the large state institutions devoted chiefly to charity patients with one particular kind of disease. One might ask why is there need for a community hospital? One of the reasons, and one which in itself is sufficient to necessitate these hospitals is the fact that for certain diagnostic and therapeutic procedures expensive and elaborate equipment is necessary, the price of which practically prohibits the individual physician from owning it. Therefore, each community must supply its physicians with such equipment and by so doing the cost of this elaborate equipment is spread throughout the community. Such a community hospital also provides a medical center for the community from which may emanate knowledge in regard to medical problems for the layman. A community hospital can be an important factor in improving the standards of the medical work in the community. It also provides a training school for nurses so that each community may train its young women to take care of the sick of that community.

In my experience throughout New England, the large teaching hospitals and the large charity hospitals with closed staffs are usually well organized; on the other hand the community hospitals which are naturally opened to many physicians and in which the majority of the patients are usually private patients are frequently not well organized and considerable improvement is easily possible.

Today the discussion will be limited to the organization of a community hospital to render the best of service and it should be borne in mind that no ideals will be presented which have not been worked out in a practical way in some existing hospital.

In the first place, the community hospital should be a complete unit so built that it is able to have admitted and to care for acute and chronic illnesses, contagious or mental diseases, or any other medical problem with which the physician may be confronted. The time has gone by when the patient can be properly studied from just one angle and the expensive and elaborate equipment should be available for all the problems.

* Delivered September 1st, 1936 to the Refresher Course at Dalhousie University, Halifax, Nova Scotia

Just how large the complete unit should be will vary in different communities. The size of the community, the facilities for transportation and the financial resources will all be a factor in determining just what is the ideal unit. There may be several community hospitals in a given community but they all should be complete units.

In addition to a building so arranged to contain any type of medical problem, there should be complete equipment for the diagnosis and treatment of any disease with possibly a few exceptions of very expensive equipment which is only very rarely used. If such equipment is necessary, the patient could be transferred to a larger medical center. In addition to equipment for diagnosis and treatment, there should also be a complete laboratory for diagnosis and post-mortem study.

The staff of such a community hospital should be opened to all reputable physicians of the community for their private patients. If the hospital is not large enough to take care of all the private patients referred, then another community hospital should be built or the existing one enlarged. If more than one community hospital exists in a community, the physicians might only have access to one, but provision should be made so that all of the reputable physicians in a community should have access to the equipment furnished by the tax-payers of that community. Obviously, if there is a large number of physicians on the staff of a community hospital, it is not practical to have them all taking part in the care of the charity patients, and therefore, the staff could be closed so far as designating one group to look after the charity patients.

It is interesting to note that in Massachusetts it is in the larger cities that the opportunities for physicians to hospitalize their private patients are most limited. Although these hospitals should be opened to all of the reputable doctors in the community, it is important that the activities of the physicians and surgeons be limited to what they are capable of doing. This is one of the ways in which the hospital may be a very powerful factor in raising the standards of medical and surgical work in the community.

The organization of the staff is of special importance. I feel that there should be three main divisions of the staff:—Medical, Surgical and Obstetrical. The other specialists may be grouped under one of these three heads. There should be a chief of each service who should be chosen from ability and not from seniority. The chiefs of service should have their offices in the hospital. It is of interest to note how many questions are referred to a chief of service and how helpful he can be if his office is in the hospital, so that an appreciable amount of his time is spent on the grounds.

All of the charity cases which are referred to the special group of the staff selected for their care should be admitted to a diagnostic service unless it is obvious that there is need for immediate treatment such as the delivery of a baby or the care of a compound fracture. If one will study the difference in diagnostic procedure and advice in regard to treatment among patients with apparently the same symptoms who are admitted through the admitting office of a hospital directly to this or what service, one will appreciate what discrepancies there are in the results from this method of admission, even in hospitals where the closest attention is given to excellent diagnosis and treatment. If a patient is going to be admitted to a diagnostic service, it is equally important to see that all of the appropriate members of the staff are called upon to help in making diagnosis as well as prescribing treatment, and the medical chief should act as the family physician in summarizing the

various opinions. This can easily be worked out by certain rules in regard to consultations.

There should be readily available on all the wards, in the administrative offices and in the laboratory, a book of rules covering certain problems relating to the administrators, the physicians and the nurses. Such a book in the Faulkner Hospital is called the Precedent Book. It is a loose-leaf affair which is changed from time to time, and in which are various rules in regard to minimum standards which must be lived up to by all. Also, there are rules in regard to problems of administration and consultation. Also, there are certain specific instructions in regard to the duties of the nurses. In addition to this, there is also recorded in this Precedent Book certain therapeutic procedures and surgical procedures which are well established and non-controversial. These are put in in order to assist the doctors in caring for their patients with a minimum of difficulty. Such outlines of treatment also avoid confusion in the nurses' minds, because many times different doctors make minor changes in a certain type of treatment which are unessential and which are frequently omitted if a definite program is available in print. Through such a rule book, it is possible to limit appreciably the number of medical and other preparations used in treatment and thus economy will result.

The community hospital should be organized so that the laboratory and roentgen-ray service is available not only for the patients within the hospital but for the patients of the physicians on its staff who do not have to come into the hospital for study or treatment.

In the training of nurses, consideration should be given to turning out nurses with different grades of education so that the hospital will supply to the community not only the fully trained nurse but also the trained attendant who will not demand such a large financial reward. The hospital should have a directory of nurses for the physicians on its staff.

These community hospitals should realize their responsibility toward the education not only of the physicians but of the laymen. The physicians of the community can be educated and stimulated by clinical meetings in which pathological discussions are held and talks given by physicians who are acquainted with any advances which have developed in any line of medicine or surgery. The laymen should be educated in medical problems by lectures on medical problems which are of interest to the laymen and by demonstrations in the hospital of what the laymen should expect in the way of diagnosis and treatment if they are being properly cared for. The laymen of the community served by the Faulkner Hospital have shown a steadily increasing interest in lectures and demonstrations of this type as the years go by. This interest is much more marked than many of the physicians thought would be the case. Such an education of the laymen arouses their interest in their hospital and leads to better support from the community so that the hospital may be a more comprehensive unit.

It is realized that it is difficult to carry out all of these ideals immediately in every community, but experience has shown that each step made toward the ideal has resulted in improved conditions in the hospital in which it has been tried.

The Present Maternal Mortality Rate with Special Reference to Labor*

E. K. MACLELLAN, M.D.

DR. MCLEAN gave you some statistics yesterday in regard to our maternal mortality. These figures can scarcely be "pointed to with pride," as the politicians say. We may possibly salve our consciences to some extent and comfort ourselves with the knowledge that our figures are not worse than the general world average. Ours are better than some and worse than others. It is an undisputable fact, however, that the world over, there is a most appalling slaughter of the innocents, and of their mothers, as well as a terrible toll of damaged health due to maternal and foetal morbidity. Last year, in presenting a paper, I was able to show that the gross loss of Nova Scotian lives, due to childbirth, since the outbreak of the Great War, was four times as great as the loss of life due to the war. The birth injuries to mothers and babies in that same period would no doubt also tremendously outnumber the maimed and crippled due to the war.

The war was a dramatic and horrible thing. Nearly all of us here can recall the sense of dread with which we read the casualty lists. The death and maiming of our young men seemed such a needless and useless sacrifice. During the war years, all Nova Scotians, even though no immediate relatives were in danger, were under a severe nervous tension. Contrast this with the apathy and indifference which has existed and which continues to exist, in regard to maternal and foetal deaths and damage. I regret to say that this apathy is *nowhere more evident than it is in the ranks of our own profession.*

I gave the following warning at one of our branch society meetings within the last year or two, and I should like to repeat it here. There is going to be a very marked improvement in the practice of obstetrics in the next few years. It is going to be *forced* on the profession. Agencies now at work are going to compel us to make a vast improvement. Women's magazines which are being read by *your patients* are going into minute detail regarding good and bad obstetric practice. There are women in most communities who have had babies under ideal conditions, with the best of *pre, intra, and post-natal* care. Women are prone to compare notes. There are well trained young men going out from colleges with the idea of giving good obstetrical service.—Any of you who are not giving such service had better do so. It is humiliating to be shown up by a tyro—or to have your type of practice contrasted with that of a young man, to your disadvantage. You men who are here today are probably not the ones who need such warning. Your attendance year after year at these meetings indicates a desire to keep up to date. There are, however, many practitioners in our midst who are doing work which can only be described as perfectly ghastly. If time permitted I could tell you of many cases in which lives of both mothers and babies have been unnecessarily sacrificed.

* Delivered before the Fifteenth Dalhousie Refresher Course, Halifax, N. S. on September 1st, 1936.

I should like to suggest to you who are here,—make this an obstetrical autumn. Get a good text book and give yourself a refresher course. Study the text as though you had to pass an examination and make 97% to pass. At the same time, study every case you can pre-natally and spend plenty of time. Study every case in retrospect. Ask yourself if you could have improved your handling of the case. Check up specially on trauma to mother or child. Do rectal examinations wherever possible rather than vaginal. Start routine auscultation of the foetal heart if you are not now doing so. Auscultate the heart frequently during the second stage of labor and specially during forceps deliveries. Try to approximate, as closely as you can, an aseptic delivery.

Dr. Atlee gave you an excellent paper yesterday on the care of the mother during pregnancy and the puerperium. My task is now, to go into some more detail in regard to the "safe conduct" of the baby into the world and of the conduct of the labor in such a way that the mother will have received no preventable damage.

Dr. Atlee has gone into the question of pre-natal examination very carefully.—I shall only refer to one or two points. Do not neglect routine pelvimetry. But do not place complete reliance on the measurements you find. Remember you may have a classical normal or even an oversize pelvis and yet have gross disproportion. Many of you will recall Dr. Chipman's talk on this subject and his dictum "Measure the pelvis with the head as the cork to the mouth of the bottle."—Push the presenting part down into the pelvis and see if it can be made to engage. If it can it will probably pass. Dr. Atlee has referred to over-riding of the presenting part,—watch carefully for this; it is very important and it usually means gross disproportion. A point of great importance is this—"Non-engagement of the head at term in a primipara usually indicates gross disproportion." By gross disproportion we mean, a degree of disproportion such that delivery by the natural passages of a living and undamaged child and without serious damage to the mother's tissues is impossible or at least very improbable.

Before leaving the subject of pre-natal examination, I should like to advise that you should always be on the look-out for anomalies. Polyhydramnios is almost always associated with anomalies. In its presence look out for hydrocephalics. Be suspicious of a sudden increase in size between the seventh month and full term. In suspicious cases have an X-ray examination if it is available. Hydrocephalus can always be recognized. The tremendous head is easily palpable. It is a crime to allow a woman to go through hours of exhausting labor, when it is quite impossible for her to deliver herself. Anencephaly is not so easy to diagnose—but in the presence of polyhydramnios without hydrocephalus, it is very probable. On examination the signs are those of a double breech. I have had three cases recognized before delivery; one was confirmed by X-ray. Twins can be recognized in almost one hundred per cent of cases, if the examiner spends sufficient time. Be suspicious if the uterus is unnaturally large, broad, flattened anteriorly, and irregular. The uterus with polyhydramnios is excessively large but is unusually regular in contour and under high tension. The diagnosis of twins is important as well as being a great satisfaction to the attendant. Don't forget to search for two foetal hearts. The ante-natal diagnosis of twins or polyhydramnios is of practical obstetrical importance in that each condition predisposes to Post Partum Haemorrhage, and when Post Partum Haemorrhage is anticipated, great loss of blood can usually be prevented. This will

be referred to in more detail later. There is just one other point to which I would like to refer. Do not be surprised if the position and presentation at the onset of labor differs from the findings at pre-natal examination. I have had several cases during the last few years in which the presentation changed from vertex to breech, or from breech to vertex, in the last few days. These cases were ones proved by X-ray. It is not uncommon to find the foetus swing from an LOA to an ROA during examination. Always check your previous diagnosis of presentation and position when you are first called to see your patient in labor.

Let us pass now to the conduct of labor and consideration of the dangers which threaten the mother and the child. From the maternal standpoint the three killing complications are infection, haemorrhage and toxæmia. There are many disorders which may be associated with pregnancy and labor, which may endanger life, but we cannot consider them here.

Infection is introduced at the time of birth probably in every case. Each one of you knows as well as I do what surgical asepsis means. In every case, surgical asepsis, as near as is possible, should be striven for. Even in a poor home with very limited facilities and assistance, much can be done. A clean gown can easily be carried, as well as a dozen cheap and clean towels, for draping. The field should be kept clean with frequent irrigations with lysol solution. Gloves and surgical preparation of the patient need scarcely be mentioned as essential. Rectal examinations to note progress have already been referred to. Every entry of the vagina adds to the risk of infection. All of these precautions are important and should be observed.—*but* I believe the menace which overshadows all others is that of direct infection from the nasopharynx of the operator or nurse, and less often from the nasopharynx of the patient herself.

In 1926 in the Sloane Hospital in New York an epidemic occurred of infection by the streptococcus haemolyticus. They had some forty odd cases with nineteen deaths; many of those who recovered were left with permanently damaged hearts, kidneys or other organs. Investigation of this epidemic revealed the fact that thirty-five members of their staff were carrying the streptococcus haemolyticus in their nasal pharynges. I was in New York at the time of this epidemic and saw many of these patients with Dr. Watson. At the same time I had left a patient in the Grace Maternity twelve days after a successful Caesarean section with both mother and child doing well. While in New York I received a telegram saying that the condition of the baby was causing concern and a day or two later received word that the baby had died. On my return to Halifax I discovered that the baby had died from diphtheria. We immediately instituted a complete swabbing of everyone on the staff and found five nurses were carriers of the Klebs Löffler Bacillus including the two nurses in the nursery who had been handling the baby. At the same time, another baby, a patient of Dr. Wiswell's, became infected and died.

In Toronto in 1925 an epidemic of infection with the streptococcus haemolyticus resulted in a great many maternal deaths. This epidemic was not confined to any one hospital. Investigation revealed similar findings to those of the New York epidemic of 1926.

The danger of the naso pharynx as a source of infection is adequately borne out by the seasonal incidence. It will be found that puerperal infection rises to its peak during the months when respiratory and throat infections

are prevalent. It falls to a minimum during the summer months when these infections are rare.

The medical practitioner, who is doing general practice and coming in contact with colds, influenzas, sore throats, quinsies, etc., is very liable to harbour infection himself, and to pass it on to his patient. There is only one answer to this question—*Masks*. Masks should be of six ply gauze and should cover both mouth and nose completely. A mask which covers the mouth only, might as well not be worn. I might suggest a very simple experiment that could easily be tried in this province and which, if it furnished striking results, might be passed on to the world at large as a real contribution to public health. It is this,—have packages of masks made up by the nursing staffs of the three provincial hospitals and supplied to every practitioner in the province with a request that they be worn at every delivery both by the doctor and nurse, for a period of one year, and that the masks be laundered after each wearing. At the end of a year, if we could show a sharp decline of the death rate due to infection, which has averaged about twenty-five per annum for many years, it would be most convincing. I believe the results would be so striking that few men would subsequently care to attend a case unmasked. The cost of such an experiment would be trifling. I have only one or two other remarks to make in regard to infection. Remember that trauma predisposes to infection. Be gentle with forceps. Also retention of placental tissue is an important predisposing factor both in regard to haemorrhage and infection. Handle your third stage of labor correctly.

In regard to the actual treatment of infection, time does not permit of going into much detail. Remember above all to keep out of the uterus. An uterine douche is dangerous as it is very liable to carry with it infection from without. Any instrumentation is absolutely contraindicated as damage is liable to be done to the zone of leucocytes which will change a localized infection into an infection of the blood stream. The only justification for ever entering a puerperal uterus is that of removing retained placenta tissue which is causing haemorrhage. Removal can be best done with the gloved finger and manipulation should be gentle. Posture for drainage is obviously important. This is well provided for in most hospitals where modern Gatche beds are available. Much can be done, however, in the home by raising the foot of the bed on blocks or chairs.

Watch the bladder for residual urine. In many cases it will be found that eight to sixteen ounces of residual urine are habitually retained the first few days of the puerperium. Patients with any considerable quantity of residual urine usually have the sensation that the bladder is only partially emptied. In such cases a catheter should be passed after urination. The use of Ergot during the puerperium is referred to in an article in the last issue of the American Journal of Obstetrics and Gynaecology. It shows a lessening of morbidity, of haemorrhage and of infection in a large group of cases by comparison with a similar group in which Ergot was not used routinely.

Haemorrhage. It is quite impossible to deal with the ante-partum haemorrhages, placenta praevia, and accidental haemorrhage in this paper, as each one would furnish material for several lectures. I have just one observation to make. Don't do Caesarean Section for accidental haemorrhage. These patients are suffering from shock, haemorrhage and toxæmia, and are poor operative risks. They are also very liable to post operative bleeding.

Post Partum Haemorrhage is almost one hundred per cent due to faulty handling. Nature makes wonderful provision for the prevention of bleeding after delivery. Co-incident with the end of labor there is a fall in blood pressure, a slowing of the blood stream, an increased coagulability of the blood, and lastly and of outstanding importance, the contraction of the uterine muscle by which its cavity is obliterated and the venous sinuses sealed. There is also retraction of the muscle fibres to aid the contraction. By retraction is meant a permanent shortening of the muscle fibres.

There are certain things which predispose to haemorrhage—

Uterine Inertia or Exhaustion.

Long difficult labor. Over distention.

Twins. Poly-hydramnios.

Toxaemia.

Ante-partum haemorrhage.

Prolonged anaesthesia, particularly chloroform.

Mechanical obs. to obliteration.

Retained placental tissue. Clot.

Blood Dyscrasia.

As the birth is nearing completion, the operator should ask himself these questions. "Is this a case which is likely to bleed?" "Have any of the predisposing causes of haemorrhage been present?" If so, be prepared to control the bleeding promptly if it should develop. Have a hypo of $\frac{1}{2}$ c.c. Pituitary and 1 c.c. of aseptic Ergot, or better, Ergometrine, ready for immediate injection (intravenous), as soon as the placenta is delivered. Have a hot douche 115° of weak lysol solution ready. Gauze for packing should be available.

Primarily, uterine inertia should be anticipated and prevented by not allowing patients to go into labor who have such a degree of disproportion that the uterus will exhaust itself without delivery being effected. Secondly, if forceps are going to be used, they should be used before the uterus becomes exhausted. If definite exhaustion has developed, forceps should be withheld until the patient and the uterus have been rested. When contractions have been re-established, forceps should not be withheld (provided, of course, there are no contra-indications), because the inertia will very soon recur.

Pituitary used unwisely is one of the most fruitful causes of Post Partum Haemorrhage. To use it to stimulate a tiring uterus will often result in a storm of powerful contractions which may or may not effect delivery, but will result in complete exhaustion.

Faulty handling of the third stage with retained placental tissue is, I believe, by far the most common obstetrical error.

Routine inspection of placenta. The importance of routine inspection of the placenta need scarcely be mentioned.

Clot as a mechanical barrier to complete obliteration of the uterus is important. Before leaving your patient make certain by the use of a moderate Créde that the uterine cavity is entirely empty.

I cannot go into the details of the treatment of haemorrhage here. Prophylaxis is all important. Just one thing I should like to say is—familiarize yourself with the method of packing a uterus properly.

Since the Chamberlen secret became known about 1747, forceps have probably caused more deaths than any other single agency. This instru-

ment never was intended as a means of effecting delivery. It should properly only be used as *an aid* to the natural expulsive forces. I know from past experience that it makes a speaker very unpopular to condemn this weapon. I use the word weapon advisedly. On many occasions I have been told by medical audiences practically—that I didn't know what I was talking about when I had advocated caution. We have heard all about the trials of the country doctor, the eighteen to twenty mile drives, the snow-blocked roads, his own exhaustion, poor fees or no fees at all, etc., etc. We know that these things are true and we sympathize with him. But poor fees, no fees, exhaustion, or distance, don't justify the taking of a human life. Forceps used to drag a baby out of its mother's pelvis by brute force and with disregard for her tissues, are simply carniclasts. Some 425 babies are born dead each year in this province. How many of these deaths do you think are due to forceps? My guess would be at least 250. Curtailment of the use of forceps—and their proper use rather than abuse would result in a sharp drop in our foetal death rate.

There are three forceps operations.

High—almost obsolete. Medium. Low.

There are three types of application.

Cephalic. Pelvic, and Cephalic Pelvic—only at outlet.

Always strive for as near a perfect cephalic application as possible.

Forceps must not be applied if there is gross disproportion. They must not be applied if there is secondary uterine inertia. The position must be definitely known. Go up and keep on going up with the examining finger or half hand till you find a part you can definitely recognize. The os must be fully dilated. The membranes must be ruptured. The bladder must be empty.

After the forceps are applied, if there is a spread between the handles, you have a poor cephalic application.

After the forceps are applied, and before closure of the handles, listen to the foetal heart. Then close and lock the handles and auscultate again. Listen for thirty seconds or so. A sudden slowing of the foetal heart usually indicates cord interference. Increase in rate or irregularity usually indicates excessive compression.

Being assured your forceps are as well applied as possible, a tentative pull which is made in order to assure one's self that the forceps will not slip.

Then proceed. Pull with pains only remembering that the forceps are an adjunct to the natural expulsive forces. The foetal head can stand considerable compression for a short time, but it cannot stand moderate compression for a long time.

Separate handles when traction is not being made in order that the cerebral anaemia due to the compression may have an opportunity to correct itself before the next uterine contraction.

Auscultate the heart frequently during a difficult forceps delivery.

Be gentle, DeLee says, Art not Force. DeLee's key in the lock manoeuvre is used in cases of occipital posterior position with deep transverse arrest. This manoeuvre may be well described by its name. Imagine yourself attempting to open a lock with which you are not familiar and in which case the key does not readily turn in the first attempt. You would feel your way, so to speak, pushing it in a little further and trying it. If this is not successful it is brought out a little and tried again until finally a line of least resistance

is found. This exactly describes the key lock manoeuvre. The forceps are applied and traction is made. If advance is not noted with reasonable traction Dr. DeLee rotates and again makes traction. This manoeuvre is repeated until he gets the head in a position of least resistance in which advance can be affected with moderate traction. If the head rotates anteriorly and descends Dr. DeLee removes the forceps and reapplies them correctly to the low level and proceeds until delivery is effected. The whole operation of the delivery is produced by moderate traction and gentleness.

The Melhado manoeuvre is a manoeuvre described by Dr. Melhado one of the younger associates at McGill. It is a manoeuvre intended to replace the old Scanzoni which consisted of rotation of the head in the pelvis in which there was grave danger of damage to the pelvic organs. Dr. Melhado pushes the non-rotating head high up above the pelvic inlet until it lies in a transverse position. He then applies forceps rotating the head until it lies in one or other of the anterior positions. He then makes traction to bring the head down in an anterior position and to fix it there. The forceps are then either removed and the case left to proceed normally, or, if it looks like a very easy delivery he may, in some cases, proceed to complete the delivery with the forceps after reapplying them. Dr. Melhado's manoeuvre has been very favourably received by many of the large American schools of obstetrics. I believe it is a decided addition to the various methods we have in dealing with this type of case.

The prophylactic low operation is one which is coming more and more into favour. High forceps or medium forceps operations are being used with steadily decreasing frequency. The prophylactic low operation, on the other hand, is now done as routine in many good centres. It is an operation which one would hesitate to do in a private home, but is ideal for hospital practice where the aseptic technique is more nearly perfect. In this operation one is assured of a perfect pelvic application and at the same time of a perfect cephalic application. The forceps are used more for direction than traction, only two or three pounds traction is necessary coincident with a uterine contraction. The head is brought down until it can be controlled, the forceps being then removed. Forceps used for this purpose save time, which lessens the risk of secondary inertia and saves anaesthesia, thereby lessening the risk of post-partum haemorrhage.

Breech deliveries are dreaded particularly on account of the increased foetal mortality. As a general thing breech deliveries from the mother's standpoint, are not particularly undesirable. The old teaching, which was to the effect that if the infant was not delivered in ten minutes it could not be delivered alive, was responsible, for the largest percentage of dead babies. The teaching today is to disregard the clock. Don't make traction on the breech. It will certainly result in extension of the head and extension of the after coming arms which makes the delivery almost impossible in many cases. Any traction which is made should be gentle and should be made during a uterine contraction. The contracting uterus maintains flexion and prevents the arms extending. I am very fond of the use of pituitary as soon as the breech is born. The uterus is usually temporarily exhausted by its efforts to deliver the breech; a $\frac{1}{2}$ c.c. hypo of pituitary will usually result in delivery with ease. An episiotomy should be done as routine in breech deliveries. It is done here in the interest of the baby in order that easy access may be

had in order to deliver the after coming head. If forceps are required to the after coming head they can be more readily applied.

Pressure by an assistant directly on the foetal head, and following it down into the pelvis by firm pressure, as the operator makes delivery by the Moricean Veit method, is of the greatest assistance. The high foetal mortality rate in breech deliveries is usually due to fractured cervical vertebrae or intracranial damage caused by the operator in using excessive traction.

Eclampsia. I like to group my patients into those who are potential eclamptics and those who under no circumstances are likely to develop eclampsia. You know the various reactions of women to pregnancy. Many react so favourably that they feel in better health than they have ever done. This type is not going to develop eclampsia. There is the other type who have usually had trouble during the first trimester who have lassitude, occasional headache, and eye-spots. It is from this group we may look for eclamptics. I always feel that there is an analogy between the pre-eclamptic patient and the diabetic. The diabetic can carry on for years in apparently perfect health and freedom from symptoms as long as the rules are observed. A diabetic in perfect health can, however, precipitate a deadly illness by a violation of these rules. In the same way a potential eclamptic may become desperately ill to the point of death in a few hours. There are certain things which precipitate convulsions and serious illness. These things are constipation, excessive physical exercise, gross intake of proteid and chill. Of these things constipation is the most important. During late pregnancy intestinal elimination is almost always defective. A patient may have a large bowel movement daily and yet be constipated; that is to say, the bowel movement she has today is the one she should have had three or four days previously. Excessive physical exercise is of the utmost importance; these patients have extensive pathology in the liver and kidneys. Work means increased metabolism which in turn means increased toxæmia. I have known many cases where this factor has seemed to be the precipitating cause of convulsions. Gross intake of proteid is probably not less important than constipation or excessive physical exercise. It operates in the same way as gross intake of carbohydrate would with a diabetic. We do not know why proteid should be so deadly to eclamptics; the fact remains, however, that it is in many cases a deadly poison.

Chill, particularly after having been over-heated, will often precipitate danger signs. It will often create almost a complete anuria. The chief danger signs of an approaching eclamptic, are a rising diastolic pressure, headache, a falling urinary out-put with increasing albumen and some one or other of the various types of disturbance of vision, the most common being dimness or hazy vision. Most potential eclamptics can be carried to term safely without the development of these alarming signs. They should be instructed to rest a great deal of the time. Advising exercise in these cases is asking for trouble. Adequate intestinal elimination should be provided for. Proteids should be restricted to a minimum and chill avoided. If the patient is getting worse in spite of your treatment the pregnancy should be terminated.

There are many other subjects, such as version, caesarean section and obstetrical anaesthesia which unfortunately time does not permit us to discuss.

Infant Mortality and its Prevention*

GORDON WISWELL, M.D.

INFANT mortality is a social and economic problem, a symptom of the sanitary condition of a community, an indication of its economic and moral state, and of the existence of evil conditions in the homes of its people. It is the most sensitive index of social welfare and public health administration, and a high mortality rate is an early sign of degenerative racial qualities. Infant mortality can be prevented to a large extent, and statistics of the last few years are showing the results of the enthusiasm and work of a large body of labourers in the child welfare field.

It might be argued that the saving of a great many infants is not worth the effort—and is merely perpetuating the survival of the unfit and the weaklings, and disseminating another strain of weak heredity. Against this argument, we have the fact that a low death rate in infancy is associated with a low death rate in older children. A reduction of infant mortality secures a reduction of mortality at higher ages, and we should strive to eliminate the unfit by birth rather than by death, and improve the race by preventing marriage and reproduction by the unfit. It has been shown by careful records that the infants saved during their first year are not only in good health at the end of the first year, but continue in good health throughout child life, and show a definite improvement in their mortality during later years, a greater improvement than is shown even during the first year. We must also realize that the conditions that determine a high infant rate are prejudicial to life at all ages, and improvement in sanitary measures, and the betterment of social economic conditions which are associated with a low infant rate exert a favourable influence on the community as a whole.

By improving the condition of the pregnant mother and by using our knowledge in prenatal care and infant hygiene, we are also preventing the development of serious defects, and lessening the damage to those who survive. A high infant mortality also means an increase in permanent defects, and by improvement in the rate we automatically affect the future health of the child. We also find a definite improvement in the general standard of health in those communities with a low infant rate, and these communities are registering a definite lowering of their general mortality rate.

To the general practitioner a study of infant mortality should be both of interest and of value. A great many of what used to be attractive features of practice have disappeared. By divisions of labour, and the emphasis placed on the specialties, the field is contracting all the time. The public have been led to believe that the sooner the specialist is called in the better. The seriously ill are sent to hospital. The poor go to the various clinics. The army, the navy, the merchant marine and the Workmen's Compensation Board and other government agencies, federal, provincial and municipal lop off a few more branches of the general practitioners tree. Yet in the final analysis, it is still the ordinary doctor who is in the best position to originate public health

* Delivered at the Annual Dalhousie Refresher Course, Halifax, N. S. on September 3rd, 1936.

work among the people. There is still the doctor patient relation that gives him a tremendous advantage for good as far as the health of the people is concerned. Nor can he escape the responsibility when the infant mortality in his community is too high. He, above all others, should be able to point out the various factors entering into the problem, and it is his advice that should be followed in the steps taken to deal with the problem and reduce the rate. Organized child welfare work cannot seriously interfere with private practice. The small number of infants which come under the care of any one physician in the course of a year does not materially affect the mortality rate. On the other hand, organized welfare work has improved the lot of the physician in that the mothers are educated to bring their babies at a much earlier stage of their lives, when results of treatment are more satisfactory, and the activity of the nurses in weighing babies alone has been of considerable help rather than loss to the physician.

The causes of Infant Mortality must be sought throughout the whole of the social fabric. These causes may be indirect or contributory and direct or immediate. Ordinary statistical tables do not show the contributing factors. These may be prenatal, natal or post-natal, or due to purely local or more general causes. The rate is also found to vary considerably, according to the season, the social condition of the family, its location, varying from one town to another a short distance away, and in one town in different years. It is very difficult to trace causes, and no one plan can be adopted to solve the problem of their origin. To mention some of the more important contributing factors, we have weather conditions, extremes of heat and cold, the intelligence, habits and customs of the population, the completeness of birth registration, the relation of male to female births, legitimate to illegitimate, the number of first born in any one year. Standards of public health influence the mortality, such as control of epidemics, milk and water supplies, housing conditions. The physical condition of the mother has a marked effect on the mortality rate, as also has her economic state, her intelligence, the frequency of her pregnancies, and whether she is encouraged in breast feeding, or receives proper guidance in artificially feeding her baby. A study of infant mortality really begins with antenatal pathology and hygiene. Loss and damage occurring prenatally may not be revealed until after birth and about 40 to 45% of infant deaths occur during the first month of life. This is serious enough, but if we add to these the still-births, and again to these the loss through miscarriage and abortion, it is estimated that before pregnancy and labour and the puerperium are completed, we may calculate an infant loss of 200 per 1,000 pregnancies. This is a terrific loss, and it is obvious that its prevention lies in adequate prenatal, intranatal and postnatal care of our mothers. As regards the other factors mentioned, and their influences on the mortality rate, male infants have a uniformly higher rate, and as the male birth rate has risen since the war, we should expect a higher rate for this reason. By four years of age the mortality of the sexes is equal. On the average, first born infants have a 33% higher mortality rate than second born during the first year. The rate among illegitimate babies is probably twice as high as that of legitimate babies. The causes of this are apparent, and removal of the stigma attached to the unmarried mother would do a great deal to help in the care of these infants, especially during the first few months. Breast feeding has a very definite effect on mortality, and opinion is unanimous in all countries regarding the supreme value of mother's milk in prevention. A

breast fed baby has four to five times the chance of survival over the artificially fed baby, even considering the advances made in recent years in bottle feeding. Weaning at the end of three months can be done safely without affecting the mortality. Breast milk is the best protection against gastrointestinal diseases, and babies getting it show a far greater immunity to the infectious diseases. It is undoubtedly the greatest preventive of infant mortality, and it is the most economical. It is difficult to arrive at a correct conclusion as to the percentage of babies that are breast fed. From my own experience, I should say that a few years ago it was not difficult to get mothers to breast-feed their infants. Now, my experience is that there is a greater tendency for the average mother to want to feed her babies artificially. Some of them refuse to even try, and if they do not want to do so, it is almost useless to attempt it.

Weather conditions and climate have an important bearing on infant mortality—heat and diarrhoea in summer and cold and respiratory infections in winter. Poor housing conditions and overcrowding in tenements and educational status aggravate the effect of heat and cold, as also do contamination of foods by infected persons and flies. Hot weather hygiene is pretty generally recognized as a cause, and education along these lines is cutting down the mortality directly or indirectly. Mortality is higher in large families, but this may be more a result of defective hygiene, and insufficient nourishment.

Economically speaking, the income of a family has a direct influence on mortality within the family group. The rate of the upper and middle classes is practically half that of the lower and unemployed groups. Better economic conditions, increase in employment and income automatically improve the infant mortality.

Institutional mortality has always been high, but has improved tremendously in recent years, due to better nursing, better feeding and better care of the milk supply. The rate now may be said to be surprisingly low, especially among those infants who have passed through the first few perilous months successfully. We have not had a death at the Infant's Home here for four years, and we have an average of forty babies from birth to three years. Generally speaking, the fewer days spent in an institution the better; the average baby is safer in its own home, and to admit a healthy baby to a hospital may be the signing of its death warrant. Those babies who must be separated from their mothers are better off in supervised foster homes, and the compensation given should be adequate to make it possible for them to secure the best of care. There are quite a few cities now where all these babies are placed in homes under proper supervision, and institutional care is a thing of the past.

Drawing your attention to these factors gives you some idea of the contributing and indirect causes of infant mortality. Direct causes, however, are perhaps more interesting, and concern us more in our every day practice.

Four causes are all present at birth—prematurity, injury, debility and malformation.—89% of these deaths occur during the first week of life, and 70% of the total death rate of the first week is due to these four causes. Of cases dying through the first month, 75% are due to prenatal causes, and acute and chronic diseases of the mother. Intracranial haemorrhage heads the list of causes occurring during birth or shortly after, with asphyxia and atelectasis as results very often of injury. In the neo-natal period, prematurity becomes the big factor in mortality, 23%; with congenital debility and mal-

formations coming next, 18%. To deal adequately with the question of prematurity we must take better care of the mother prenatally. Among the more obvious causes are syphilis, acute infections, chronic infections, as nephritis, tuberculosis, heart disease, injury to the mother from falls or violent exercise, emotional upsets, fright, shock, placenta praevia and malpositions of the uterus. The immediate prognosis depends on the age of the infant, type of feeding, and promptness of care given. At twenty-four weeks, all infants die in a few hours. At twenty-eight weeks, about 50% survive, and at thirty-six weeks the majority will live. The greatest mortality of the older infants occurs in the third week, often as a result of pneumonia and infection. The exact age does not matter a great deal. A baby under $2\frac{1}{2}$ lbs. and less than 13" in length has a small chance of survival. The two most important points in treatment are the maintenance of heat, and the provision of proper food. To maintain heat, incubators are not a necessity. Two or three bottles in a padded crib or basket are sufficient. The temperature of the region around the baby should be from 85 to 90°. Attention to the humidity of the surrounding atmosphere is very important. The food requirements are high, estimated at 60 to 100 cal. per pound. In terms of breast milk, this means $2\frac{1}{2}$ to $3\frac{1}{2}$ oz. per lb. We do not attempt to feed this amount at first, but gradually work up to it, a 3 lb. baby getting $1\frac{1}{2}$ oz. every 3 hours at the end of first or second week. One-sixth of the body weight should be given in food, and this allows for fluid requirements. If breast milk is not available a choice may be made of sweetened condensed milk, acidified dried milk or evaporated milk. Evaporated milk may be added to breast milk, one to three oz. to increase caloric value. The next important point is to guard against infection, and to treat vigorously attacks of cyanosis and atelectasis.

After prematurity congenital debility and malformation account for a large number of deaths. There is little to be done about malformations until we know more about their causes and are able to deal with them. Debility is a name applied to a great many conditions that might be better classified if the diagnosis were more accurate. A great many of these children are physically immature though born at term while prematurity may be a cause of debility. Premature conditions account for most of these delicate infants. Hereditary factors in both parents, tuberculosis, syphilis, alcoholism, age, health of the mother, the number in the family, the toxæmias of pregnancy, are among the causes of asthenia in the infant. Anaemia in the mother plays a part also. You have all seen some of these delicate frail little babies. You have also seen particularly the babies born of toxæmic or eclamptic mothers, and you have noticed how often the last baby of a large family is delicate and difficult to feed and how easily they succumb to infections. These babies show little increase of energy as time passes.

After we leave the neo-natal period, and reach the third month gastrointestinal and digestive disturbances become the major factor in infant mortality. Deaths from diarrhoea reach their peak in the late summer, and heat and over-crowding and bad hygiene are important contributing factors. The trend of mortality in diarrhoea is definitely downward during late years. Education of the mothers, more supervision of the home conditions, and better and cleaner milk supplies have played the prominent part in reducing the rate. This is true particularly of Halifax, and I am sure is a result of an improvement in milk supply, and the educational value of regular contact with nurses and doctors week after week in this clinic. Mothers are now bringing their

children earlier for treatment, and this alone is important in the prevention and treatment of diarrhoea. If treatment of diarrhoea is begun during the first three days, the prognosis is much better than if the baby is neglected for a week. It is important to treat early and carefully the simplest diarrhoea if we are to guard against a fatal outcome. We must also recognize and deal with causes. We must consider certain constitutional anomalies that lead to lessened food tolerance. Babies with eczema, or rickets, suffer more readily as a result of minor dietetic errors. Heat, excessive humidity, bad atmosphere and overcrowding must be reckoned with. Incorrect and dirty feedings are also important causes, and infections of all types must be prevented. However, once the baby has contracted diarrhoea, proper treatment is essential to prevent mortality. Briefly, there are three main types to recognize—1. Dietetic or fermentative; 2. Symptomatic or parenteral; 3. Infectious or enteral. Two special varieties may be added to these—cholera infantum and ileo-colitis. In all of these types we may have mild cases or severe cases. In the mild cases which are also the common ones, we usually have a disturbance of carbohydrate digestion, aggravated by an abnormal fat intolerance. Diarrhoea due to excessive protein is rare. The stools are acid and green, with excess of mucus. The skin around the anus becomes reddened, vomiting is frequent and sour, the abdomen is distended with gas, the weight falls and the temperature is raised and irregular, the child becomes fretful and pale, and cries with spasms of colic.

The severe cases give us the picture of so-called summer diarrhoea. Constitutional symptoms are more marked.—A rise of temperature is often the first symptom and may reach 105 to 106°, but again some of the worst cases may run a subnormal temperature. Vomiting varies, the stools are similar to those of the mild types, but become more watery, more frequent, offensive in odour, and accompanied by severe colic and gas. As the toxic absorption increases with the loss of fluids, the weight goes down rapidly, dehydration becomes obvious, the fontanelle and eyes sink in, collapse follows, with meningitic symptoms of restlessness first and then coma. In the so-called cholera infantum form the onset is sudden and vomiting is urgent and continuous, rice water stools are profuse. There is rapid loss of fluid, coma sets in early, the intoxication is profound and death may occur in twelve hours. The mild cases respond to temporary starvation with plenty of fluid in the form of 5% glucose in saline, plain water, weak tea. The best food to use is boiled skimmed milk, acid skimmed milk, or dried protein milk. Carbohydrates are added in the form of dextri-maltose. Fat is not added until much later, particularly if there has been a history of previous fat intolerance. In the severe forms, immediate treatment consists in the supplying of fluids. If the stomach is tolerant, 5% glucose, saline, water, and tea are given. It is usually safer to give fluids intravenously, and by the intraperitoneal or subcutaneous routes. A transfusion of blood will save some of the severe cases. The technique of these procedures is not difficult, and 5% glucose in saline is the fluid usually chosen. The question of food is often a difficult one. It is important to give small amounts at first, $\frac{1}{2}$ oz. four hourly, increasing the amount slowly, noting the effect on stools, temperature and general condition. Breast milk is the ideal food. Of the artificial foods, protein milk is our sheet anchor. It is given in varying amounts depending on the age and size of the baby, and carbohydrate added in the form of dextri-maltose or corn syrup. If stimulation is needed, a mustard bath may be used, or brandy in 5-10 min. doses

two hourly. Drugs play a small part in treatment in infants. Opium is useful if used carefully, and if there is no toxæmia. Paregoric or Dover's powder are the forms commonly used. This gives you very briefly some idea of the management of these cases of diarrhoea. Some of them are hopeless from the start, but a great many of them can be saved. The majority of them can be prevented, and home treatment is better than hospital care on account of the lessened danger from cross infection.

The next great cause of infant mortality during the first year is respiratory infection and pneumonia. They reach their peak during the winter and spring months. Lobar pneumonia is not common in the first year, occurring later with a low mortality. Broncho-pneumonia is the type of infection found at this period. It is more often a secondary condition, and as a cause of death should be more often classified as such, when the rate would be automatically reduced. It originates as a result of bad hygiene, poor feeding, neglect of the ordinary upper respiratory infections, neglect of measles, whooping-cough and influenza. The association with rickets is unfavourable due to lowered resistance, thoracic deformities and feeble muscular power. A reduction in the mortality of pneumonia involves the whole question of infant welfare, and when this latter is established on a sound basis the rate from pneumonia will fall as a result. Incidentally, the trend of the mortality rate for both diarrhoea and pneumonia has been downward during the past ten years. This decline has been maintained in spite of the depression. The average baby of today is much healthier than the baby of ten years ago, rickets, malnutrition, scurvy being much less frequent. Parents give greater attention to all infections in infants, and take better care of the child with a common cold, sore throat and gripe infection. The pasteurization of milk, improved and simplified methods of feeding, the establishment of baby welfare stations and clinics, the circulation of literature in newspapers, magazines and pamphlets, with the activities of municipal and provincial health authorities and nurses have all added their quota to the downward mortality rate. The rate can still further be improved. It is our responsibility. It is for us to give better prenatal, natal and postnatal care. It is our business to stress the importance of breast feeding, to insist on the pasteurization of all milk supplies, and to learn to properly advise the mother as regards the feeding of her baby. It is our duty to insist on better control of infectious diseases, encourage immunization wherever possible, and see that quarantine regulations are enforced, rather than ignored as so often happens. It is we who should be the first to protect the infant from its tuberculous parents or relations. It is equally our business to bring the question of syphilis out into the open, to have it adequately treated, and the innocent children protected from all the suffering and disability that follows the victim of congenital infection. All these will take more of our time and patience. We shall be paid less and less for more and more, but the dividends from the other part of the investment will surely make it worth the effort.

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It is to be distinctly understood that the Editors of this Journal do not necessarily subscribe to the views of its contributors, except those which may be expressed in this section.

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No. 10

THE Medical Society of Nova Scotia very reluctantly accepted the resignation of Dr. N. H. Gosse as Editor-in-Chief of the BULLETIN. Our retiring editor has devoted many, many hours of time during the last six years to rendering a service to each and every practitioner in this Province. Possessed with energy, imagination and a sense of social responsibility he typifies the class deemed so essential to national well being by the writer of the 29th Chapter of Proverbs when he made the observation that, "Where there is no vision, the people perish."

The BULLETIN lost another member of its Editorial Board when Dr. J. R. Corston was elevated to the Presidency of the Medical Society of Nova Scotia. Regret, a selfish regret, is entertained by the Editors but they rejoice in the honour that has been conferred on one of their number and congratulate the membership of the Society on their selection.

After prolonged meditation Dr. J. W. Reid, a man of well balanced hormones, has been selected as the new member of your Board.

The 83rd. meeting of our Society held in conjunction with the 15th. Dalhousie Refresher Course resulted in registering 138 with the former and 183 an all time record for the latter. The plan worked very well whereby the business of the Society was conducted in the evening when freedom from interruptions and hurry was assured. The writer is of the opinion that the annual Society dinner, with a dance in the offing, is not the most suitable time for the delivery of a serious talk and would suggest that some other time be reserved for so important an item as the Presidential Address.

The only criticism of the scientific portion of the programme was that no special provision had been made for the specialist. As Chairman of the 1936 Refresher Course Committee one would like to make it clear that the Course is designed for those engaged in family practice and consequently the subject matter must be the common denominator of general practice. As one who limits his practice to a special field one feels free to observe that it seems highly improbable that any medical man can know too much about general medicine, and this applies with peculiar force to those whose work lies above the level of the shoulders: the region where so much that disturbs the rest of the system may originate, and on the other hand where so much

that is constitutional is reflected: If there is one variety of practitioner who needs a generalized refresher course more than another it is the one who limits his practice to diseases of special portions of the anatomy "learning" as has been jokingly said "more and more about less and less." Surely he above all others needs to keep the broad foundations of general medicine and surgery in repair.

The dictionary defines an Editor as one who "oversees the selection, preparation and arrangement of material for publication." Your Editorial Board is prepared to carry out these duties. It only remains for you to supply it with sufficient material on which to exercise its function.

Dr. Arthur Murphy will present for your consideration in the November issue some remarks bearing upon the subject of case reporting. The "Case Reports," should be one of its most helpful sections of a publication such as the BULLETIN and one to which all can and should contribute. Not only does a well written report, delight and edify the reader but the writer benefits even more so in virtue of the more careful observation, detailed study and exact recording which proper preparation entails.

ANSWER YOUR QUESTIONNAIRE

Of the 420 questionnaires which were recently sent out dealing with the question of a combined fee for the Medical Society of Nova Scotia and the Canadian Medical Association, so far only 200 have been returned.

Dr. K. MacKenzie will be leaving for Ottawa on the 27th of October and would like to know how the Society feels about this matter before he goes.

If you have not already done so, answer your questionnaire and return it immediately to the secretary.

CASE REPORTS

Subacute Pancreatitis with Cholelithiasis.

Housewife, age 55 years, came to hospital complaining of severe pain and soreness across upper abdomen.

Family History reveals nothing except that one brother had suffered from pernicious anaemia.

Personal History: Erysipelas of face 30 years ago. Appendicitis 10 years ago but no operation. In January of this year patient was treated for soreness of tongue which was due to her false teeth. The soreness was on the margins of the tongue and cleared up rapidly under treatment. During the same month she underwent a physical examination and was pronounced in good health. The patient went through her menopause eight years ago. She has had no children.

Present Illness: On July 22nd after a meal of lobster, cheese, cream, cakes and candy the patient took sick with severe colicky pains in the upper abdomen. She felt quite ill and vomited undigested food. Soda bicarbonate gave temporary relief but a similar attack followed in half hour which lasted for a period of two hours. The patient was apparently quite well until July 24th when she suffered a similar attack lasting for one hour and leaving her with a persistent soreness across the upper abdomen. Another attack occurred on the 25th and on the 26th a physician was consulted who diagnosed peptic ulcer and prescribed a milk diet with alkaline medication. On the 29th the condition recurred and got steadily worse. The pain was of a dull aching character across the upper abdomen. The pain was deep seated and was not relieved by heat or soda although cold applications gave some relief. A physician was sent for who administered a hypodermic. The patient entered hospital on the morning of July 30th complaining of soreness across the upper abdomen. She complained of constipation. Appetite poor. Weight normal. No cough or haemoptysis. No breathlessness or oedema. No urinary symptoms.

Physical examination: Stout gray haired woman, cheeks flushed, apparently in great pain. No jaundice.

Respiratory system: Negative.

Cardio-Vasc. system: B. P. 124/74. Heart sounds loud and sharp. No murmurs or thrills.

Abdomen: There is some restriction of movement in right hypochondrium. There also seems to be a fulness of the right side of upper abdomen about the level of the umbilicus. Deep seated soreness across the upper abdomen, but no tenderness. Rigidity is definite especially on the right side. On palpation a soft doughy, ill-defined mass can be made out. The mass extends from the umbilicus to just below the xiphoid process about 2" to the left of the midline and 1" to the right. It is not moveable nor is it attached to the overlying skin. There is no evident enlargement of liver, kidney or spleen. No internal or external hernia can be made out.

Extremities: Apparently normal.

C. N. S.: Reflexes normal to all tests.

Urine: Albumen—1. Sugar—trace. Bile—negative.

Loewe's Test: negative.

B. P.: 124/74.

Temp.: 99.6. Pulse—86. Resp.—22.

W. B. C.: 11,300.

Despite the contradictory temperature, pulse and respiration a diagnosis of subacute pancreatitis was made, and it was thought at the time there was no condition of the gall bladder which could account for the aetiology.

On the day after admission there was a sudden rise in temperature, pulse and respiration and the w. b. c. rose to 15,000. At this time it was decided that immediate laparotomy was called for and patient was taken to O. R.

At operation the pancreas was found to be enlarged and very firm. Scattered over the omentum were found several patches of fat necrosis. On examining the gall bladder no evidence of a cholecystitis could be detected, but two small stones could be definitely felt. The stones were removed, the gall bladder drained and the appendix removed.

Post operative diagnosis: Subacute pancreatitis with cholelithiasis.

During the first three days the patient responded very well to operation.

Temperature, pulse and respiration are only slightly elevated, and the patient is resting very comfortably. Up to date there has been a drainage of 13 oz. from the gall bladder.

(Case of Dr. D. A. McLeod's).

H. DAVIS,

Interne, City of Sydney Hospital.

What Every Woman Doesn't Know—How to Give Cod Liver Oil.

Some authorities recommend that cod liver oil be given in the morning and at bedtime when the stomach is empty, while others prefer to give it after meals in order not to retard gastric secretion. If the mother will place the very young baby on her lap and hold the child's mouth open by gently pressing the cheeks together between her thumb and fingers while she administers the oil, all of it will be taken. The infant soon becomes accustomed to taking the oil without having its mouth held open. It is most important that the mother administer the oil in a matter-of-fact manner, without apology or expression of sympathy.

If given cold, cod liver oil has little taste, for the cold tends to paralyze momentarily the gustatory nerves. As any "taste" is largely a metallic one from the silver or silverplated spoon (particularly if the plating is worn), a glass spoon has an advantage.

On account of its higher potency in Vitamins A and D, Mead's Cod Liver Oil Fortified With Percomorph Liver Oil may be given in one-third the ordinary cod liver oil dosage, and is particularly desirable in cases of fat intolerance.

Minutes of the Annual Business Meeting

THE 83rd Annual Meeting of the Medical Society of Nova Scotia was opened at the Nova Scotian Hotel, Halifax, N. S., on September 1st, 1936, at 8.15 P.M. The meeting was called to order by the President, Dr. R. M. Benvie.

The first item was the reading of the Minutes. The President asked that they be adopted as published last August, September and October, except that, on account of hurry at the end of last year's meeting a notice of motion by Dr. D. A. MacLeod of Sydney had been omitted. This notice of motion was as follows—

"Resolved that this Society approve the principle of an annual licensing fee for all medical practitioners practising in this Province. The interests of this Society and the Provincial Medical Board in the revenue so derived and in making by-laws and other details to be worked out by a joint committee of these two bodies."

It was moved by Dr. G. H. Murphy and seconded by Dr. H. K. Macdonald that this notice of motion be included in last year's Minutes.

Dr. Benvie: "You remember last year we had the reports of the different committees, then the report of the Executive which meant that all reports were read twice, and there is no necessity for this. The reports will be read and the Secretary will simply give the Executive's recommendations on them. Will somebody please move that the order of business be changed so that we can save time."

It was moved by Dr. W. R. Dunbar, seconded by Dr. F. R. Shankel that this be done. Carried.

Dr. Benvie: "Last year in discussing Federation with the Canadian Medical Association I gave notice of motion as follows—

'At the next annual meeting I shall move that the report of the Executive Committee to Federation with the Canadian Medical Association become effective in accordance with the plan which is to be submitted by a special committee of the Association which has been appointed for that purpose and that the by-laws of the Association be amended in such a way as may be necessary to complete this change.'

As you will learn from the report of this Committee, of which Dr. Corston is the chairman, it is impossible for us this year to complete the federation, so that I have to withdraw my notice of motion."

"Dr. Gosse had given notice of motion for changing Article 7, Auditors, which is as follows—

'The Auditors shall be appointed by the President, at each annual meeting from among those present.'

Dr. Gosse was not present to give his notice of motion, the matter was held over. A communication from Dr. Bell of New Glasgow was read by the Secretary."

"New Glasgow, June 30, 1936.

The Executive were instructed to prepare for a presentation and dinner in honor of Dr. John W. McKay who is enjoying his fiftieth year in medicine since graduation in 1886. This is to be held in New Glasgow in September. The Pictou Medical Society would be glad to entertain any representatives of the Nova Scotia Medical Society who might care to be present.

Yours sincerely,

(Sgd.) JOHN BELL, Secretary."

The Secretary stated that the Executive decided this communication be brought to the attention of the Nominating Committee.

The President advised that any members who would like to attend the dinner which is to be held at the Norfolk Hotel, would be welcomed.

The Secretary read the following resolution from the Windsor Rotary Club—

"Whereas a large number of deformities found in the Public Schools of Nova Scotia is due to improper posture of the students, and whereas we believe that most of these deformities are preventable; therefore resolved that we ask the Nova Scotia Medical Society, if it meets with their approval, to pass a resolution to the effect that proper postural methods be taught in the schools, and that said resolution be recommended to the Board of Education of the Province of Nova Scotia.

(Sgd.) A. R. REID,

F. R. SHANKEL."

The Secretary advised that the Executive decided that this matter be brought up on the floor with the recommendation that it be referred to the Branch Societies for their action, and that the Branch Societies report back to the Medical Society of Nova Scotia at the next annual meeting. Dr. Shankel stated that they had found a large number of deformities in the schools of Windsor and they thought if posture were taught in school it could be very easily done through teachers receiving a further training in the Normal School.

Dr. Dunbar stated that he understood the training at the Normal School stressed the importance of posture and that it must be neglect on the part of the teachers. It was moved by Dr. G. H. Murphy and seconded by Dr. Johnston that the action of the Executive Committee be approved. Carried.

The following letter from Dr. D. A. MacLeod of Sydney, dated August 23, 1936.

"Dear Dr. Grant:—

You will recall some informal discussion during the last meeting of the Society at Sydney with reference to making the membership of the Society more fully appreciated by the medical profession of the province. It seemed to be the feeling of those in the discussion that some steps should be taken to if possible have the Society represent the whole profession rather than the small percentage now on its membership roll. With this end in view a notice of motion stands in my name for discussion at this meeting in Halifax.

It has occurred to me, however, that the matter of the C. M. A. affiliation is a weighty one and should have free and full discussion so for that reason it might be better to not crowd the gathering for time with another equally important subject. In addition, I find I cannot be present at this session to submit the motion. (This

perhaps would be better done by others in any case), so that if agreeable to the members present I would ask that the matter be laid over to the next meeting and that in the meantime the profession should seriously consider the adoption of a system that has worked well in other provinces of the Dominion.

Sincerely yours,

(Sgd.) D. A. MACLEOD."

It was moved by Dr. Williamson and seconded by Dr. Leblanc that the recommendation of the Executive that Dr. MacLeod's resolution be laid over for the next session of the Medical Society of Nova Scotia be carried out. Carried.

A letter from Dr. H. L. Scammell, Registrar-Secretary-Treasurer of the Provincial Medical Board of Nova Scotia dated June 1st, 1936, was read by the Secretary.

"Dear Doctor Grant:

This is to give formal notice that the term of the present representatives of the Medical Society of Nova Scotia on the Provincial Medical Board will expire this Summer, and, accordingly, it is the right of the Society at its next meeting to appoint six representatives to the Board for a term of three years.

Yours truly,

(Sgd.) H. L. SCAMMELL."

Executive had recommended that the appointment of these six members be left to the Nominating Committee and this recommendation was accepted.

The Secretary read a letter from Dr. J. Fenton Argue, Registrar, The Medical Council of Canada dated December 20th, 1935.

"Dear Doctor Grant—

On page 23 of the Minutes and Proceedings of the Twenty-third Annual Session of the Medical Council of Canada held on September 4th, 1935, you will find the following report of the committee on specialists.

The following resolution was moved by Dr. E. S. Ryerson and seconded by Dr. E. L. Pope and carried.

"The Committee on Specialists begs to report that the communication of the Canadian Medical Association enclosing the report of a Special Committee on the control of Specialists in Canada has been considered.

"The Committee begs to recommend that action on this report be deferred until expressions of opinion on the question of the control of Specialists in Canada be received from the Canadian and Provincial Associations, the Provincial Medical Councils and the Universities granting degrees in medicine in Canada.

"This resolution is forwarded for your information and action.

Yours sincerely,

(Sgd.) J. FENTON ARGUE, M.D."

The report of the Committee on Specialists was a lengthy one, but many of the recommendations were read by the Secretary.

It was moved by Dr. Scammell and seconded by Dr. Dunbar that the report of the Committee on Specialists be laid over for future consideration. Carried.

The following letter from the C. V. Mosby Company dated August 24, 1936, was read by the Secretary.

"Dear Dr. Grant:

We want to warn you against the activities of a Mr. Bruce McLaren Thompson, who is going about the Maritime Provinces, representing himself as an agent for our company and illegally collecting and retaining all the money he can by pretending to be soliciting subscriptions to our several periodicals.

Mr. Thompson, who describes himself as being twenty-eight years old, and five feet nine inches high, one-hundred and fifty-five pounds in weight and of medium complexion, is not our agent and therefore has no authority to collect money for our periodicals. If he approaches you, we can assure you that it is with the intention of defrauding you and we therefore suggest that you turn him over to the police immediately. We shall also appreciate it if you will notify us, as we have been trying to locate him for some time.

This man did work for us for several months during 1935. We advanced him considerable money and, as gratitude, received from him only unfaithfulness and dishonesty, so that we eventually had to dismiss him. He has, contrary to our orders, represented himself as our agent and defrauded a number of doctors in your area.

We have been advised recently that he is now travelling in the company of another young man. Do not trust either of them, for we assure you, that at the present time, we have no representatives in the Maritime Provinces.

Very truly yours,

(Sgd.) A. W. VOLLAND,
Circulation Manager."

The Report of the Committee on Federation with the Canadian Medical Association was read by Dr. Corston.

"To the President, Medical Society of Nova Scotia.

On July 3rd, 1935, the Medical Society of Nova Scotia by resolution approved of the principles of merging the Medical Society of Nova Scotia with the Canadian Medical Association, in accordance with the plan set forth by emissaries of the C. M. A.; and appointed a committee of five, who, with the Presidents of the Branch Societies, were instructed to study the matter of federation and report back at the next general meeting.

Your Committee has had several meetings at Halifax, at most of which, unfortunately, the attendance of Branch Presidents has been impracticable. We have kept in touch with the development of the Federation scheme throughout Canada by means of correspondence, reports of Society proceedings, etc., and we have caused to be published in the Nova Scotia Medical Bulletin on several occasions short articles dealing with the subject.

In our study of the matter we find that the definite changes from our present status of affiliation, so far proposed, are—

- (1) A change in name from 'Medical Society of Nova Scotia' to 'Canadian Medical Association Nova Scotia Division;' and
- (2) The adoption, as our own, by this Society, of the new Constitution and By-laws of the C. M. A. as recently passed by that Association.

When considering the applicability of the scheme we found it in many matters to be seriously lacking in detail; e.g. while the new Constitution in Article XIV apparently guarantees complete control of its own affairs to each provincial body, certain sections in the by-laws seem to contravene this principle; and it is not at present clear that probability of differences between

the federal and provincial bodies, in matters within the provincial jurisdiction, has been sufficiently guarded against.

LEGAL ASPECTS.

Bearing in mind that we are at present an incorporated body under the authority of the Nova Scotia Government, and that as such we are the holders of funds and that we appoint members to the Provincial Medical Board, your committee made enquiry of the Deputy Provincial Secretary as to what legal or legislative procedure might be required in making the proposed changes.

We are informed by him that appropriate amendments are required to Chapter 113, Revised Statutes of Nova Scotia, referring in Section 11 to the Medical Society of Nova Scotia and its powers of appointing members to the Provincial Medical Board, also amendments to Chapter 69, Acts of 1861, reholding of funds. It is of interest to note that at present this Society is authorized to hold real estate only, but that other property is not mentioned.

It appears that such legislative amendments are not possible until the next session of the legislature.

After such amendments are made, it will be necessary to have the new constitution and by-laws adopted by a general meeting of the Society, after which they must be approved by the Governor in Council.

Your committee would point out the necessity of retaining counsel for the preparation and supervision of these legislative amendments.

FINANCIAL ASPECTS.

In considering ways and means of effecting the proposed federation your committee necessarily gave much attention to the financial aspects of the matter.

We thought it highly desirable that a fee of \$15.00 for membership in the federated organization should be instituted, if possible. To do this we found that a membership of approximately 255 was required, this being a larger number by about 25 than our average in recent years.

In order to get definite information as to our prospects in this regard we sent out a questionnaire to all active practitioners in the Province, with the following results—

Number who signified willingness to join federated society at \$15.00 per year	210
Number who signified willingness to join federated society at \$15.00 per year	17
Number who did not answer questionnaire	182

Your Committee is of the opinion that of the 182 who did not reply, enough will eventually come forward to make up the number required to render the federation scheme feasible from a financial point of view.

In the questionnaire, comment was invited and was freely given by some 75 or 80 members. These extensive comments indicated a general interest in the question and are appended.

ACTION OF OTHER BODIES.

In recent months it has become increasingly apparent to the profession of Canada that this whole question requires a great deal of further consideration and elaboration.

All Provinces who have considered it at their annual meetings this year, with the exception of Alberta, have postponed further action. Manitoba, who

originated the proposal in 1934, has deferred action. Ontario proposes a National Committee for further study of the matter.

The C. M. A. itself, at Victoria in June, 1936, recognizing the need and demand for further study, has instructed a sub-committee of its Executive to carry out this further study of the question, and has requested the setting up of a Study Committee in each Province to collaborate with them.

RECOMMENDATIONS.

Your Committee makes the following recommendations.

- (1) That this Society reaffirm its endorsement of the principle of Federation, provided that a scheme can be evolved with satisfactory definitions of the powers and functions of the federal and provincial bodies.
- (2) That, in view of the legislative enactments required in Nova Scotia, and in view of the necessity of further elaboration of the scheme, this Society should defer completion of Federation at this time.
- (3) That this Society appoint a Study Committee as requested by the C. M. A. for collaboration with its sub-executive in further study of this matter; and that Dr. K. A. MacKenzie, a member of the C. M. A. Executive, be Chairman of this Study Committee.
- (4) That this Study Committee be empowered, at its discretion, to employ legal counsel in the preparation and completion of the necessary legislative amendments.

Respectfully submitted,

(Sgd.) J. R. CORSTON.
Chairman."

The Secretary advised that this report had been adopted by the Executive Committee. It was moved by Dr. Corston and seconded by Dr. G. H. Murphy that the report of the Committee on Federation be adopted, and that a Study Committee be formed with Dr. K. A. MacKenzie as Chairman and that the remainder of the Committee be appointed by the Nominating Committee. Carried.

Dr. Gosse moved that Article VII, Auditors, of the By-laws be deleted and that the following be inserted in its place, "that an auditor be appointed at an annual salary not to exceed \$50.00," this was seconded by Dr. Dunbar, and carried.

The report of the Cancer Committee was read by Dr. Gosse.

"Mr. President:

We would first record the fact that cancer has again well maintained its place among the great death-dealers of this province. The official figures for last registration are 688 deaths. This represents a rate of 1-746 of our population, and so that an estimate of our relative position may be made, it might be stated that the rate in U. S. A. is only 1-1000. Further comparison is indicated in the fact that 1-1000 represents five times as many deaths from Cancer as there are from automobile accidents—even in U. S. A.

The year under review has not been without other incident in the field of cancer in Canada. Members will remember that the last few months of 1935 and the earliest months of 1936 saw the rise and fall of 'Ensol,' a substance prepared by proteolysis of cancer tissue. This, as is well known, was

developed at Kingston, Ontario, by Dr. Connell, an Ophthalmologist. It at first, presented interesting possibilities, so great that many scores of doctors made the pilgrimage to Kingston and had demonstrated to them the wonderful clinical results which were being obtained there. It is unfortunate that the best traditions of medicine seem to have been ignored in this and that it should have been given to the public before its value had been determined. The results from its use have been most disappointing.

Pursuant to your instructions, your Committee met with the Minister of Public Health and the Chief Medical Officer and discussed the matter of Cancer Education. It will be remembered that these instructions followed upon this Society's putting itself on record as being in favour of much greater activity in this direction.

Your committee was sympathetically received, the present activity of the department with respect to cancer was outlined to us and its general attitude indicated. This might be stated as follows:—

In spite of the large sums of money being spent on Cancer Research all over the civilized world we are still dependent upon early diagnosis and prompt efficient treatment. The department's efforts have been concentrated on keeping these simple basic facts before the public and to a certain extent before the physicians. The plan is to accomplish this in two ways.

- (1) By a small pamphlet, a copy of which is attached to this report as appendix 1, prepared by the department and given such distribution as its facilities will allow; that is to say,
 - (a) Mailed from central office, largely on request.
 - (b) By personal delivery to the field workers.
- (2) *By Public Health Nurses* who are instructed to make use of every opportunity presenting, while in the homes, for the dissemination of cancer educational propaganda of the usually accepted order.

Their belief was expressed that education projected through competent nurses would seem to be more effective than newspaper or pamphlet.

The Chief Health Officer said in conclusion that he would be delighted to sit in with the Cancer Committee for the purpose of revising the pamphlet or for the purpose of considering the preparation of other literature.

We believe that members will appreciate this willingness on the part of the Department of Health to accept our co-operation in their efforts. Many, however, in view of the earlier decision of this society, and in view of what other interested bodies believe to be necessary, will raise the question as to whether or not those efforts are adequate. We think it desirable, however, in the light of what follows, to waive consideration of that question at this time.

It is now desirable that, for the moment, we leave the provincial field and consider what is going on in Canadian Medicine with respect to Cancer. It is in keeping with the spirit of things that we should do so this year when in other aspects of Medicine we are called to broader vision, and, since the Trustees of the Jubilee Fund have come to occupy the position of the proverbial 'hills from which cometh our help', it is very important that our vision should include them.

This will be made as brief as possible but it would appear to be important to show where we fit, and to do that it is necessary for us to review recent and relatively recent activities and to state the presently proposed plan of action.

It will be remembered that the Canadian Medical Association Cancer Study Committee under the chairmanship of Dr. McEachern had been working for some time on this subject prior to 1933, and that in that year, at the Saint John meeting of the Canadian Medical Association, they brought forward certain recommendations with respect to Cancer Education, and suggestions as to how they might best be put into effect.

Two essential principles stood out in their conclusions at that time: (1) that Canadian organized medicine could not assume any responsibility for laboratory research work. (2) That the field of the Canadian Medical Association in relation to the Cancer problem lay in insuring that all presently known facts relating to cancer be applied clinically.

It was agreed that this was *not* being done because of two factors, (1) too large a number of cases of cancer were not being recognized in the early stage, even when the patient consulted a physician during the early stage of the disease, and (2) a large number of patients failed to appreciate the possible significance of early signs and symptoms of cancer, and in consequence delayed seeking advice until too late.

Based on these conclusions a recommendation was made that *the Canadian Medical Association set up within itself a Department of Cancer Control* which would inaugurate and maintain a programme of education with reference to the recognition of the early signs of cancer. This programme was to include the doctors of Canada and the lay public. At that time it seemed to be peculiarly the business of the Canadian Medical Association to do this because there seemed to exist no other body in Canada which might be expected to undertake it.

Further study followed, and progress reports were made in which it was made apparent that most of their recommendations could not be implemented because they entailed the expenditure of a lot of money, and it was not forthcoming.

The creation of the King George V Silver Jubilee Cancer Fund for Canada then began to engender hope that at last this very necessary activity might be undertaken. The place of the Fund in the development of the matter is therefore next to be considered.

It will be remembered that to administer the Fund a *Board of Trustees* was set up, included in which was the chairman of the Canadian Medical Association Cancer Study Committee *ex officio*. At the time of the formation of the Board, the Chairman of the Canadian Medical Association Committee was Dr. Primrose, who had succeeded Dr. McEachern when he was elevated to the Presidency of the Canadian Medical Association.

Now it appears to have been the policy of the Cancer Study Committee and the Canadian Medical Association executive that the programme of the Canadian Medical Association should be put on by the Canadian Medical Association and that the Fund should enable it to do so by an annual grant. This does not seem to have been in keeping with the ideas of the trustees of the Fund for Dr. Primrose's efforts to procure funds for that purpose are said to have been quite unsuccessful.

At the last meeting of the Executive of the Canadian Medical Association in Victoria, Dr. Primrose resigned the chairmanship and Dr. McEachern again reigns in his stead. This change seems to have been made the occasion for a very great change of policy as between the Canadian Medical Association and the Jubilee Fund Trustees, a change which would seem to reflect a

more progressive viewpoint, and one calculated to produce a much wider interest and a much greater activity.

At this point it might be remembered that the Cancer Study Committee of the Canadian Medical Association is composed of a chairman elected by the Canadian Medical Association or by its executive, a small nucleus from the chairman's own environs, and finally the *Chairmen of the Cancer Committees of the Provincial Societies*. It is apparent therefore that this Society of Nova Scotia has at once the privilege and the responsibility through this machinery of pressing its opinions upon the chairman of the Canadian Medical Association Cancer Study Committee, and indirectly upon the Trustees of the Jubilee Fund for Canada. Furthermore, Dr. McEachern has just asked your chairman as a member of his committee to instruct him as to what attitude he must assume when the Board of Trustees meets this month.

Your present chairman does not lack very definite views upon the matter. They are in keeping with those which have been already adopted by this society. But in view of the proximity of this annual meeting it was felt that the society would welcome the opportunity to reopen the question on this basis, and it is therefore recommended that this society give immediate additional consideration to the matter and instruct its chairman accordingly.

Dr. McEachern, who has probably been a closer student of this subject than any man in Canada has not changed his views as to the great necessity for educational effort, but in view of the position of the Fund has modified his views as to how the desire of those interested can best be attained. He has submitted a resume of his present views in that regard and asks that we subscribe to them as are, or to such modification as we may see fit to make.

Your committee has also been asked to encourage the formation of Cancer Study Committees in every hospital of 100 beds or larger. The feasibility accomplishing this might well be made subject for further discussion.

They are submitted herewith as a basis for discussion, (Appendix II).

(Sgd.) N. H. GOSSE, Chairman,
S. R. JOHNSTON,
H. W. SCHWARTZ."

APPENDIX I.

Province of Nova Scotia—Department of the Public Health, Halifax,
N. S., 1935.

CANCER.

More persons died in Nova Scotia from Cancer last year than in any former year. Each year our Cancer losses are becoming greater. Better diagnosis may have something to do with this, the cause of death being more accurately given. But our experience seems to agree in this particular with that of many communities where the number of Cancer deaths is forcing itself upon the attention of the health authorities. Last year one person in eleven of those dying died of Cancer, or of all persons who died aged over forty, about one in seven was a Cancer patient.

This pamphlet represents what we actually know at this moment about Cancer. Remember, however, that there are hundreds of persons now trying to solve the mystery of its appearance and its cause, and that at almost any

time something may be discovered which will make this description out of date.

- A. Usually it is a disease of later life, especially prevalent after one has passed his or her forty-fifth birthday.
- B. At its onset it is usually painless. The first thing noted is often the lump or abnormal growth or some disorder of function. Pain is usually an indication of advancing growth or involvement of other organs.
- C. It is not at least at first a constitutional disease. It commences locally. If then removed there will be no progression of the growth. General involvement is a late effect.
- D. It is not a hopeless disease if it can be removed in its local stage, before the whole system is affected.
- E. The effect of heredity is doubtful. Persons whose immediate relatives have died of Cancer ought, however, be warned themselves to be on guard for the first abnormality.
- F. There seems to be a connection between Cancer and irritation, perhaps an irritation the result of certain occupations of those dependent on habits.
- G. There is no cure known after the disease has become systematic or generalized, and many organs or structures are involved.

CANCER OF THE SKIN.

These should be recognized early and a death from them indicates carelessness. They usually start from moles, warts, scaly patches, scars or cysts. Early treatment can eliminate from the death lists all cases of skin cancer.

CANCER OF THE LIPS.

The danger signal is a small sore or crack or scaly patch on the lower lip of a man over forty years of age. If removed early no more trouble should result.

CANCER OF THE MOUTH AND TONGUE.

If a small ulcer, sore, white hard patch or warty growth is seen on tongue, cheeks or gums, it may be a cancer. Tobacco users are especially prone to it. These cancers require early treatment but cases have a good chance of cure, if taken early.

CANCER OF THE RECTUM.

There is usually bleeding which resembles that from piles, though there is not usually much blood lost. The earlier the condition is recognized the better the chance of cure.

CANCER OF THE WOMB.

Any bloody discharge coming on at unusual times, in a woman over 35 years of age, or any increase in the usual amount of flow ought at once be investigated. Be especially careful about any such discharge which comes on after the cessation of the periods, especially if there have been injuries as a result of child bearing.

CANCER OF THE BREAST.

Look carefully after any lump occurring in the breast. Remember that some of these grow very rapidly. Do not waste time before you get advice.

CANCER OF STOMACH, INTESTINES AND LIVER.

Any abnormality of digestion, persistent and increasing dyspepsia or burning after food, ought to be reason for examination and if necessary treatment.

To help ensure early diagnosis, free tissue examinations by the Provincial Pathologist are now available to all practitioners and hospitals throughout the province. In addition all necessitous persons are given free treatment use of the radium emanation plant located in the Victoria General Hospital.

Whether or not persons with Cancer are to be cured will depend largely on their mental alertness, intelligence and good sense.

FINALLY.

Consult your family physician. Shun the quack or the person who promises cures by new discoveries or discredited or unproved forms of treatment. Your family physician knows or can get for you the advice of some one who does.

APPENDIX II.

Suggested attitude which the chairman of the Cancer Committee of the C. M. A. should assume in his capacity as member of the Board of Trustees of the Cancer Fund.

The reduction of cancer mortality and cancer morbidity is the task of all Canadian citizens whether lay or medical. The maximum result can be obtained only if they co-operate with each other. The Canadian Medical Association is preparing to mobilize its resources toward this end. It asks only that all other units of society do the same.

Effective co-operation can be secured only if all units act under some acknowledged head.

To-day the obvious body to assume Headship is the "King George V Jubilee Cancer Fund for Canada."

Let the Trustees take steps to organize a nation-wide society for the control of cancer under the aegis of the Jubilee Cancer Fund. Extend an invitation to every individual Canadian citizen to become a member, providing for annual, sustaining, and life memberships.

At the same time, extend an invitation to all organized bodies in Canada, who will volunteer to throw the strength of their organized groups into the campaign to become affiliated with the Society. A few such organized groups come to mind such as, Canadian Dental Association, National Research Council, Women's Institutes, Daughters of the Empire, United Farm Women, Teachers' Associations, Provincial and Federal Departments of Health, Canadian Universities, Research Departments. This list may be greatly added to, and in it would, of course, appear the Canadian Medical Association.

The Jubilee Cancer Fund would receive all membership fees, contributions and bequests. It would undertake to finance all expenditures arising from the publication and distribution of literature. The maintenance of supervision over all details of the work of the society by a full time specially qualified medical man who would be provided with an adequate secretariat. The cost of stationery and forms required in the *cancer activities* of the society and affiliated organizations. The expenses incurred in sending out lecturers and speakers in the work of the society.

It would budget for annual expenditures, a sum equal to the total amount received in interest from its investments plus a portion of the estimated yearly revenues from membership fees.

It would preserve the capital investment of the Fund intact and add to it annually as much as possible, bearing in mind that its activities must be maintained over many years—perhaps indefinitely.

In subscribing to this proposal, the Canadian Medical Association would be expected to place at the disposal of the Jubilee Fund all the organized resources which it has developed or may in future develop in dealing with the cancer problem. This action of the Canadian Medical Association would be conditioned upon the "Fund's" undertaking that at no time would it enter into any medical activities without the full consent and co-operation of the Canadian Medical Association.

The Canadian Medical Association would undertake to secure *authors* of leaflets and pamphlets dealing with the *medical* aspects of the society's work.

It would undertake to secure Doctors who would collaborate with lay speakers in the work of organizing the National Society.

It would be responsible for the selection of medical speakers who would be required from time to time to address medical meetings or public gatherings on the subject of cancer.

Please consider whether or not this idea would be likely to accomplish as much for the Canadian people as would the effort to carry on our programme as C. M. A. independent of the Jubilee Cancer Fund.

It was moved by Dr. Gosse and seconded by Dr. Johnston that the Report of the Cancer Committee be adopted.

The Secretary read the resolution of the Executive which was that the suggestion as made by Dr. McEachern and Appendix II be adopted by the Society and that the Chairman inform Dr. McEachern that we subscribe whole-heartedly to the suggestion he has made.

Dr. Johnston stated that it was a very deep subject and it would have been well if the report could have been sent around so that each one would have had the opportunity of studying it, and that he questioned whether all of Dr. McEachern's programme needed to be carried out in this Province, but that it was a matter for future discussion.

Dr. Keddy stated that Dr. Gosse had brought out the importance of the medical men being more actively concerned in the prevention of cancer. He pointed out that this Society appointed six members to the Provincial Medical Board, but that something might be done at this time in the matter of examinations on this very important line to impress on the young men who are graduating to detect the early signs of cancer, which although really a matter for colleges should be kept in mind by the Medical Board.

Dr. G. H. Murphy: "I feel quite disappointed in not hearing more discussion on this. It seems to me that a question of such tremendous significance should evoke the very greatest consideration possible on the part of our organization here. The only thing about the report and the appended report of Dr. McEachern's that I feel I would like to comment on is the indefiniteness of it. We are speaking about the prevention of cancer, but there is nothing told about the matter of publicity, how it should be gone about, by whom, and when, and so on. Now, I think, of course, that cancer is the tragedy in the world at present. One reason is we do not know what it is. Something must be done that will bring cases of cancer early before the surgeon and

before the men who are handling the different agencies for the cure of cancer, X-ray, radium, and so on. It would be well for us to consider centralizing these efforts in the Department of Public Health. If they take the lead in this matter as in tuberculosis and in other diseases they could get the profession behind them and carry on in that way. The public are looking to the medical profession to try to save them, to do something for them; we should not be silent on such an important matter."

Dr. Leblanc said he wanted a few points of information regarding the scheme; he did not know whether this matter had been clearly put before the meeting, but Dr. Murphy suggested that it might be dealt with by the Department of Public Health the same as in the field of tuberculosis. He stated that when the specialists came they helped with the clinics, did the work in the interest of the community, but did not get any remuneration. Will there be specialists travelling all over the Province paid by the C. M. A., and would the young men who are trying to earn a living do the same thing they are doing in connection with tuberculosis? Dr. Gosse stated that there is \$420,000.00 in the Jubilee Cancer Fund collected for education, and the Chairman of the C. M. A. Council is expected to give some guidance in the matter of what action should be taken in the spending of that money for educational purposes.

Dr. Schwartz stated that one thing in Dr. McEachern's report was very clear cut and definite and that was the matter would be controlled entirely by medical men.

Dr. Williamson thought that the medical men were failing largely in this, that he himself had learned to realize the great importance of early diagnosis. Dr. Burton: "We should go a step further; it is a question of education. What are we going to do when they find they are suffering from cancer? Is there in Halifax at the present time a working cancer group and are there funds available; can we send any suspicious cases that we may have free of cost for thorough investigation? This might be stressed in the BULLETIN."

Dr. Scammell stated there is a cancer clinic organized at the Victoria General Hospital in Halifax which has been functioning now since 1933, and on the whole it has justified its existence. The Victoria General Hospital admits patients, both public and private; public are general ward patients, admitted from the Province at a cost of \$2.00 daily, paid either by the patient, or municipality or town. The number being admitted from the Province is increasing and taxing the hospital to an unbearable degree. If he is a late case when he arrives he will come back for treatment at regular intervals for approximately three years. If he is a case that is responsive to treatment he may be under treatment for five years. New cases are coming and old ones returning, and sooner or later more beds will be needed for cancer cases; it is a national problem as well as a local problem.

Dr. Smith stated that the number of specimens examined were five times more than they were in 1933; he only had one complaint to make, and that was that the physicians did not send sufficient history, he would like to have the age, duration of disease, the sex, and one or two points like that.

Dr. Scammell suggested that in interviewing the central committee of the C. M. A. that they ask they carry out as much of the report as the funds will allow, but that the whole project not be abandoned.

The Secretary next read the report of the Historical Committee as follows—

“DR. R. M. BENVIE,
President, Nova Scotia Medical Society,
Stellarton, N. S.

Sir:

In submitting this report we desire at the beginning to express our deep regret for the sudden passing of the late Dr. Lewis Johnstone. He was the third Member of the Historical Committee and an active colliery practitioner for over half a century. His personal knowledge of Medical practice in the old days would have supplied the Committee with much valuable information. His death removes another of the old landmarks of our profession many of which have stood out as beacons of inspiration to those who follow in the discharge of their service to humanity.

At our first meeting during Christmas week at the Isle Royale Hotel, Sydney, all were present. We felt that each might make some contribution of a Historical nature confining our attention to Cape Breton Island. “The Early Practitioners” was assigned to Dr. Johnstone but now this work remains a task for other hands. “The Cape Breton Hospitals” was allotted to Dr. Morrison. This has turned out to be a much greater undertaking than was first anticipated and although much valuable information has been secured time does not permit to have it arranged in proper form for this Annual Meeting. “The Kings Hospital” at Louisbourg during the French occupation was the subject for Dr. Patton. A paper on that institution is here submitted.

Couldn't Fool Him

The officer took out his book and poised his stubby pencil. “What’s yer name?”

“John Smith.”

“Yer real name,” bawled the officer, who had been tricked the day before.

“Well, then, put me down as William Shakespeare.”

“That’s better. Yuh can’t fool me with that Smith stuff.”

MISS PHILIPPA THYGESEN

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Bethune, R. O., Berwick (Mcpy.)
de Witt, C. E. A., Wolfville.
Morash, R. A., Berwick.

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Morrison, L. N., Magone Bay.
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Blackett, A. E., New Glasgow.
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Bagnall, P. O., Westville.
Crummey, C. B., Trenton.
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RICHMOND COUNTY

Digout, J. H., St. Peters (Mcpy.)

SHELburne COUNTY

Brown, G. W. Clark's Harbour.
Fuller, L. O., Shelburne. (Town and Mcpy).
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MacMillan, C. L., Baddeck (Mcpy.)

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Hawkins, Z., South Ohio (Yarmouth Mcpy).
Burton, G. V., Yarmouth.
Lebbetter, T. A., Yarmouth (M.H.O. for Wedgeport).
Chiasson, B. I., (Argyle Mcpy).

Those physicians wishing to make use of the free diagnostic services offered by the Public Health Laboratory, will please address material to Dr. D. J. MacKenzie, Public Health Laboratory, Pathological Institute, Morris Street, Halifax. This free service has reference to the examination of such specimens as will assist in the diagnosis and control of communicable diseases; including Kahn test, Widal test, blood culture, cerebro spinal fluid, gonococci and sputa smears, bacteriological examination of pleural fluid, urine and faeces for tubercle or typhoid, water and milk analysis.

In connection with Cancer Control, tumor tissues are examined free. These should be addressed to Dr. R. P. Smith, Pathological Institute, Morris Street, Halifax.

All orders for Vaccines and sera are to be sent to the Department of the Public Health, Metropole Building, Halifax.

Report on Tissues sectioned and examined at the Provincial Pathological Laboratory from September 1st, 1936, to October 1st, 1936.

During the month, 198 tissues were sectioned and examined, which with 17 tissues from 4 autopsies, makes a total of 215 tissues.

Tumours, simple.....	21
Tumours, malignant.....	34
Other conditions.....	143
Tissues from 4 autopsies.....	17

Communicable Diseases Reported by the Medical Health Officers
for the month of September, 1936.

County	Chickenpox	Diphtheria	Cerebro Spinal Meningitis	Influenza	Measles	Mumps	Paratyphoid	Pneumonia	Scarlet Fever	Typhoid Fever	Tbc. Pulmonary	Tbc.-other Forms	V. D. G.	V. D. S.	Whooping Cough	Erysipelas	German Measles	Impetigo	TOTAL
Annapolis.....	1	..	..	..	2	..	..	..	..	..	..	..	4	..	..	..	..	..	7
Antigonish.....
Cape Breton....	..	11	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	14
Colchester.....
Cumberland....	..	1	..	..	..	..	..	..	..	..	..	..	2	1	3	..	..	..	7
Digby.....
Guysboro.....	4	..	..	..	4
Halifax City..	1	3	..	..	1	..	..	..	6	..	1	..	..	..	10	..	..	..	22
Halifax.....
Hants.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2
Inverness.....
Kings.....	7	1	..	..	..	..	..	1	1	9	1	2	..	2	2	26
Lunenburg.....
Pictou.....	4	..	1	..	2	..	8	..	..	..	15
Queens.....
Richmond.....
Shelburne.....	2	..	..	..	..	..	2
Victoria.....
Yarmouth.....
TOTAL.....	2	16	..	7	5	..	1	..	11	..	3	1	19	2	28	..	2	2	99

Positive cases Tbc. reported by D. M. H. O's. 59.

RETURNS VITAL STATISTICS FOR AUGUST, 1936.

County	Births		Marriages	Deaths		Stillbirths
	M	F		M	F	
Annapolis.....	18	11	16	8	4	1
Antigonish.....	10	14	13	6	4	0
Cape Breton....	106	90	81	35	33	5
Colchester.....	31	21	16	14	15	1
Cumberland....	41	34	37	15	10	4
Digby.....	18	16	21	22	18	2
Guysboro.....	6	15	13	4	4	1
Halifax.....	106	114	81	44	53	9
Hants.....	19	19	30	10	5	2
Inverness.....	22	15	5	18	8	0
Kings.....	17	18	25	13	9	2
Lunenburg.....	25	17	33	10	14	1
Pictou.....	43	27	38	18	14	2
Queens.....	11	15	10	7	3	3
Richmond.....	6	7	2	6	4	0
Shelburne.....	14	9	6	6	7	0
Victoria.....	3	5	6	2	0	0
Yarmouth.....	15	14	39	4	0	0
	511	461	472	242	205	33

A Day In The Life of a Medical Missionary

We reproduce from the United Churchman the following letter from Dr. W. Sidney Gilchrist, knowing that it will be read with interest by his many friends in Pictou:

Missao de Camundongo
C. P. 27, Silva Porto, Angola
Portuguese West Africa

Dear Friends,

Letters to catch the train for down country must go this morning and the carrier is kicking his heels outside the office door as I grind out a few replies to the most urgent of the letters in the stack that has grown day by day and week by week upon my desk. Why don't I "get busy" and answer them? Well last night, for instance, I was too tired. You would be too if you had ridden fifty miles on a bicycle to visit and treat a group of thirty lepers! The day before it was something else and so on "ad infin". No, I'm sorry, folks, but I simply can't write anything but general letters such as this.

It is a question of comparative values and it seems to me that the patients who are looking for me for help and healing must have first place.

Can it be only six short months since we stepped from the gangplank of the west coast steamer to the docks of Lobito Bay? It does not take long for one to become immersed again in the surging tide of African life. Here is no eating out of the heart in loneliness, no dreary hours, no time to stand apart to watch the world go by! How could there be, for this is our life:—full hospital wards; an ever-increasing clinic; urgent calls to villages in the bush; bitter fights with death—unfair fights, too, where one labors often with few or none of the weapons available to the humblest soldier in the ranks of Surgery and Medicine at home; desperate operations to preform with none to assist but African youths who stepped as it were but yesterday from a background of bush and savagery; long jaunts by car or bicycle to out-stations centres where one attempts in 8 or 10 hours a program of public health that would occupy a week under the direction of an American Country Health unit (such as that with which I worked under the Rockefeller Foundation in Alabama), physical examination of children and the institution of treatment for those—and they are many—who stand in need of medical aid, a mothers' conference and a baby clinic, microscopic examination of excreta carried out under the shade of a convenient tree and the treatment of those found to be infected with intestinal parasites—these are some of the activities that the missionary doctor attempts on such days as he is able to get away from the hospital and "sick camp."

Well, thank goodness, I have already made rounds at the hospital and as soon as I get the mailboy on the trail I'll go and see as many as possible of those who had already begun to assemble outside the dispensary when I made rounds at 6.30 a.m.—

"All right Chilulu, here's the mail. Away you go on your twelve-mile tramp to town (or fort, as it is still called). Now I'm away to my job too!" But wait a minute! What does this lad want? "Master, my mother who is the only Christian besides myself in our village, is in a fix, I didn't know what to do so I just said to myself: 'I'll go to Nala. I know he's busy

but he'll know what to do.' Well, you couldn't refuse to give him a hearing when he put it up to you like that, could you?

"What's it all about, boy?" Well here's the story—or part of it—in a few words.

The Story

Africans, of course, never tell their stories in a few words so I have to sit and listen longer than it will take you to read this paragraph—(a lot longer!) A sick baby, treated by roots and leaves and charms but responding to none of them. The mother, tired of looking after the sick baby attempts suicide by taking locust poison but fails. The witch doctor is called and bribed to name the Christian neighbor as he one who has bewitched the child. He divines and accuses her. The relatives fetch the patient and place him and his mother in the house of the accused. There they will stay. This woman bewitched the child. Let her remove the charm!

If the baby gets better all will be well. If he dies she will pay the price! Well, they didn't teach me at Dalhousie what to do in a case of this kind and I never fancied the job of playing counsel for a witch, but it's all in the day's work. I call an elder and we leave on bicycles. An hour's hard riding. Heavy rains have turned the path into a rut. As we come into the village at last we see a group of men in a yard. I call to them to come as we want all the witnesses we can get to settle the "word." Two of them stare at us for a moment and then run as fast as their legs can carry them in the opposite direction. I give chase and locate one fugitive hiding behind the door of a hut. The other has disappeared into thin air. (Later I find out that he is the witch-doctor, and how I wish I had caught him!) I wish I could describe the hut which is our destination and the scene which meets our eyes as we enter it! We stoop low to avoid bumping our heads and in the smoke-filled and windowless interior we behold:—

1. The mother of the sick child, sullen, dirty, hunched up, knees under chin, on a low stool by the open fire in the centre of the room.
2. The baby in her arms, breathing rapidly and shaken by one convulsion after another, eyes rolling horribly.
3. The Christian "granny" seated opposite unperturbed and apparently facing the situation in quite a Spartan spirit. The chief and a great group of relatives and little children crowd about the door. The elder and I enter and find low stools on which we seat ourselves. One's eyes begin to become accustomed to the darkness and then the smoke starts the tears flowing, so that altogether the problem of vision is quite a troubled one. However, you don't worry much about your eyes now. What you do need is a quick tongue. The mother tells her story, the granny tells hers, half a dozen other interested parties tell theirs. And all the time the missionary and elder throw out questions, show up as many lies as possible and try to get a few facts out of the mud. Finally the balance of opinion begins to swing against what has been done and when I say, "Well, we came here and find this baby in a *Christian* home, and that being the case, it seems to me that it should go to a *Christian* hospital." I find that I have the majority with me and they agree to send the innocent cause of all the trouble to Camundongo. Whether he will arrive there alive or not is another question. We set out for home and arrive there early in the afternoon. No sooner do we come within sight of the house than I am called away again. A boy comes up to me and says in a torrent of Umbundu, "Nala, there's a woman needing help badly at Capoia.

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The carrier arrived to call you two hours ago. Your nurses have everything ready!" The Munro Sunday Schools' truck is having a coat of paint so I go to the ladies' garage for the W. M. S. "pick-up." By the time it is out of the garage Namana and Vihemba are waiting with emergency cases, instruments, etc. Some five miles from the Mission—in I should hate to say how many minutes—my helpers call a halt. "Here's the road to the village!—There we've just passed it!" I see nothing that looks like a road but I pull up to the side of the highway in obedience to their instructions. Yes, hidden in the long grass there is a well-worn path. "Is it far to the village?" I ask. "No, no, Nala, it's right here," That statement, spoken so reassuringly, means nothing to me. If my dusky companions spoke English I might be tempted to reply, "Oh Yeah!" We walk and walk and walk, and finally, hot, dusty and hungry (for I've not had time to eat since early morning and I don't suppose my helpers have had a leisure moment either), we reach the village. Finding the house of the sick woman, we are informed that the child was born dead. Where is the mother? Oh, she's gone to the river with the other women to bury the baby! A three-day labor—and she was ill before it began—and now, two hours or less afterwards, she's gone to the funeral! Well, now I've come this far I'm going to see my patient even if I do have to follow her to the river! So I leave the nurses to rest in the shade and I ask one of the men to show me where they have gone with the corpse. Soon we are walking through the long grass by the riverside. No funeral cortege in sight. Nothing but some long-horned native cattle basking in the mingled shade and sunshine, flocks of beautiful white tick-birds whose avocation, as their name suggests, is the removal of certain unlovely parasites from the cattle whom they almost invariably accompany. My guide takes a path leading upstream and by dint of hard walking, we at last discern, a long way ahead, a long line of human forms wending their way still farther up the river valley. I think of the sick woman in that moving file and marvel at the powers of human endurance. I am already tired, the sun beats down mercilessly, and the rough winding path is most unkind to one's feet.

How can she do it—she who has this very day arisen from a bed of labor? I'm stumped. It's one of the things you have to see with your own eyes in order to believe. And why should she try to do it anyway? Why should it be necessary? That I know only too well. Many are the little bodies that are removed from the grave that their ashes may be scattered upon the fields to gratify the spirits and to bring good crops. The corpse of such a little one as this is useful, too, in the making of powerful charms. So the mother's obligation, according to Umbundu thought, is to see that it is buried well and deep where none will be likely to disturb it more. As they are digging the grave we come up. The mother is indeed a sick woman. I note her racing pulse and feverish face. I make the others in the party promise to carry her back to her village in a tepoia. They consent—half-heartedly I fear. I promise to leave medicines for her in the village and, resigning them to their grim task, I retrace my steps, for in Camundongo we have a week-end conference of over a hundred lepers and this afternoon has been set aside for sports and recreation.

The Leper Camp

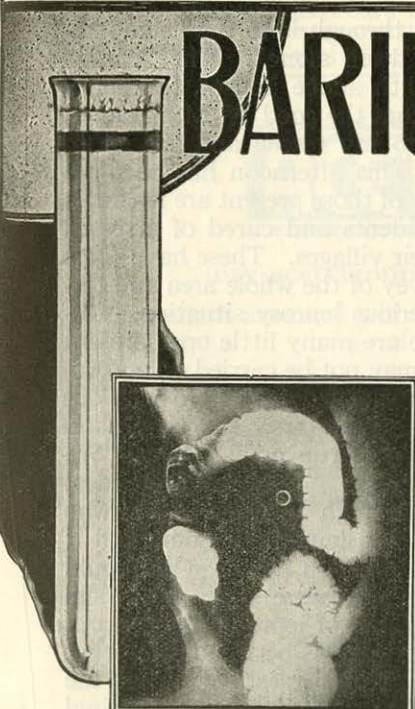
Soon we are back in the village. I leave the necessary medicines with a member of the woman's family so that she may take them upon her return from the burial and then we head for the highway again. When we reach

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TORONTO

ST. LOUIS

NEW YORK

Camundongo I have a bite to eat and then race on to the hospital. Nothing urgent there, so I pass on to the sick camp and through it to the "camp beyond the camp" where live those who must "dwell alone". The "camp" is rapidly developing into a beautiful village with adobe houses, tall shade trees, shrubs and flowers and fruit trees. I find that the good W. M. S. ladies, Miss Howse and Miss Robertson, have come to my rescue and are entertaining the leper folks with the gramophone. This afternoon has been set aside for sports and a "festa" (feast). Some sixty of those present are residents of the leprosarium. The others are former residents and cured of arrested cases who have been treated by dispensers in their villages. These have come to spend the week-end and we are making a survey of the whole area and formulating our plans to meet this increasingly serious leprosy situation. Today however, we need a little relaxation. There are many little ones present and our fun begins with children's races. They may not be carried on according to whoever is the "Hoyle" of such events, but at least they are hilarious and are enjoyed alike by the participants and the onlookers. But now what! "This crazy white doctor of ours wants the men to run now! What! We olosekulu to take part in such infantile amusements!" "Yes, that's the idea. Come on now! Now it's the youngsters' turn to laugh at those of you who come lagging to the finish line! What shouting and laughing! Some find it hard to shout for "their voice is asleep" as the Umbundu has it. (We would say that the larynx has been attacked by the dread disease). Some of them find it hard to laugh for there are thickened nodules of leprosy tissue about their eyes and mouths and cheeks. But everyone does his best and altogether it's a great time. But now what's this unheard of suggestion! That the women show their speed before a most appreciative and enthusiastic gathering! "No, no, Master doctor! Hameko, Hameko (Not I, Not I). Look, how can I run! I have no toes!" That sounds like a good excuse to the other, for there are many who have some deformity and they take up the strain, "Look at this ulcer on the sole of my foot! How can I run?"

Here's another problem that my early training did not fit me to meet! How many toes do you need to be able to run? Well I strike an arbitrary figure of 50% and soon all those who have sound feet and most of those who have as much as half a set of toes are lined up for the race. Some are dressed in a single piece of pounded bark, and some are wrapped in blankets and many are clad in very scanty cotton garments. We can only hope that things will hold together! "Mosi! Vali! Tatulupuki!" And here they come stamping, stumbling, laughing down the road. I train my movie camera on the scene and the crowds roar and we're all lost in a cloud of dust as the winners cross the finish line! Yes, it was a great day—I mean what was left of a day.

There was much more that I had to tell you but there is no time. I'll write again when I can.

Very Sincerely Yours,
W. SIDNEY GILCHRIST.

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In the prophylactic and curative treatment of congenital syphilis, STOVAR SOL by mouth is advised because of its ease of administration and the resulting co-operation of the parents.

For **Adults**, STOVAR SOL is most useful as a form of "follow-up" or supporting therapy between courses of Arsphenamine compounds or Bismuth.

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STOVAR SOL POWDER.—Insufflation of STOVAR SOL in powder form is used successfully in the treatment of Trichomonas Vaginitis.

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Personal Interest Notes

Dr. Freeman P. Smith of Mill Village celebrates his 87th birthday. Saturday September 12th was the 87th birthday of Dr. Freeman P. Smith of Mill Village. A number of his neighbours and friends armed with a large birthday cake, decorated with candles, called on Dr. Smith to wish him many happy returns. The doctor was taken by surprise but apparently was as hearty as ever in his welcome to the guests while Mrs. Smith was busy answering telephone calls from many friends. The BULLETIN joins with the friends and neighbours who so thoughtfully remembered the doctor's birthday and wish him many birthdays to come. Many happy returns.

Dr. Crummey of Trenton has been visiting Montreal where he attended the Children's clinic at Memorial Hospital.

Dr. C. A. and Mrs. Donkin of Bridgewater left recently for Boston and New York, where Dr. Donkin will take a short course in anaesthesia.

Dr. and Mrs. E. K. Woodroffe of Canning, have been visiting Montreal where Dr. Woodroffe attended the refresher course given at the Montreal Children's Hospital.

Congratulations to Dr. G. P. Tanton and Mrs. Tanton of Port Dufferin on the birth of a son at the Grace Maternity Hospital Halifax, September 20th.

The marriage took place during the latter part of September of Dr. Fred Cyril Jennings of St. John, N. B. and Miss Hazel Kathleen Myles of Campbellton. Dr. Jennings formerly attended St. Francis Xavier University and afterwards graduated from the Dalhousie Medical School in 1932. The couple will reside in St. John.

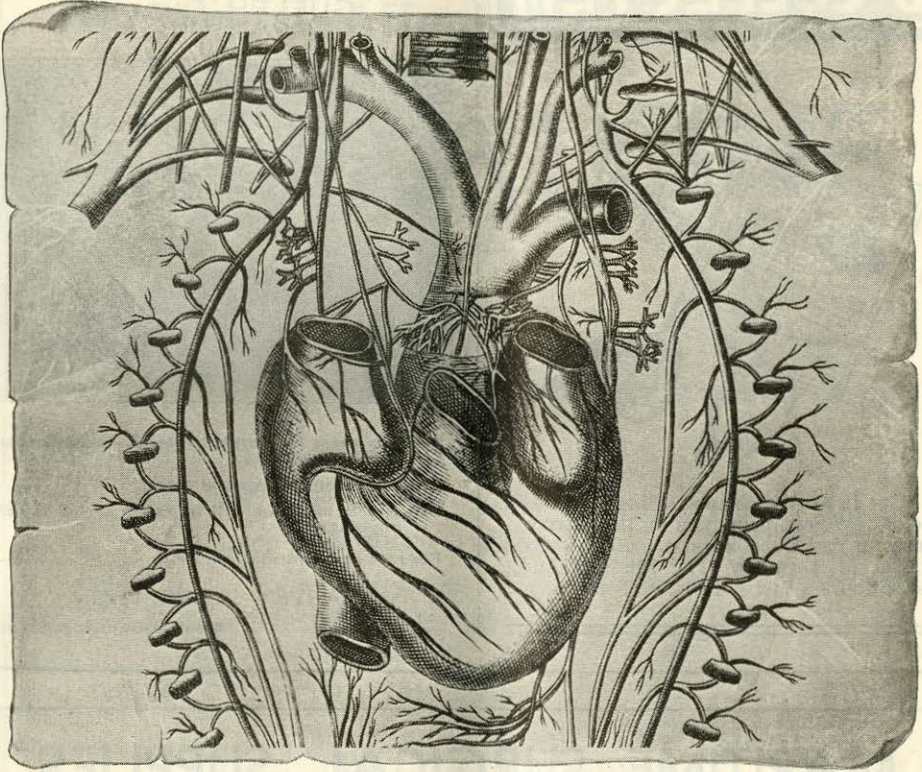
Dr. and Mrs. Fabian Bates of Glace Bay have returned from an extensive visit to various points of interest in the New England States.

Dr. D. S. Sutherland, who has practised at Chester for the past number of years is leaving Nova Scotia to take up practice at St. Kitts, West Indies Islands. Before his leaving he was tendered a banquet by the members of the Masonic Order.

The marriage took place on Saturday afternoon, September 12th, at Guysboro of Miss Isobel Frances Floyd and Dr. G. Watson Sodero. Dr. Sodero and his wife have sailed from Halifax to England, where the doctor intends to do post graduate work.

We regret to announce the death of Mrs. Patton, wife of Dr. J. W. T. Patton, Truro, who passed away at her home on Saturday, September 19th, following a serious illness of several months. Mrs. Patton was formerly Miss Thelma Yorke, of Parrsboro. Besides her husband she is survived by three sisters and five brothers. The funeral was held on Monday at St. John's Church, after which the remains were taken to Parrsboro for interment.

One of a series of advertisements prepared and published by PARKE, DAVIS & CO. in behalf of the medical profession. This "See Your Doctor" campaign is running in *Maclean's* and other leading magazines.



The heart as represented in an anatomical drawing of the 18th Century.

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Its Herculean job is made still more difficult by the strain and accelerated pace of modern life. This, perhaps, is one of the reasons heart disease is increasing. Today, it leads all other causes of death—one person in six, above the age of 40, dies of heart disease.

That is an alarming figure. It makes the thoughtful person wonder,

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Today physicians know more about the ills of the heart and ways of the heart than ever before. They are better equipped than ever before

to treat and control heart disease—and to guard against it as well.

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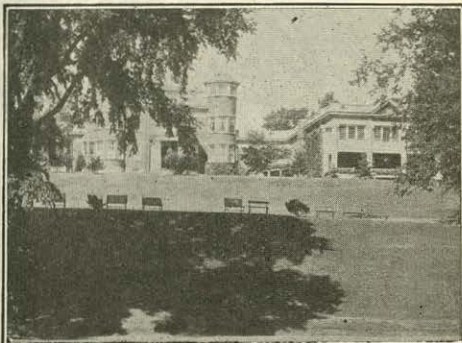
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