

Acute Osteomyelitis

SIR HENRY M. W. GRAY, K.B.E., C.B., C.M.G., LL.D., M.B.,
(Aberd.) F.R.C.S., (Ed.), Montreal.*

A PROMINENT surgeon in one of the large cities of the Eastern States of North America wrote as recently as 1921:

"This is the disease which is so commonly diagnosed as rheumatism, arthritis, and later as erysipelas, abscess, or typhoid, and denied the prompt treatment which would prevent metastatic abscesses and infective embolism. There is no single disease which is a greater reproach to the medical profession. The tardiness of the general practitioner to secure prompt relief in osteomyelitis is inexcusable. The recognition of the disease is easy, the treatment is simple. Operation at the hands of the most unskilful is not so dangerous as the disease when left unoperated upon. Many children are crippled and die of this disease. Too rarely does the general practitioner recognize acute osteomyelitis in its *first stage*, and secure immediate surgical relief without wasting precious time with palliative measures while destruction of the bone and general infection make rapid progress."

This statement was made in New York in 1921. Have we made progress since then? I doubt it.

If we get a vivid mental picture of the onset and mode of development of this dangerous disease firmly fixed; if we look upon every patient with sudden acute bone pain as being afflicted with it until we can prove that he is not; and, having become reasonably sure of our diagnosis, if we do not delay in carrying out surgical treatment—then we shall remove this reproach to our profession. Early diagnosis and treatment usually is successful in cutting short the disease. Delay may mean loss of limb or life, and short of those, it means prolonged serious illness with repeated more or less severe operations as an accompaniment, and in the end, possibly a permanently crippled individual.

The causative organism, whatever it may be, seems to be possessed of what Rosenow calls an "elective localisation", and it may affect, primarily or secondarily, bones in any part of the body. It matters not in what part of the bone structure the infection lodges, whether medulla, dense bone, or periosteum, every acute, unchecked inflammation may, speaking in a general way, affect all these component parts in a very few days. Joints are not infrequently affected, usually only by spread to them of the congestion, but possibly of the actual infective agent, from neighbouring inflamed bone. As a result they may become ankylosed, even though the arthritis may not have been actually suppurative.

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Professor John Fraser noted the infective organisms in 200 cases—in 61% he found staphylococcus aureus, in 29% pneumococcus, so that these two caused 90% of the cases. In 6% streptococci and in 3% staphylococcus albus were found. Of course, typhoid osteomyelitis is an old story, but it is likely to be of a more chronic type.

I propose to discuss, almost exclusively, the aspects of an acute case.

The great majority of such cases occur in individuals long before the age is reached at which the epiphyses become united to the diaphyses, i. e.,—in fairly young children. Some say that it occurs most often about the age of six—possibly because throat trouble, tonsillitis, is common at that age while older children are likely to have had their tonsils removed. It may be that removal of diseased tonsils, which, act as a constant immunising agent, may tend possibly to make an attack of acute osteomyelitis more severe in these older children. It is said that the older the child, the more likely is the attack to be of severe text book description, while the younger the child, the greater the chance of a subacute development. But at the onset we cannot tell what the outcome is to be. Later in life, osteomyelitis is rather uncommon except as an accompaniment of compound fracture. It is by no means infrequent in wounds of war when sepsis is not prevented by efficient early treatment. In compound injury, whether the result of an accident, of an operation or of a "gunshot wound", osteomyelitis is due, practically always, to spread of infection from the wound. This spread occurs more readily when the "nutrient artery" is torn. Owing to the fact that the medullary canal is laid open by the fracture and that therefore high-grade intra-osseous tension cannot occur, the symptoms are more insidious in onset and less severe during their development than in those cases in which the soft tissues and the bone are intact.

In the usual case of acute osteomyelitis we must presuppose a focus of infection somewhere, a portal for the infective organisms to enter the bloodstream. This focus is not necessarily in a state of acute inflammation. A crusted skin lesion, a septic tooth, a suppurating tonsil or ear, or so forth, is usually responsible or at any rate is usually present. Before I left Scotland in 1923, I gained the impression that acute osteomyelitis was less common owing to the systematised inspection and treatment of school children which had been instituted years previously. The patient is usually healthy. The active, well-nourished, robust child is more commonly affected than the "piner", and boys at least three times more often than girls.

The disease occurs usually at an age before the epiphysis has united. It begins usually close to the epiphysial line of cartilage, on its diaphysial side, in the so-called metaphysis, where the effect of a wrench on the long bone shews as a slight tearing of tissues and of course, of vessels. The resulting clot and effusion makes excellent pabulum for the growth of circulating organisms which may be held

up there. In a long bone this disease nearly always begins at the end at which the greatest growth occurs, where the epiphysis is the last to unite with the shaft, for example, in the upper end of the tibia or humerus and the lower end of the femur. The greater vascularity plus the greater liability to being wrenched probably have much to do with this frequency.

The epiphysis is rarely primarily affected. It has a firmer attachment to the epiphysial cartilage which is therefore less likely to be torn than that of the diaphysis. Naturally, disease beginning in the epiphysis spreads more easily to the neighbouring joint.

Symptoms. Let us learn what happens to a fulminating case in absence of suitable treatment.

The youngster, in playing around, gets, say, a twist of the leg which may get but scant notice at the time. But in a few hours or possibly after a day or two a horrible beating, boring pain begins, for example, in the upper end of his tibia—a sign that inflammation in the small lesion already described is occurring.

The inflammatory effusion fills the rigid canals and spaces in the bone. The pressure of effused products occludes vessels in these canals. Veins are more readily affected than arteries. Therefore congestion increases. Tension becomes excessive. Nerves are compressed. The process spreads gradually but quickly.

If the focus be near the surface, the periosteum early becomes thickened and oedematous, fluid collects beneath it, at first serous but rapidly becomes purulent. The superjacent tissues become oedematous and swollen. The skin becomes glazed and may be pallid at first but is reddened later on when pus breaks through the periosteum or forms independently in the subcutaneous tissue.

If the focus be near the medullary cavity, the pus-forming process may make its way there first. When it breaks into this cavity, whose contents are capable of slight compression, there may be a short respite in the severity of the symptoms, but soon increase of tension makes the pain well-nigh unbearable. The intra-medullary pressure stops the circulation. Early relief of tension usually cuts short the process.

Absence of circulating blood and virulent toxins secreted by the organisms cause necrosis of the bone in its interior. When the periosteum, which carries the blood supply of the outer parts of the diaphysis, is elevated off the bone by pus, the corresponding part of the bone soon dies. The subperiosteal effusion usually keeps pace with the extent of pus formation in the medulla. In fact, in children I have usually found it is rather in advance. Thus, in some degree, the size of the periosteal abscess is an indication of the extent to which the medulla is affected. There may be a small flattish abscess beneath the periosteum while the deep inflammation is still confined to the cancellous tissue of the metaphysis. The subperiosteal pus spreads, at first along one side, but ultimately may lift the periosteum off the whole

circumference and length of the shaft except perhaps at the insertions of tendinous fibres. This separation of periosteum is usually abruptly limited at the level of the epiphysial cartilages where it is more firmly attached. It thus comes about that the entire diaphysis may be surrounded by pus, although before this occurs the periosteum may give way at one or more points. Pus from the medullary cavity may by this time have made its way through cortical foramina or burrowed between the metaphysis and epiphysial cartilages, whose normal connections have been loosened. So that, when the subcutaneous abscess, which by this time has formed, bursts or is opened, ordinary pus at first and then oily pus, characteristic mixture of medullary fat globules and pus, is discharged. The sinus leads to dead bone.

If the osteoblasts which, invariably in a child, cling to the periosteum, have not been destroyed by the virulence of the toxins, they then begin to form new bone, the so-called involucrum. Where erosions or incisions of the skin and periosteum have been made, and which now form sinuses leading through holes in the newly formed bone, these are called cloacae. Through these pus, produced by irritation of the dead diaphysis, is constantly discharged.

The disease is usually so virulent that patients, if unrelieved, succumb before the end of a week or less, which sees the full development which I have described. It is only rarely that the bursting of abscess saves a life.

Even though a weak spot in the periosteum gives way early and the subcutaneous abscess soon bursts, or is opened, and though pus escapes from the medulla through a fortuitous or operative but too small opening, yet the inflammation in the medulla may spread extensively. I shall show you slides of such a case.

Now, supposing our small boy, instead of having his leg twisted, had received a kick on the shin, so severe that the periosteum and superficial part of the bone was bruised. The floating organisms would have been held up in the resulting haemorrhage and inflammation would have affected only the bruised parts. When the periosteum became elevated by pus formation, the superficial osteitis would probably have spread and have resulted in necrosis of a slither of bone or exfoliation, as it used to be called. In such cases the medulla is very rarely affected.

Whether "elective localisation" or multiple injury be the cause, there are very frequently multiple foci of osteomyelitis. Secondary foci are sometimes unobtrusive until they are well-advanced, and foci in other tissues may be equally so. In all cases, therefore, careful systematic examination of especially the long bones should be made frequently during the illness. Secondary foci develop slowly and insidiously probably because the patient acquires resistance and the pain of the original focus detracts attention from them.

During the development of the disastrous local condition intense toxæmia, agonising pain and resultant want of rest and sleep make the

patient so acutely ill that he may die in a few days. Unless the infecting virus is attenuated, he rarely produces sufficient antibodies to neutralise the poisons and subdue the organisms. If this happens, general symptoms subside and local symptoms resemble those of a chronic lesion. It is in this way that sometimes a so-called Brodie's central abscess of bone is developed. In its interior there may or may not be a piece of necrosed bone. One hears occasionally advocacy of vaccine or serum treatment and some suppose that they can cut short or ameliorate an attack. My experience bids me to have little faith in this. The process is too rapid and disastrous. By all means use such treatment as an adjuvant to surgical treatment if you care to.

General symptoms in a fulminating case rapidly assume alarming characters. I need not detail more than a few. Feverish symptoms are prominent usually from the beginning. The patient may be restless at first but soon pain compels him to keep still. The cerebrum is apt to become affected. I remember vividly the youngster whom I saw in my student days who lay muttering nonsense, staring into space with widely open, bright eyes, trying with his hands to catch butterflies which did not exist, and plucking at the bedclothes while his muscles twitched disconnectedly. (Muttering delirium, coma vigil, floccitatio, carphology, and subsultus tendinum). Patients in that condition rarely recover. Emaciation is rapid. The small patient burns up his available carbohydrates first, then his fats and proteids. The latter two are probably imperfectly metabolised and the resultant products add to the strain on his organs.

The urine is characteristic of high fever. As the effects of toxæmia and high temperature become more and more manifest it may contain albumins and products of imperfect metabolism such as acetone bodies, oxybutyric acid and so forth. This provides both an indication and a warning—an indication that one must give the patient foods which are easily oxidised so that a minimum of strain is put on the general metabolic mechanism, and a warning that he is on the eve of a general break up.

Heart and lungs suffer from the strain as well as the nervous system, metabolic organs, fats and muscles. Numerous "vicious circles" are at work within the body.

The leucocyte count is often very high, 25-30,000 or more being not uncommon. A high count indicates usually good resistance and capacity for recovery. When resistance and recuperative power are low, the count is also likely to be low. Indeed, as in other overwhelming toxæmias of micrococcal origin, there may be leucopenia. The number of polymorphs relative to other white blood cells is then unusually high.

Sometimes a scarlatiniform rash, the result of toxæmia, appears quite early. One has heard of cases where this has led to diagnosis of scarlet fever!

Local symptoms develop in intensity "pari passu" with the bone pathology I have described. Pain, tenderness and swelling are at first confined to the focus of origin, usually near the epiphysial line. The proximity to a joint which may soon become swollen by effusion has led to diagnosis of acute rheumatic fever. Later foci in similar situations confirm the unwary in their early diagnosis and much valuable time is lost. But careful examination reveals the tender spot on the bone, at a little distance from the line of the joint. The pain is intense, throbbing, boring, deep in the bone and may make the patient toss about in his agony but as the inflammation nears the surface he is more and more inclined to keep the limb absolutely at rest. The slightest pull on the muscles inserted near the affected part, handling the limb, jarring of the bed, tapping the bone or pressure over or near the focus makes him shriek aloud. Swelling, in appearance and development, has been already dealt with.

Sudden, acute persistent pain in bone, even unaccompanied by swelling, should always provoke thoughts of acute osteomyelitis.

When an infant is attacked, the diagnosis may be a matter of some difficulty. The child yells and cannot be comforted. It will not feed for more than a second or two. One may notice that, in its cot, it tends to hold one limb quiet; it does not wriggle about. When it is picked up, and especially if the affected limb is grasped in so doing, its cries are more heartrending than ever. A thorough examination will reveal a tender spot *on the bone*. Diagnosis, then not long delayed, should be followed by immediate operation.

Congestive serous effusion may distend the neighbouring joint. It disappears rapidly when timely treatment of the osteomyelitis is carried out. If this is neglected the effusion may become purulent. Pus rarely burrows through the epiphysis into a joint, but in some joints, the primary focus, in the diaphysis, may break through directly into the joint. The chances of this happening vary with the anatomical relationships of the synovial membrane to the affected bone. I shall show those of the chief joints by lantern slides.

This secondary suppurative arthritis is just as disastrous to the functions of a joint as is a primary arthritis—all the more when direct spread from the original focus has taken place. Courageous eradication of the primary focus although it entails free opening of the joint has resulted in some cases in complete recovery. Acute suppuration in the hip or shoulder joint, especially in absence of septicaemia should make one think of osteomyelitis and lead one to treat the offending bone.

X-Rays are very rarely indeed of use in the early treatment of acute osteomyelitis. It takes several days at least for changes in the bone to become visible in a skiagram.

Before discussing treatment, I should like to make a few remarks about osteogenesis.

Great difference of opinion apparently still exists as to whether periosteum produces bone or not. From my own observations, I

say "Yes, in the child, but not in the adult, except under certain conditions." Up to about puberty, periosteum stripped off the bone will proceed at once to form new bone. Osteoblasts adhere to its under surface, indeed they form part of it. The nearer the age of puberty, the more precarious is the prospect of bone formation, although it *may* occur for two or three years thereafter. In the adult, healthy stripped periosteum does not carry osteoblasts. Leriche, during the recent war, appreciated this fact. He recommended that, in making debridement of wounds in which shattered fragments of bone were present, shavings of the surface bone of these fragments should be left behind, attached to the periosteum, in order that every chance for bony union might be given. These shavings contain the necessary osteoblasts.

However, when an adult bone is inflamed, the surface cortical osteoblasts take part in the general multiplication of cells which occurs. These newly formed osteoblasts emigrate and stick to the periosteum and when it is detached by pus or by elevator they may still adhere, and in favourable circumstances will functionate and form new bone. But their hold on life is precarious. Virulent toxins, strong antiseptics or adverse mechanical conditions will kill them.

With these facts in view, I think there are three important considerations which should influence the line of treatment in any given case.

- (1) Conditions under which treatment has to be carried out.
- (2) Stage of development of the disease.
- (3) Age of patient.

Under (1) are included, the experience and skill of the medical attendants, (2) the amount of time which they can devote to the case, and (3) the housing conditions available, whether log-cabin or "White House", small country hospital or a city hospital replete with all conveniences.

If the conditions are adverse and it is impossible to get a skilled surgeon, I think that a simple attempt should be made to stay the progress of the disease and send the patient to the big centre as soon as possible thereafter.

With regard to the stage of development of the disease—the pathology indicates what is necessary. In the earliest stage drilling or gouging into the bone over the focus will, when properly carried out, bring immediate relief. In more advanced cases sufficiently free vent should be given to the pus in the medullary cavity and perforce at the same time to that surrounding the bone. In the most advanced and neglected cases amputation may have to be resorted to when the patient is unfit for prolonged transport, but, and especially under good hospital surroundings, I cannot realize that amputation has any advantages over the treatment which I shall describe.

The age of the patient is of account because of the capacity varying at different ages to regenerate bone. Thus, while I remove half or the whole of the shaft of a long bone in a child, with assurance that the

bone will regenerate and be strong in a few months, I have great compunction about doing so in an adult. In an adult, moreover, the bone does not usually become affected so diffusely.

Stated shortly, the operative treatment which I prefer to carry out under the favourable conditions of a well equipped hospital is:—

(1). If the inflammation is in its earliest phase, that is, when the focus is still confined to the cancellous bone of the shaft near the epiphysial line, incise over the thickened periosteum or tender spot revealed by palpation and drill or gouge into the bone. One does not always strike pus, but if that is present, it will likely make its way to the surface through the track prepared for it. It is not necessary to make the opening more than half an inch in diameter, nor is it advisable to scoop out bone in the depth, because one may easily remove part of the epiphysial cartilage or open the real medullary cavity and thereby provide a path of entrance for the infection. The line of the tunnel in the bone should be at right angles to the surface and need not be deeper than about one inch. When one strikes pus, the cavity may be gently wiped out or even curetted and dressed with some mildly antiseptic gauze. I have seen some such cases completely healed over in two or three week's time.

(2). If there is definite abscess under the periosteum, one may take this as an indication that the disease in the bone is fairly far advanced, and that one is almost certain of striking pus when the bone is drilled. In such a case one may suspect from the extent of the suppuration in the cancellous bone that the medullary cavity has become infected, but still not extensively. One may, therefore, cautiously cut a gutter until one gets beyond the purulent infiltration. The edges of the gutter should be bevelled. The adjacent bone may still be capable of recovery after the congestion has been relieved by removal of the suppurating part, and healing may be rapid or attended only by superficial necrosis of the cut surface of the bone. X-Rays will prove an efficient guide to further treatment.

(3). When the periosteum has become separated from practically the entire circumference of the shaft, there is likelihood that the denuded part of the shaft will die, at all events, a large part will. Therefore, in a child I have no hesitation in removing the diaphysis by cutting across the shaft of the bone about an inch beyond the limit of periosteal denudation and wrenching out the affected part. It usually comes away quite easily. If the whole length of the diaphysis is thus denuded, the bone is cut across about the middle of the shaft and first one end and then the other is removed. This procedure is not favoured by all surgeons. Some object to it, whatever be the nature of the case. Others do not carry it out, unless where two parallel bones are present, when the healthy one acts as a splint and helps to prevent deformity. Before I left Aberdeen, it was in that city fast becoming a routine measure in advanced cases in children, to remove the bone in the way described, regardless of whether another

splinting bone was adjacent or not. By careful after treatment, especially by giving very strict regard to extension, splendid and uniform results were obtained.

In the case of the tibia or fibula, after-treatment is comparatively simple. Special attention must be paid to maintain length and to prevent deviation of the foot.

Take now the case of the femur or humerus. If, for example, the lower end of the femur becomes extensively involved and is treated in this way, one must be careful not to put on too much extension at first, else the periosteal sheath may be over-stretched and its blood supply interfered with so that sloughing may occur. There is really no necessity to make the measurements of both limbs equal during the first week or so—shortening may be corrected by gradually increasing the pull after that time. There is usually no tendency for the condylar epiphysis to rotate backwards. If there is, the tendo Achillis may require division. A Thomas splint seems to fulfil all requirements in the way of support. Ice tongs extension may be used in order to allow movements of the knee. Theoretically, this mode of extension should not be used until the temperature is normal. So long as the temperature remains elevated, there may be organisms circulating in the blood and the points of the tongs may be the cause of trouble starting in the epiphysis.

The advantages of removing the affected bone *en masse* are (1) that all the disease so far as the particular bone is concerned is removed. There are no recesses left in which infection may lurk. Amputation does this also, but amputation is a much more severe operation, and the limb is lost forever! (2) Convalescence is, therefore, established more quickly. (3) The patient is spared further serious operations. (4) The bone in a child, with very rare exceptions, always grows again so that, in say six months time, it will be practically normal so far as function is concerned. (5) There is no interference with the growth of the bone in length or breadth.

After removal of the bone one must be careful not to damage the vitality of the osteoblasts on the inner surface of the periosteum by rough wiping or by the application of strong antiseptics. Some stitch the edges of the periosteal tube together and leave a soft drain at either end. Others pack the cavity loosely with plain or mildly antiseptic gauze for some days. In the case I shall show on the slide, operated on 21 years ago, this was done. At the end of five days the gauze was removed and the periosteal cavity was filled with Beck's bismuth paste. Then the soft parts were sutured. As the bone grew, the paste was gradually extruded. You will see the wonderfully accurate way in which the new tibia was formed, so that within a year the bone was practically normal.

We found that when the children treated in this way grew to full size, the affected bones were practically equal to their fellows on the opposite side of the body.

In adults, I think that treatment of advanced cases must be conducted on different lines. There is usually no need to make removal of part or whole of the complete thickness of the shaft and, further, it is likely that such removal will be followed by very faulty regeneration of bone. As age advances, the epiphysial line becomes much more firmly welded to the diaphysis, indeed usually it is completely obliterated so that there is no differentiation of epiphysis and diaphysis. The cortical bone, as a whole, is thicker, denser, and less vascular in older people so that spread of infection through it to the periosteum is rendered more difficult and, if it does occur, the subperiosteal spread itself is not so diffuse. In an adult affected by osteomyelitis, the periosteum is rarely separated to a very large extent from the bone. It is more adherent than in a child, so that pus tends to be more confined in area, and will tend to break through towards the overlying soft parts more readily. But the suppuration may spread just as widely and almost as generally in the medullary cavity itself, although as I have indicated the whole circumference of the cortical bone does not tend so readily to become devitalized. The periosteal vessels probably play a greater part in nourishing the cortical bone of an adult.

Therefore, it seems to me that the suitable procedure is to cut a gutter right through into the medulla of the bone, preferably under the spot where subperiosteal suppuration exists. The gutter should extend as far as the limits of the medullary suppuration. The interior of the medullary cavity should not be curetted. Removal of possibly viable endosteum may cause more extensive necrosis than would otherwise have occurred.

In such cases, a certain amount of necrosis of the remaining bone almost invariably occurs and sequestrectomy has to be performed when the dead part has become loose. Meantime, however, the bone has been strengthened by formation of new bone by the osteoblasts which migrate outwards from the cortex.

The operative treatment of the sequelae of acute osteomyelitis does not come within the scope of this paper.

It remains for me to speak of those cases in which a kick or blow is followed by persistent and increasing pain at the part, along with symptoms of inflammation. The severity of the pain may make one suspicious that the deep bone is affected. Prompt incision is indicated, but are we to penetrate deeply into the bone? In order to cut short the inflammation in the bone, which otherwise may develop as virulently as in ordinary cases, we have to cut away the affected part. If the medulla be opened, inflammation may be set up there, which did not exist before. I know that one may be lucky in not exciting such inflammation even if the bone is drilled, but I believe the safer plan is to remove the bone in shavings with a gouge. When one reaches bleeding bone, stop. Persistence of deep pain and of general symptoms will, in a few hours, indicate if one has stopped too soon.

One more point! If the neighbouring joint is swollen and painful, pus may be present. When in doubt, I do not hesitate to use an exploring needle. If pus is found, I prefer, before proceeding to more radical treatment, to aspirate the joint to reduce tension, thus relieving the circulation, and if that fails, to puncture the joint with two fairly large trocars, one on either side, and wash out the pus by irrigating from canula to canula with saline solution or possibly one of the newer non-poisonous antiseptics. Removal of the main focus of inflammation may have allowed the resisting powers of the patient to become so strong that the secondary trouble in the joint will be overcome. The treatment of suppurating joints, however, should not have to be undertaken in such cases.

The general treatment of such cases is of great importance, but time will not permit me to go into detail. As I have mentioned, the little patient soon shows the effect of profound toxæmia on all his special organs and general tissues. He loses his appetite so that he has to draw on foodstuffs available within his body in order to meet an increased demand. Water, carbohydrates, fats and proteids are used up in the order named. The easily metabolized carbohydrates are adequately digested, but fats and more especially, proteids, drawn chiefly from subcutaneous tissue and from muscles, are not properly dealt with by the mechanism which usually is able to dispose successfully of such highly complex substances. As a result, deleterious matter of various kinds accumulates in the blood and other tissues as I have already said. Metabolism is impaired, oxidation is imperfect. The patient's excessive thirst reveals a loss of body fluid. Emaciation and weakness progress hand in hand. The nervous system, both central and peripheral, is seriously affected. Stimulation is followed by exhaustion and this accelerates general break-up. The internal state of affairs is revealed by the appearance of the patient, the smell of his breath, and the presence of characteristic abnormal substances in the blood and urine.

It is fairly clear therefore that, in order to maintain the patient's vitality, we must give food materials which are easily absorbed and metabolized. We must make an attempt to stop the formation of noxious substances in the tissues and body fluids, as well as to neutralize and help the elimination of those already formed.

Fluid nourishment is probably the only thing the patient can be coaxed to take. Carbohydrates in various forms should be used as abundantly as possible to provide easily combustible material and thus reduce the wastage of fats and proteids. If milk is given it should be predigested and well diluted. To combat acidosis bicarbonate of soda is a usual standby but the child will probably refuse it by mouth. Alkaline phosphate of soda is more pleasant to take and is more lasting in its effects. Fruit juices, in virtue of their convertible citric and tartaric acids also make a palatable substitute. Beef juices and beef extracts, chicken and fish preparations are not to be recommended in

the acute stage, but may be used freely during convalescence. If enough cannot be given by the mouth, glucose and bicarbonate or alkaline phosphate solutions should be given subcutaneously, intravenously, and by rectum. Seeing that all the secretory glands of the body are probably in the same state as the salivary glands, some insulin should be added to the solution of glucose to help its metabolism along. Large quantities of water are given, to which some mild diuretic, such as spirits of nitre, is added in order to favour renal secretion. Sedatives, the simpler the better, may be required to produce sleep.

But all general treatment will be in vain, unless the patient is relieved of the original cause of his trouble. Gas and oxygen is probably the best anaesthetic to use during operation. There may be danger in the use of spinal anaesthesia owing to the possible presence of organisms circulating in the blood. Chloroform, and to a much less extent ether, may plunge the patient into severe acidosis—delayed anaesthetic or post-operative poisoning. Whatever anaesthetic is used, it is well to give, copiously, both before and after, subcutaneous or intravenous doses of glucose 5% and bicarbonate or alkaline phosphate solution.

The activities of the Women's Institute of Middleton are to be directed this year by the wives of two local doctors, Mrs. F. S. Messenger being President and Mrs. J. A. Sponagle being Vice-President.

Dr. Stella Messenger-Pearson of Lawrencetown has removed to Yarmouth where she will practice her profession. Dr. Pearson is a sister of Mrs. Phinney, wife of Dr. W. H. Phinney of Yarmouth.

Miss Margaret Armstrong, daughter of Dr. M. E. and Mrs. Armstrong, formerly of Bridgetown but now residing in Amherst, after two years studying Music at Mt. Allison University, was recently presented with a scholarship by her Alma Mater and is now taking vocal training in Toronto.

The *Montreal Star* intimates this happened in Montreal, for all purposes it might have happened in Halifax or Sydney: "A sweet young thing in distress came in and said:—'I have broken my glasses, do I have to be examined all over again?' 'Er, no,' said the oculist, 'just your eyes.'"

Dr. James R. Robertson of Amherst has recently been appointed a Coroner for that district. Are we right in concluding that Coroners have to-day more investigations to hold than ever before? Whether this is true or not the question is pertinent as to why there are so many cases of deaths requiring investigation. Perhaps some of the Coroners who have been recently through the mill have some opinions as to cause. For such the pages of the BULLETIN are open.

UNDERWEAR and HEALTH.

Gone are the days when raw wool underwear was the protector from cold and as good as mustard on tender skin. Modern requirements and styles have brought a great change even in this particular, all wool is too expensive, also unnecessary, hence we have all kinds of fabrics to suit the times and the funds. It is not strange to learn that very considerable effort has been made to ascertain the health qualities of modern underwear fabrics. The BULLETIN has received a reprint from the American Journal of Diseases of Children giving a report of an Investigation of some of the Fabrics used in the Manufacture of Underclothing, as studied by Doctors Snelling and Alan Brown of the University of Toronto.

This is a matter of considerable importance to the paediatrician, in view of the tender skin of infants especially. The following points were considered by these investigators:—1. Power of heat retention. 2. Moisture absorption and loss. 3. Porosity. 4. Skin irritation and allergy. 5. Cleansing strength and durability. 6. Relative cost.

The Article concludes with the following comment:—

“The ideal underwear is one combining warmth, ready and rapid absorption, lack of skin irritation and durability with moderate cost. The two layer fabric has all these properties to the greatest extent because of the wool on the outer surface, the heat retention power and durability are greatest; with bleached cotton next the skin, absorption of body moisture and lack of irritation are insured. This two layer fabric is more expensive than cotton, but not as expensive as wool.

“The properties to be considered in choosing the most useful type of diaper are ready and rapid absorption, softness, elasticity, durability and relative cost. The knitted bleached cotton diaper absorbs rapidly; it is soft, elastic, and it fits the body. The experience of those using the knitted diapers has shown that they will last for at least three children, and that in that time their efficiency does not decrease. The initial cost is nearly double, but the woven diapers do not usually wear for more than one child. When wet, a woven material is harsh next the skin. The efficiency of the woven diapers with the fuzzy surface becomes much less after a few washings. The woven fabrics will not conform to the shape of the body, but makes the child conform to the shape of the diaper. Thus it can be readily seen that economically, and for relative usefulness, the knitted bleached cotton diaper is a real advance over the woven fabrics.”

This is brought to the attention of BULLETIN readers on account of the appearance in the December and January issues of the advertisement of the Woods Underwear Company for a fabric called *Hytex*. It is characteristic of modern industry that it recognizes the part health plays in the product made as well as in the health of the workers.

It is, moreover, to the credit of these manufacturers that they adopt these health ideas in the making of their products and it is well to keep these facts in mind when in the home or hospital these products are required.

Will all our readers please note now, if they have never done so before, that all our advertising is along lines of utility to our journal clientele. If the advertisement is in the BULLETIN there is something in that advertisement to your interest, or *it wouldn't be there.*

NEW ADVERTISEMENTS.

The BULLETIN is glad to welcome new advertisements at any time, especially yearly contracts starting in the January number. Ciba Company, Limited have recently been circularizing the medical profession in the Maritime Provinces for their pharmaceutical products and their advertisement appears in this issue. Organized in 1864 in Basle (Switzerland) this house became in time The Society of Chemical Industry in Basle. In time a branch was established in New York and now the Canadian field has brought a branch in Montreal into the list of pharmaceutical houses with whom we, in Nova Scotia, largely do business.

Post Graduate Medical Study is more necessary to-day than ever before in our medical history. In Nova Scotia we have endeavored to meet this need by the annual Refresher Course given by Dalhousie Medical College and visits of C. M. A. Lecturers before Branch Societies. But many men can get away for a month or two and only recently have the larger medical centres arranged suitable courses for these men. It is therefore a pleasure to read in this issue what the New York Academy of Medicine has to say and to offer to the doctor visiting New York.

In Arduis Fidelis.

His Majesty the King has been graciously pleased to approve of the motto of the Royal Army Medical Corps, namely, "In Arduis Fidelis" being adopted as the motto of the Royal Canadian Army Corps and the Canadian Army Medical Corps. (G. O. 13251930.)

Obituary notices not indicated. A local newspaper does not publish obituaries indiscriminately but says,—“People who do not take the home town paper are dead anyway, and their passing has no news value.” Quite so.

The Nova Scotia Medical Bulletin

Official Organ of The Medical Society of Nova Scotia.

Published on the 5th of each month and mailed to all physicians and hospitals in Nova Scotia. Advertising forms close on the 20th of the preceding month. All Mss should be in the hands of the Business Editor on or before the 15th of the month. Subscription Price:—\$3.00 per year.

Business Editor	- - - -	S. L. WALKER, B.A., M.D.
Editorial Board	- - - -	GEORGE H. MURPHY, M.D., C.M.
		S. J. MACLENNAN, B.A., M.D.
		H. B. ATLEE, M.D., C.M.

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No. 1

Happy New Year--1931

Merry versus Happy.

OUR December BULLETIN Editorial, "Merry Christmas—1930", stressed the Christmas spirit as one essentially of Merriment,— "of in-no-cent mer-ri-ment", universal rejoicing, a burst of applause for what the year has brought,—peace and goodwill.

There is an obvious difference between merriment and happiness, the former is not permanent and never can be; the latter may be but seldom is. But the joy of Christmas has so mellowed our souls that we seek for ourselves and others that better part, the happiness of the best life. The wish is sincere, hence the habit of making resolutions. Even if most of the resolutions in a few days or weeks get the go by, there has been an appreciation of what is the better way.

Nor does this happiness mean, or depend upon, contentment; happiness indicates and requires activity, while contentment may be another term for blissful ignorance or calm indifference. Of course, happiness requires a certain frame of mind but that mind must be alive to everything that will combine to make the year, and every day in it, really happy.

"Service" is a terribly hard-worked word in these present days, but it is the surest route to happiness, whether the going be smooth or rough. But this is the kind of a life that is so frequently demonstrated by members of the medical and nursing profession as to take from it all its glory, but if it brings about a service that later on will give rise to the commendation, he hath done what he could, the goal of happiness will have been reached.

The BULLETIN then, wishes to join the throng in the familiar wish of,—A Happy New Year,—to every member of the Medical Society of Scotia, to every reader of the BULLETIN, to all of our advertisers and all who see these words. If serving you to the best of our ability, for the year 1931, gives you all satisfaction, it will afford us more happiness than has ever been our lot till this Happy 1931.

THE PRESIDENT'S MESSAGE.

With the promise of more in the near future the President of the Medical Society of Nova Scotia writes as follows:

The December, 1930, issue of the BULLETIN has just come to hand and I should like to express my appreciation for the efforts that you are putting forth for its continued improvement.

In scanning the pages of this latest edition I am convinced that you are not receiving the assistance and co-operation from the Medical Society that you should; but I trust that in the coming year many members of the Society will show their interest in our official organ by more frequent contributions.

If any physician has an unusual or interesting case to report let us hear about it; or, if in his reading he discovers something which particularly interests him, let us hear about that also; for we are not all likely to read the same available material. Could we not thus help in the improvement of the BULLETIN and in so doing improve ourselves also?

Your review of W. J. Robinson's book—*Practical Preventception*—is, I think, timely and most certainly has my cordial approval. I feel that the only conditions under which preventception should be considered, would be the existence of some gross pathological condition, and I have a sufficient confidence in the intelligence of the Medical Profession of this Province, to leave to the individual judgment of each, when and how, such devices should be used.

We, in Canada, at least, need have no fear over our population, for some years to come; nor will the system of natural selection, now obtaining, prove any serious menace to our Country's intellectual development. We must not interpret too literally the lurid warnings of the Eugenists about our folly in killing off the best breeds and multiplying from the worst. Shakespeare was the son of a butcher and a mother who could not write her name; Beethoven was the son of a consumptive mother and a father who was a confirmed drunkard; Schubert was the son of a peasant father and a mother in domestic service; Michel Faraday was born over a stable, his father an invalid blacksmith, his mother a common drudge. Let us therefore not forget that surprising consequences may come from very unlikely sources.

I note that a number of pages of the BULLETIN are devoted to reports, addresses, etc., from the Department of the Public Health. This would appear to me to be a move in the right direction, for what is more important than the public health. "The Public Health is the foundation upon which rests the happiness of the people and the welfare of the nation. The care of the Public Health is the first duty of the Statesman."—(Disraeli.)

To the members of the Medical Society of Nova Scotia I extend the Season's Greetings. May the New Year bring to one and all a

full measure of health, happiness and prosperity; and may the BULLETIN of 1931, under your guiding hand, attain a standard of literary and educational value equal to the best.

(Signed) DAN MURRAY.

PRESIDENT MACKENZIE RETIRES.

The announcement that Dr. A. Stanley Mackenzie is to retire from the presidency of Dalhousie University at the expiration of the present academic year has occasioned intense regret throughout Nova Scotia and, in fact, wherever there are Dalhousians. Under Dr. Mackenzie's administration, Dalhousie has progressed by leaps and bounds. The splendid group of buildings on the Studley campus, and the new buildings on the medical campus constitute a permanent monument to his untiring activity and devotion to the interests of the University. During the twenty years of his presidency the student body has more than doubled, while the monies available for University purposes have increased nearly sevenfold. By no means the least of his achievements is the reformation which has come about in the medical school, in which Dr. Mackenzie has shown the most whole-hearted interest. At the commencement of his regime, the outlook for the medical school was by no means encouraging, but under his wise and forceful administration it has been built up steadily and is now a source of real pride to the University. All that he has done for Dalhousie has been very well done by a good and faithful servant, and he will carry into his retirement the well earned gratitude and esteem of all who know of his splendid achievements.

Bulletin Alumni Association. The BULLETIN of the Medical Society of Nova Scotia has received Volume 4, No. 7 of the Bulletin published by the Alumni Association of the University of Western Ontario Medical School. It gives much personal information regarding graduates and present members of the University Medical classes. In Nova Scotia it has been found to be extremely difficult to obtain much information along this line, altho the BULLETIN is anxious to be of use and interest to recent graduates. Is there any good reason why Dalhousie Medical Graduates should not have an active Alumni?

For this purpose the BULLETIN would gladly devote sufficient pages for the usual publicity purposes of such an Association. Of course, it would mean a little voluntary co-operation by graduates and students, the cost being a nominal amount. This is the kind of co-operation the BULLETIN has consistently advocated. There are many auxiliary services closely related to the broad work of the Medical Society of Nova Scotia that might well have their required publicity in this official journal.

Tuberculosis

THE Government has recently been in consultation with the Medical profession of the Province on the problem of tuberculosis. The profession was represented by its regular committees; one appointed at the annual meeting in Pictou in 1929, and the other from the Provincial Health Officers' Association appointed, to cooperate with the former, at the Digby meeting in July last. Doctors will recall that this important action of the Medical Society of Nova Scotia came as a response to the request of the Government, through its responsible minister, to create such a body of medical men as would represent the whole profession and would be available for advice at any time on such things, pertaining to the public health of the Province, as their intimate acquaintance with conditions and their professional knowledge best fitted them to give.

Two meetings of the Committee were held following its formation, during which parleys took place to discover the best ways and means to make this newly created health agency as useful and effective as possible. The Committee was the answer to a long felt conviction, that no public health policy could be successful, which had not behind it the full sympathy and active co-operation of the men whose lives are devoted to the health of the people; who go about amongst them; who know by personal touch their homes and all the intrinsic and extrinsic conditions that enter so vitally in the health and happiness of the people. In a word, the Medical Profession, the most democratic organization civilization has yet evolved; wherein lies its just fulfilment, if the health and happiness of the individual citizen contains the real seeds of democracy. The Committee could do little more in those first meetings than develop a consciousness and suggest a reasonable *modus operandi*. Hon. John Mahoney's tragic passing hampered the progress of the Committee, for it was he who set action on the heels of the Government's wish to take the doctors into their full confidence. The Committee was strengthened at the Digby meeting in July last by the addition of six new members elected by the Health Officers' Association.

The final meeting of the combined representatives of doctors and health officers was held in the Legislative Council Chamber in October, with full attendance. The meeting was called by the Health Department and was presided over by Dr. G. H. Murphy. A lengthy discussion on the tuberculosis problem took place, and wound up with an unanimous resolution that more beds be made available both at Kentville and in certain of the smaller general hospitals of the Province. The discussion showed a strong desire to come to closer grips with the conditions, in the homes and elsewhere, which tend to generate and spread the disease. Sanatorium care could never be more than one

of a number of agencies in fighting the disease. Better central control of all health activities was urged. The BULLETIN does not intend this to be a full account of the Committee's deliberations; rather a few of its more important decisions. The meeting was in every way a great success. The Chairman was asked to place the committee's deliberations before the Government. This was done.

Desirous of establishing a definite policy under which the government could work to the best advantage with its available resources, Premier Harrington called the Committee together a few weeks ago. Dr. Miller of the Kentville Sanatorium, Dr. Bayne, Cape Breton, and others, in one way or other specially interested in tuberculosis work were asked to be present. The attendance was one hundred per cent. Discussions occupying a whole forenoon before a full attendance of the Government took place. Before adjournment at noon, the Premier stated the government would spend \$300,000 on Capital Account for tuberculosis, and would set aside \$80,000 for maintenance to increase the per capita amounts to such of the general hospitals treating tuberculosis patients. He called upon the Committee to work out its most effective plan for the expenditure of this money and cautioned its members that all recommendations should be unanimous.

Never did a group of medical men work with more honest zest than during the long afternoon meeting. There were opposing views and every known plan or system of fighting tuberculosis was canvassed and appraised. Finally, it was agreed to recommend that \$200,000 be spent in expansion at Kentville, and that the remaining \$100,000 be spent in Cape Breton to provide beds for the tubercular patients and to increase the efficiency of the nursing service and home treatment. Details, of which there are bound to be many, should be worked out in conjunction with the Provincial Department of Health. The proposed accommodation for the tubercular patients in Cape Breton is to be obtained by arrangements with a number of the existing general hospitals on the Island. They will take the form of wards or annexes, and the whole matter must be worked out with the particular hospital Board concerned. Quite clearly there is much to be done before the system is in operation. But it looks as if we were at last working under a real system and a definite policy. This is not the time or place to argue the virtues of one system or another. It is by a combination of a lot of them we shall probably get our best results. What we wish to give the doctors of the province just now is that their representative Committee has been on the job and is doing good work, and that it has the ear of the government at all times.

The names of the Committee members attending the meeting with the government are as follows: Dr. J. L. McIsaac, M.L.A., Antigonish; Dr. J. J. Roy, Sydney; Dr. J. K. McLeod, Sydney; Dr. G. W. T. Farish, Yarmouth; Dr. A. E. Blackett, New Glasgow; Dr. R. L. Blackader, Port Maitland; Dr. F. R. Little, Dr. H. K. MacDonald, Dr. K. A.

MacKenzie, Dr. G. H. Murphy, Halifax; Dr. C. E. A. deWitt, Wolfville; Dr. T. Ives Byrne, Provincial Health Officer; Dr. P. S. Campbell and Dr. Bayne, Department of Provincial Health; Dr. Miller, Kentville Sanatorium. Other doctors present included Dr. A. McD. Morton, M.L.A.; Dr. W. D. Reh fuss, Bridgewater; and Dr. W. D. Forrest, Halifax.

G. H. M.

A GRACEFUL TRIBUTE.

UPON looking over an old weekly newspaper the editorial eye fell upon a reference to Dr. M. E. Armstrong of Bridgetown, N. S. and his removal to Amherst to reside. As this was news we had missed, a note was sent to Dr. L. R. Morse for particulars, and this is his very prompt reply:—

“Dr. M. E. Armstrong of Bridgetown was the recipient, a few weeks ago, of a fine testimonial by the citizens of Bridgetown and vicinity. He was presented with a purse of \$700.00 and a well worded address of appreciation of him and his work in the community. His health has been poor for over a year and he has now become an invalid. It was decided by his family that it would be best for him to live with his son, Rev. Maurice Armstrong, of Amherst, during the winter. So quietly had the preparations been made that many were unaware that he was going away the next day. The public get accustomed so soon to anything that, although they knew he had not been in practice for some time, nearly all were surprised to hear that Dr. A. was leaving the town, perhaps not to return. But the response was spontaneous and generous. The amount would have been larger if there had been time to go out into the outlying districts where many a good deed is standing to his credit.

“Dr. Armstrong’s life has been a busy one. He has not only looked after the sick of the community but has been a good citizen, foremost in everything that was good for the town. He was prominent in his church activities, President of the School Board for 27 years, etc., and in everything was always on the “right side of the fence”. His generous service to those for whom he worked for so many years, should be an example to every young man, especially to the young medical practitioners.”

Just a few days before this presentation to Dr. Armstrong, at a meeting of the Executive of the Medical Society of Nova Scotia, he was elected to Honorary Membership in the Society. This was largely a move to recognize his honorable service as a member of the Society and the medical profession since 1892. It was also an expression of regret that his health prevented him from continuing longer in practice. In this every member of the profession in Nova Scotia will be in accord.

Crippled Children

NO one will object to the following definition of a crippled child as "One who by reason of congenital or acquired defects of development, disease or injury is deficient in the use of his body or limbs." Further, the organization of a society in Nova Scotia for the care and treatment of crippled children is a movement to be heartily endorsed by the medical profession. The Society recently launched in Nova Scotia deserves more than a passing notice and suggests a general consideration of the whole problem might be wise.

It is pleasing to note the change in opinion regarding these unfortunates. Most of us can recall the time when the cripples were carefully shielded from even the friendly neighbors until mind became as inefficient as the arms and legs. Then the medical men took little interest because of the unwillingness of parents and their own lack of time and of knowledge to give the necessary treatment and care. Then, inspired by the marvellous work of some distinguished surgeons and its publicity, both the profession and the parents and the kindly public became convinced that here was a field for positive service to individuals and the community. Now that the movement is at full tide intelligent direction is surely indicated.

The first question one may raise is,—upon whom should the responsibility for this work rest? As its object is to change these hopeless and helpless children to possible and potential citizens, able to care for themselves and in time provide for others, surely that is the duty of the state. Education has been assumed as a primary duty of the state in all countries. Then it has assumed the duty of looking after the health of those being trained for this citizenship, concerning itself with remedying physical defects that may and do handicap the child. This is but another class requiring attention. Incidentally the state needs the ardent support of voluntary organizations in nearly all its efforts along these lines, a kind of compelling inspiration.

But the undertaking is a large one involving much skill, time and expense and is of concern to the entire country as well as one province, city, town or community. A government does not make money but spends yours and mine, whether from customs, beer profits or direct taxation; we, the people, do and should pay the bills. Again it is a matter of health and its operation should be standardized. The more we look at it the more evident it becomes that there should be one co-ordinating and directing head.

The broadness of the problem is illustrated by the treatment of the children who are crippled by infantile paralysis, where efforts should concurrently be made to ascertain the cause of this disease in order to prevent the increase in these unfortunates. In every large

center where research laboratories are available there should be continuous work done along this line. Research knowledge is common knowledge to all research workers and the Banting of Infantile Paralysis may come from Halifax as likely as from Toronto, New York or Chicago.

But a department of health cannot alone solve this problem. What shall be done towards the education of these children for future citizenship? By the time the physical handicap is remedied, which may take years, without training these potential citizens are only fit to become 'hewers of wood and drawers of water', which is not good enough for citizens of Nova Scotia in this year of our Lord. The general establishment of vocational schools will help, but they must be employed while treatment is being carried out. All of which goes to emphasize the point that the direction and supervision should be the duty of the state. The state assumes responsibility for the education of the children, whether of poor or rich parentage, also of children more or less mentally deficient. Is not the crippled child in the same category as to needs?

MEDICAL LIBRARY.

Recent additions to the Medical Library at Dalhousie include the following which are of interest to practitioners:

Price.....	Medicine.
Clough.....	Diseases of the Blood.
Gwathmey.....	Anesthesia.
Lockart-Mummery.....	After-treatment of Operations.
Campbell.....	Orthopaedic Surgery.
Caird & Cathcart.....	Handbook of Surgery.
Ogilvie.....	Recent Advances in Surgery.
Garrod et al.....	Diseases of Children.
Pearson & Wyllie.....	Recent Advances in Pediatrics.
May.....	Diseases of the Eye.

A number of new volumes have also been added dealing with the several scientific branches of medical study.

The Modification of Powdered Milks Governed by the Same Rules As Cow's Milk.

When physicians are confronted with undependable fresh milk supplies in feeding infants, it is well to consider the use of reliable powdered whole milks such as Mead's or the well-known Klim brand. Such milk is safe, of standard composition, and is easily reliquefied.

Under these conditions, Dextri-Maltose is the physician's carbohydrate of choice just as it is when fresh cow's milk is employed.

The best method to follow is first to restore the powdered milk in the proportion of one ounce of milk to seven ounces of water, and then to proceed building up the formula as usual.

Department of the Public Health

PROVINCE OF NOVA SCOTIA

MINISTER OF HEALTH - - - HON. G. H. MURPHY, M. L. A., Halifax.

PROVINCIAL HEALTH OFFICER

DR. T. IVES BYRNE - - - - - Halifax.

SPECIAL DEPARTMENTS

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

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1st Vice-Pres.	- - -	DR. T. R. JOHNSON	- -	Great Village.
2nd Vice-Pres.	- - -	DR. M. J. WARDROPE	- -	Springhill.

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DR. A. C. GUTHRO	- - - -	Little Bras d'Or.
DR. A. E. BLACKETT	- - - -	New Glasgow.
DR. F. E. RICE	- - - -	Sandy Cove.

INFORMATION

The Provincial Public Health Laboratory provides free diagnostic services for the entire Province. It is, however, to be regretted that misunderstanding exists among physicians as to the scope of this work. Roughly speaking, free examinations are made of blood, cerebrospinal fluid, cultures, smears for gonococci, sputum, urine, faeces, pleural fluids, pus, water, milk, brain tissues for rabies, as well as throat, ear and prostatic swabs. Physicians desiring this service should address their communications to, Dr. D. J. MacKenzie, Public Health Laboratory, Pathological Institute, Morris Street, Halifax.

Physicians desiring serums and vaccines should address their communications to the Provincial Health Officer, Halifax, N. S.

Pasteurization

STRANGE to say the question of pasteurization of milk has been a matter of considerable discussion in some quarters, and it is only natural that there is in the minds of some people a question as to its value. It is unfortunate that clear questions relating to health cannot be considered without stirring up some opposition for quite insufficient reasons. It is most undesirable that a journal having the standing of the BULLETIN, the official journal of the Medical Society of Nova Scotia should continue the policy of silence on a matter of real and vital concern to the public. The October number of the Canadian Medical Association Journal publishes a paper presented at the Winnipeg Convention by Dr. MacGregor, Medical Officer of Health of Glasgow, Scotland, on "The Place of Pasteurization in a scheme of Milk Distribution". Upon this paper and the brief notes of the discussion we will base a few remarks.

The attitude towards pasteurization is variable, but it is generally admitted to be an imperative necessity and is demanded by many city ordinances. In some quarters it is regarded as a temporary measure to be discarded when production methods are perfected. Some nutritionists appear to think it will be well for this perfect production to come speedily. Then Dr. MacGregor gives his conclusions based upon his own experience.

(1) Milk supplied in bulk for consumption in urban areas should be pasteurized because it largely eliminates the menace of milk-borne infections. Referring to Glasgow, he says:—"The pasteurizing of milk is now applied to between 80 and 90 per cent of the city's milk, while about 70 per cent of the supply is delivered in bottles. The history of milk outbreaks of disease, where the source of infection was at the farm, is entirely concerned with this diminishing portion of unpasteurized milk in the city's general supply."

(2) Milk-borne infections in Glasgow for the last twenty years were traceable to farms from which the milk came direct, and untreated, from the producer to the consumer. Then these epidemics are mentioned in particular since 1912. We quote:—"In all these instances the milk was delivered in its natural state and was contaminated through the medium of an infected person on a farm supplying a local dairy in a suburban area. No similar incident has occurred on the main pasteurized supplies of the city. Infections occur with sufficient frequency on the comparatively small proportion of raw milk to make one wonder what would happen if the protection of pasteurization were removed."

(3) Public health control can hardly hope to eliminate any of these risks, even the 'chance carrier' is a real risk in populous areas. The standard required could not be maintained among the numerous farms supplying a city of any size.

(4) What is the value of pasteurization in the prevention of tuberculosis, and to what extent will the bovine tubercle bacilli survive the process, are still difficult questions. Dr. MacGreggor concludes from a series of experiments,—“Pasteurization is effective in destroying tubercle bacilli in milk in proportion to the efficiency with which it is conducted. There are certain suggestive features about the remarkable decline in the incidence of non-pulmonary tuberculosis which lend support to the view that pasteurization may have been far from a negligible factor.”

(5) What is the relative value of raw and heated milk as an article of food, especially for children? He says,—“Such evidence as exists is conflicting, but should it be clearly demonstrated that pasteurization deprives milk of an essential constituent, there will arise the question of a radical change of policy in milk distribution in the interests of the young.” In this connection Dr. Dow, in opening the discussion, pointed out that clean milk was not necessarily safe milk, altho it is desirable, but at the same time great care must be shown in supervising pasteurizing plants. Further, “Apart from its effect on Vitamin ‘C’ pasteurization does not impair the nutritive value, and fruit and vegetable juices can be given the child to make good this deficiency.”

Then Dr. Fitzgerald of Toronto mentioned that at the Sick Children’s Hospital in Toronto the only cases of non-pulmonary tuberculosis were in children from outside the city where pasteurized milk was not available.

Dr. MacGreggor answers his own question thus,—“The place of pasteurization as a necessary element in scientific milk control must be consistently asserted.”

S. L. W.

THE DICK TEST IN SCARLET FEVER.

Answering an inquiry regarding this test the A. M. A. Journal points out its purposes and what it may accomplish.

“The Dick test is a test for susceptibility to scarlet fever. It shows which persons are susceptible to the disease so that they might contract it on exposure and which ones are immune and are not in danger of developing scarlet fever. The test does not immunize.

“Those who are shown to be susceptible by the test may be immunized by the injection of graduated doses of toxin. Antitoxin should not be used for this purpose, except in an emergency, as it affords only transient protection.

“To immunize susceptible persons, five doses of toxin should be given, beginning with an injection of 500 skin test doses of toxin and increasing to 80,000 or more skin test doses in the last injection. Two weeks after the last dose another Dick test should be made, and if it is still positive the fifth dose should be repeated.

“The Dick test for susceptibility to scarlet fever combined with immunization of susceptible persons by the graduated doses of toxin has been successfully employed in a large number of institutions.”

Health Poster. A German Society for combatting quackery has published a large poster in colors (red, green, yellow and black) warning the public against the use of quack nostrums and healers. A free translation of the poster reads:—"The Human Body is the Greatest Work of Art in the World; Do Not Entrust this Work of Art to a Quack. During Illness Consult only a Reputable Physician."

"To Teach Hygiene,
To Combat Superstition,
To Expose Frauds and Swindles,
To Eradicate Quackery:
Help Us to Attain These Aims."

"It's Service that measures success" is the concluding line of a Christmas and New Year's Greeting from the Bureau of Vital Statistics the main body of which reads:—

"The Deputy Registrar General and Staff extend to you best wishes for a Merry Xmas and a Happy and Prosperous New Year. Efficiency being our Motto, we are looking forward to greater and more important developments during the ensuing year. With a competent staff and a thoroughly responsible army of Division Registrars and Marriage License Issuers throughout the Province the results of our efforts should be satisfaction to the public which we are serving.

"In extending good wishes, may we couple with that a request that you check up your returns for the year. There may be a Birth or Death you have overlooked. It will be a decided satisfaction to us as well as to you to know that our records are complete to date."

MORE ABOUT MILK.

The occurrence of undulant fever in human beings as the result of the ingestion of raw milk containing the organism of contagious abortion has been conclusively demonstrated. While some individuals appear to be naturally immune to the disease and others acquire a relatively mild infection, the majority of patients with undulant fever experience a severe illness, the average duration being three to four months.

It has been repeatedly demonstrated that complete, carefully supervised pasteurization will destroy organisms of the *Brucella* group. The national associations representing the medical milk commissions and the producers of certified milk have already prescribed action for the elimination of infected cattle from herds supplying certified milk. Many milk producers are now pasteurizing certified milk. There is no evidence that the testing of cattle and the segregation of infected animals has worked any great hardship on dairymen. Cows which are free from *Brucella abortus* infection have consistently produced

an average of one quart of milk a day more than cows in the infected group. There is no evidence that the sale of milk and dairy products has decreased in the many communities in which pasteurization has been practised for many years. (A. M. A. Journal.)

YOU AND YOUR BABY.

This is the general title of a series of letters published by the Canadian Council on Child and Family Welfare which have been most artistically hand bound in a 9 x 11 inch cover of classic design. Mention is made of this publication because a limited number of copies have been received by the Department of Health and it is of special interest and value to every general practitioner and to all pediatricians. While these letters are designed to answer all the questions of, and supply all the needed information sought by parents, especially mothers, we must reiterate their value to the doctor to systematize the information he gives to his patients and his advice along health lines. Two long letters give advice as to the care of the baby for the first month and then there is one letter appropriate for each month of the first year. This volume should be in the possession of every public health nurse and on the office table of every doctor in Nova Scotia. As long as these volumes are available, Miss MacKenzie of the Health Department, will be glad to send one to any nurse or doctor making application by phone or by mail.

Communicable Diseases Reported by Medical Health Officers. November 12th to December 10th, 1930.

Disease	Nov. 12	Nov. 19	Nov. 26	Dec. 3	Dec. 10	Totals
Cerebro-Spinal Meningitis.....		2	....	....	....	2
Chickenpox.....		5	....	6	5	16
Diphtheria.....	13	13	19	15	12	72
Infantile Paralysis.....	1	1	....	....	....	2
Influenza.....		8	1	2	9	20
Lethargic Encephalitis.....		....	....	....	....	....
Measles.....		1	....	....	2	3
Mumps.....		....	....	3	3	6
Paratyphoid.....		1	....	....	....	1
Pneumonia.....		1	2	1	1	5
Scarlet Fever.....	29	21	11	18	16	95
Smallpox.....		....	....	....	....	....
Typhoid Fever.....		5	1	1	....	7
Tuberculosis-Pulmonary.....	1	1	2	1	3	8
Tuberculosis—Other Forms.....		....	....	....	....	....
V. D. G.....	2	....	6	4	7	19
V. D. S.....	3	....	4	1	2	10
Whooping Cough.....	8	10	....	2	2	22
Totals.....	57	69	46	54	62	288

Halifax, N. S., December 19th, 1930.

Health Publicity

UNDER this general heading we are directing attention to one phase of Health Publicity that is certainly unique in this modern manner of advertising. We know of no better way of illustrating this than by reproducing it in the pages of the BULLETIN. So opposite you will note a full page advertisement of Parke, Davis & Co., as it appeared recently in *McLean's Magazine* and several others of the same high standing.

It is reproduced in the BULLETIN for several reasons. In the first place it is the work of a very good friend of the BULLETIN of the Medical Society of Nova Scotia, for Parke, Davis & Co. have advertised in the BULLETIN ever since the first advertisement appeared in our pages in 1925. (Do you realize that the BULLETIN is starting its tenth year of publication?) During that time this firm (as have others) has contributed more to the upkeep of the official journal of the Medical Society in one year than any member of the Society has contributed in the entire six years. Then from their kind words of appreciation we know we have rendered them good service.

This new form of publicity is worthy of consideration on account of its real objective, which is,—“To Bring about a Better Understanding between the Laity and the Medical Profession.” A large pharmaceutical house realizes the Profession is profoundly concerned with the good health of the community, therefore it endeavors to have the public realize the same thing. The very palpable trend of Medicine to-day is towards the prevention of Disease and the credit for this does not fall alone upon the health officer and the Doctor, as we are apt to think, but equally to the Pharmacist. The trouble is we do not always stop to think of this and, perhaps, we have even criticised the BULLETIN for making too much fuss entirely over the co-operation of the profession with the public in the promotion of Health. We repeat that this co-operation or partnership of the public and the profession is necessary if we are to continue to lead public thought and action towards this desirable end.

Moreover the BULLETIN is in very good company in calling attention to this particular form of advertising. The cut is such a good one of Sir William Osler and the touching scene so characteristic of the man, that it is not to be wondered at to find University Libraries, especially those with which Doctor Osler was associated, placing it on their shelves and in their catalogues. This all works into the policy the BULLETIN has editorially consistently followed and which emphasizes the co-partnership of doctors, nurses, hospitals and various welfare organizations in the relief of suffering, the prevention of disease and the promotion of health.



To the world—a great physician To the child—a beloved goblin

"There would be a little tap low on the door, which would be pushed open and a crouching figure playing goblin would come in, and in a high-pitched voice would ask if the fairy god-mother was at home and could he have a bit of tea. Instantly the sickroom was turned into a fairyland, and in fairy language he would talk about the flowers, the birds, and the dolls who sat at the foot of the bed . . ."

This vivid word-picture of Sir William Osler's visit to a sick child, so delicately drawn by the little patient's mother, typifies that human sympathy with which the understanding physician tempers his professional relations.

Who can say how many men and women, boys and girls, have been heartened to meet the challenge of illness, to fight the battle for health, by the cheering words and optimistic attitude of the physician?

Yet behind his smiling eyes a keenly serious mind is at work—observing, analyzing. The stethoscope which signals the condition of heart and lungs, the tiny light with which he searches ears and nose and throat, are but the material

tools that help him to determine the proper course of action.

From the day in 1874, when, at the age of twenty-five, Dr. Osler became a member of the medical faculty at McGill University, his influence upon the training of physicians spread throughout the world. His personal leadership and brilliant teaching at the University of Pennsylvania, at Johns Hopkins and at Oxford went far to imbue the profession with a new scientific spirit.

During the span of Osler's life, not only did physicians progress both in skill and in knowledge, but the discovery of new medicines enabled them to forestall suffering and relieve pain as never before in all history.

This epochal period saw the birth and early development of Parke, Davis & Company—an institution whose scientists have made many notable discoveries in the field of medical research and are constantly working toward the even greater triumphs which the future seems to hold.

PARKE, DAVIS & CO.

One of a series of messages in laity magazines, telling how the worker in medical science, the physician, and the maker of medicines, are "Building the Fortresses of Health."

Hospital Service

HOSPITAL TRAINING SCHOOLS.

MANY of the Hospitals of Nova Scotia held last fall their usual Graduation Exercises, most of them on a scale of pomp and effective setting and style, that made them events of beauty and a joy for the memory of those participating to recall in coming years. Nor would we advise any lessening of the many features that have come to be associated with this annual event in most of our hospitals. To those taking part it is their professional *debut*, and custom has long since decided that such an event cannot be too spectacular. To most of these nurses it means more than a wedding, for it is a public affair and not a private one. For appropriate beauty of sentiment and dedication to a life of service no day can be more impressed upon the heart and conscience of a young woman than this day of days. Each hospital seems to make an effort to have this function more beautiful and inspiring each successive year.

But we desire to make a reference particularly to the recent graduation exercises at the General Hospital in Glace Bay, where five local young ladies received their diplomas last November. The BULLETIN mentioned some time ago the passing of another young lady who had finished her training and expected to be one to share in the exercises of this occasion. But it was not so much as a matter of news or of extending congratulations to these nurses and, especially, to the hospital for its excellent work, all of which is quite in order, but to briefly refer to some features of this and similar functions for the same purpose, that furnish food for thought.

Have we set up for ourselves any definite standard as to what shall constitute a good and sufficient training for entrance to the Nursing Profession? Here we must take exception to the statement we have heard to the effect, that it would facilitate matters, if we spoke of the nursing career as a Vocation and not a Profession. The training involved, the knowledge required, the principles of mind and character that must be implanted in the student and there developed, are such that we should regard this calling of service to others, as indeed a profession and a most noble one withal.

Whether or not there is this standard recognized, are the small hospitals in Nova Scotia able to reach this standard? Keep in mind the distinction between vocation and profession and the answer is obvious. Just so long as we speak of the Nursing Profession we must admit that much of their training in Nova Scotia is insufficient and must be improved.

Perhaps the most appropriate feature of the occasion mentioned was the appearance there of the Premier of the Province and his

address to the nurses and the public. Both as Premier and Minister of Public Works and Mines, he is greatly concerned with all the problems connected with the administration of hospitals, having control of the three largest hospitals in the Province. Especially fitting was it for Hon. G. S. Harrington to attend this function as he was Mayor of Glace Bay in 1914 when the General Hospital was opened. As Mayor he was on the Board of both local hospitals for his term of office. From his knowledge of hospital matters it may be safe to draw some conclusions from his address on that occasion, as reported by the local papers.

There does not appear to be much chance to lower the cost of maintenance at any of the Government hospitals, nor is it to be expected. Then it costs a quarter of a million dollars to run these hospitals, irrespective of what patients are paying, and to this is added \$70,000, in per diem hospital grants. It is evident that no government could increase grants in this direction at the present time. While the Premier intimated that when the finances of the province improved there would likely be a general increase in hospital grants, one is inclined to think that in the very near future there must be very greatly increased appropriations for health purposes, as distinct from hospital purposes, hence the prospect for an increased per diem grant is not very bright.

Then we are reminded that the province is now fairly well supplied with hospitals, and more attention should be paid to improving the standard than increasing the capacity of these institutions. This is a sentiment that must be universally approved. As a matter of fact, we are greatly over hospitalized in Nova Scotia and very soon certain centrally located, well equipped hospitals will become larger, standardized, and the consulting center for smaller ones. It is only in this way that we can obtain what the Premier said was required in the case of the training of nurses,—that the standard of their education should be raised. By "standardization" we do not mean that set by any duly accredited body, such as the American College of Surgeons or the Canadian Medical Association, but one that is suited to the requirements of the local situation.

Can a hospital of anything under 100 beds give such a training that could be regarded as sufficient? Should any nurse be graduated without special training in obstetrics, in tuberculosis, in mental diseases, in social welfare, in public health, and in school nursing? Should there not be complete training in the essentials and a solid groundwork of all phases of modern nursing services? These are questions that we should consider. No one can say a word against our hospitals, but are we going the best way about to raise their efficiency and service? Perhaps we have too many hospitals in competition with each other rather than in co-operation? Perhaps we are working the philanthropic public too hard to keep up many small hospitals? If a man can afford to pay his hospital bill he should be made

to do so; if he cannot pay, the community, that is the Municipality, should do it. Hospitals should pay their running expenses; there will be plenty of extras and luxuries, that are nowadays regarded as necessities, to keep hospital boards and auxiliaries just as busy as ever. We might just as well take up this question of how to support our hospitals, by making every man pay his share of the cost in his yearly tax bill, to-day, as to put it off by asking for increased grants. If we do not need the hospitals why have them? Why should any tax payer be exempted in paying for a needed service?

What does the Hospital Association say in this matter?

S. L. W.

Hubby found some holes in his stockings.

"You haven't mended these?" he said to his wife.

"Did you buy that coat you promised me?" she asked.

"No—no."

"Well, if you don't give a wrap, I don't give a darn."

**In cardiac and respiratory crises . . .
when danger is great and the need urgent**

Coramine "Ciba"

(Pyridine—B—carbonic acid diethylamide)

stimulates the medullary centers and the heart muscle; causing an increase in respiration, blood-pressure, and the strength of cardiac contractions.

ISSUED:

AMPOULES: of 1.1 c.c.
boxes of 5, 20 and 100.

LIQUID

bottles of 15 c.c. and 100 c.c.

DOSAGE:

Subcutaneously, intramuscularly or intravenously 1 to 2 Ampoules.

Internally 1 to 2 c.c. with a little water.

CIBA COMPANY LIMITED - Montreal
146 St. Peter Street

Branch Societies

Eastern Counties Medical Society.

MINUTES of Ninth Annual Meeting of Eastern Counties Medical Society held at St. Martha's Hospital, Antigonish, on Tuesday, October 14, 1930.

The first session was called by the president, Dr. R. F. MacDonald at 2 p. m.

Those present were—

Hon. G. H. Murphy, M.D.	Halifax.
Dr. Ralph E. Smith	Halifax.
Dr. H. B. Atlee	Halifax.
Dr. R. F. McDonald	Antigonish.
Dr. J. J. Carroll	Antigonish.
Dr. W. F. McKinnon	Antigonish.
Dr. J. L. McIsaac	Antigonish.
Dr. J. J. Cameron	Antigonish.
Dr. M. C. McLeod	Whycocomagh.
Dr. J. S. Breaun	Mulgrave.
Dr. E. F. Moore	Canso.
Dr. D. J. McMaster	Antigonish.
Dr. H. C. S. Elliot	Guysboro.
Dr. J. J. McRitchie	Goldboro.
Dr. P. S. Campbell	Port Hood.
Dr. A. J. McNeil	Mabou.

Minutes of the last Meeting were read and adopted.

The following communications were read:

A letter from the late Dr. Murdoch Chisholm thanking the Society for its message of congratulation on the occasion of his Jubilee Celebration.

A letter from Dr. S. L. Walker, General Secretary of the Medical Society of Nova Scotia, stating that the individual members of the executive had been named special contributors to the BULLETIN.

A letter from Drs. Janes and McFarlane of Toronto, thanking the President and members for the kindly manner in which they were received at the last Annual Meeting.

A letter from Dr. Helen McMurchy, Department of Pensions and National Health, to thank the Secretary for information forwarded Re Maternal Welfare.

Hon. G. H. Murphy, M.D., was asked by the Chairman to present his paper "Surgical Common Sense". Dr. Murphy said "It was formerly the pre-operative treatment to purge the patient dry and perhaps we still do too much purging. It is important to conserve the patient's fluids. Difficult to supply those after operation as the patient is not in a position to take them by mouth, we are all

agreed that old system is pernicious and unscientific. If you have emptied the colon by an enema you have done enough. Too vigorous interference with laxatives favoured dehydration and probably induces such conditions as acute dilatation of the stomach. A glass of water may be given an hour or two before operation."

Post operative side—

Treatment here resolves itself into common sense. If a wound of hand or foot, splinting is required for rest; so with abdominal work, splint with morphia. This is sound and logical. Distension may occur especially in the colon, we have erred by whipping the bowel into action by enema and more heroic methods.

If there is mechanical obstruction it must be relieved. There is real danger in giving large enema where there is distension; this is particularly true in the aged. If you want to give rectal salines give small ones 10 ounces and slowly. Do not get colon irritable by large quantities. A heavy old style abdominal binder is of definite use but it must be put on properly tight, strapped to the pelvis and ribs. The only objection to this is that it tends to press up the diaphragm and induce Pneumonia. This objection does not appear to be a valid one. One of the most important considerations is to judge how much should be attempted in an operation. If too much is done and the patient dies, the object of "Saving Life is Defeated.

"Infection of Face", in this area we are on dangerous ground. Above the chin we are in a vascular area. Vessels linked up and closely connected with Meninges.

It may be dangerous to open up a pimple or boil too soon. Do not break down nature's barriers. If you cut through these barriers into normal tissue you are doing something dangerous and unscientific. If you have an infection say in the nose, leave it alone until pus forms, then open in the centre on tip only. Many cases of meningitis may be due to interference too soon, meddling surgery.

Dr. J. J. Cameron discussed Dr. Murphy's paper.

Dr. Murphy's talk was scientific essentially practical, at all times to the point and in many respects the best he has given this Society.

Dr. H. B. Atlee of Halifax followed with a paper on "The Delayed Case of Labor".

He said in part: "The Amount of Outcry is no indication of the strength of value of the pains. Put your hand on the abdomen and see if the uterus contracts well and long. If pains are not good give morphia $\frac{1}{4}$, and hyocine $\frac{1}{50}$ and wait for some hours when patient comes back with better pains and renewed optimism. In posterior positions there is delay due to moulding of head, etc. If the abdomen is pendulous a binder is indicated; bladder and rectum should receive attention. The head may be held up against the brim or the pelvis floor. Roughly one can judge with the fingers while the head is being pressed down, if there is disproportions between the head and pelvis

and roughly the extent of disproportion. If not too great again give morphia and hyocine which may be repeated a number of times. If there is very marked disproportion one has to consider Caesarian or some other interference.

With slight disproportion a posterior position and cervix dilated one may attempt changing the position. This is much easier than using forceps. After changing to an anterior position, it is easy to extract with forceps. Pituitrin may be given in small doses $\frac{1}{4}$ C.C. repeated if necessary.

An episiotomy may be done. Forceps always tear a Primipara. It would be well to take all abnormal positions to hospital, as well as difficult cases generally."

Dr. J. S. Brean, Dr. E. F. Moore, Dr. W. F. McKinnon, Dr. J. J. Cameron, Dr. M. G. McLeod and Dr. R. F. McDonald took part in the discussion.

Dr. Atlee made an excellent impression on the members present. The subject was handled in a manner that appealed particularly to the general practitioners.

Dr. Ralph E. Smith was next called on to present his subject, "Treatment With Vaccines".

Dr. Smith first clearly explained the difference between vaccines, sera and toxins, with explanatory remarks on the preparations used in Diphtheria and Scarlet Fever, Pneumonia, Infantile Paralysis, etc., with technique and results.

With respect of Vaccines, he said, Autogenous ones give the best hope. They are not a "Cure All" yet 75% of cases may be benefitted by their use. Their value is limited by the response of the body tissues as well as by other factors. Dosage is up to the man; the more acute the disease the smaller the dosage.

Dr. Smith gave his own experience with 85 cases treated during the past four years.

Four cases of Acne all improved, sixteen cases of Boils, eleven with good results. Twenty-four cases of Bronchitis, ten definitely improved, four not benefitted, others not traced. Six cases of Bronchitis with Asthma, two benefitted—not sufficient time elapsed to report on the others. Three cases of Styes all did well. Twenty cases of Nasal Catarrh, nine showed improvement, one case Cystitis did well, one case chronic Prostatitis did very well. In all 78% were benefitted.

In the case of boils the immunity—may last for life. Nasal catarrh may have to be repeated yearly. The proper selection of cases is important.

The following took part in the discussion: Dr. R. F. McDonald, Dr. G. H. Murphy, Dr. J. J. Cameron, Dr. H. B. Atlee, Dr. W. F. McKinnon, Dr. P. S. Campbell.

Dr. Smith, always refreshing and always at home in his subject, was well received by the Meeting. His contribution was considered of especial value.

The President, Dr. J. J. Cameron, and other members expressed their appreciation to the three visiting doctors and hoped they would all return to subsequent meetings of the organization.

The President named the Nominating Committee as follows:—
Dr. W. F. McKinnon, Dr. A. J. McNeil and Dr. E. F. Moore.

The report of the Secretary Treasurer for the past year was adopted. This showed a cash balance on hand of \$31.63. At six o'clock the Meeting adjourned to one of the dining-rooms of St. Martha's Hospital for the Annual dinner. Menu and toasts were all that could be desired. President Dr. R. F. McDonald was host and toast master.

Evening Session.

The first item for the evening session was the Presidential Address, during which Dr. McDonald dealt in a very practical way from the standpoint of the general practitioner, with foreign bodies in the eye and injuries to eye. He said in part:—"An eye with a foreign body in it is painful, congested and afraid of light. One not readily seen may be under upper lid. To remove, cocaine the eye and use a spud. If difficulty is experienced lift up and snip off. After treatment wash with Boracic and probably a drop of Atropine; also bandage the eye.

Burns and scalds are often serious. If an (alkaline) caustic use a mild acid and bandage the eye; atropine may be indicated.

Injuries from blunt instruments may harm the Iris or they may dislocate the lens with a rather poor prognosis. A traumatic cataract may result. Blunt instruments may rupture the eye ball. In seven cases removal of the eye is indicated. Sympathetic ophthalmia is more prone to occur in children usually from fourth to eighth week after injury.

The cause of Sympathetic Ophthalmia is not clear. Prodromal symptoms are lacrymation, temporary loss of accommodation, etc. After it has started, treatment is not very satisfactory.

Dr. McDonald's talk was a most valuable one, especially to the general practitioner.

The Nominating Committee reported as follows:—

Hon. Presidents: Dr. G. E. Buckley, Guysboro; Dr. J. J. Cameron, Antigonish.

President: Dr. H. C. S. Elliot, Guysboro.

First Vice President: Dr. M. C. MacLeod, Whycocomagh.

Second Vice President: Dr. P. A. McGarry, Canso.

Secretary-Treasurer: Dr. P. S. Campbell, Port Hood.

Executive: Dr. E. F. Moore, Canso; Dr. D. J. McMaster, Antigonish; Dr. J. S. Brean, Mulgrave; Dr. W. F. McKinnon, Antigonish; Dr. M. E. McGarry, Margaree; Dr. A. J. McNeil, Mabou.

Executive representatives on Nova Scotia Medical Society Executive.

Dr. R. F. McDonald, Antigonish; Dr. A. R. Stone, Sherbrooke.

The report was adopted unanimously.

There being no further business the Meeting was regularly adjourned.

P. S. CAMPBELL, Secretary.

Bulletin Library

The Eye, Ear, Nose and Throat.

Practical Medical Series, 1929.

Editors: Charles P. Small, M. D., Albert H. Andrews, M.D.,
George Shambaugh, M.D.

The Year Book Publishers, 304 S. Dearborn St., Chicago, Ill.

This Practical Medical Series, with its annual compilation and criticism of the best in literature dealing with diseases of the eye, ear, nose and throat, is top well known to need introduction to our readers.

The editors are outstanding in their specialties. The work in these departments grows better year by year.

The reader will find a very discriminating selection from the Journals and Reports of the last year, with wise condensation and, in many instances, competent discussion. This book is an epitome of the literature of its subjects and makes an invaluable selection not otherwise available even to one having access to a large medical library.

In reading the book one is impressed by the conservatism of the editors. Nothing is recommended that is untried and yet much that is new is brought forward for further investigation. The book should be of great value to the general practitioner. In these days when either necessity compels, or desire tempts, many general practitioners to institute treatment or perform operations that, strictly speaking, lie in the specialists field, the studied advice of trained authors and editors should be invaluable.

Such readers may learn why ocular strabismus may be cured if properly treated by refraction—and as early as the second year. Incidentally it should not be necessary to explain to the family physician that the refraction would necessarily have to be done by a physician who has specialised in refraction, and not by an unlicensed person.

One may read how easy it is to mistake an infection of one or more of the accessory nasal sinuses for a simple "cold in the head", to the loss of the patient.

And that ALL TONSILS should not be condemned to removal simply because they can be seen. Some laryngologists might learn this to advantage.

The specialist, too, may learn some of the difficulties of correct diagnosis, and the up-to-date demand for accurate, considered judgment before operative interference is instituted. In short, the internist is becoming a little appalled at the number and extent of the operations his patients are undergoing at the hands of enthusiastic specialists and is asking for more judgment and reserve.

J. A. M. H.

METHODS OF OBSTETRIC PRACTICE.

One of the advantages of a large exchange list for a journal such as the BULLETIN of the Medical Society of Nova Scotia, is that it enables the editors to make use of the articles published by others for the edification of our own readers. In recent months the BULLETIN has been able to present a much more varied bill of fare than would otherwise be possible under present arrangements. Repeatedly have we made reference to the many strong articles that have appeared in the *Bulletin* of the New York Academy of Medicine and such another number is the issue of October, 1930, under a general title, as above indicated. The lecturer was Dr. B. P. Watson, Professor of Obstetrics and Gynaecology, Columbia University, New York; the address was given as one of a regular series of afternoon lectures before the Academy. Dr. Watson presents this question for consideration: "Can our Methods of Obstetric Practice be Improved"?

In answering the question he elucidates three chief points which we venture to notice.

1. "Obstetrics, even to-day, does not receive the time and attention in medical schools that it requires. Faculties of Medicine have failed to realize the importance of Obstetrics in their curricula; and it is only now that the public is awakening to the fact of a stationary or even increasing maternal mortality rate that the Practitioners of Medicine and of Surgery, the Faculties of Medicine, are becoming aware of the importance of the subject. The Professors and Teachers of Obstetrics have been asking that their students be given a longer time to spend in their departments and, in most instances, their cry has been in vain, with the result that a vast number of medical students have left our schools and gone into practice with the idea that the greater part of Obstetrics is operative. I do not think it is overstating the case to say that the majority of doctors now practising Obstetrics throughout the country saw, during their student course, more abnormal than normal cases and that they got no idea of the number of women who gave birth to their children unaided. I feel that the practice of Obstetrics throughout the country will not improve materially until every practitioner shall have had the opportunity, as a student, of spending a solid block of time, not less than three months in his final year—in the wards, in the labor-room, and *on the district* of a properly equipped and managed maternity hospital."

Then, after a study of maternal mortality rates in some 15 countries, he endeavors to make another point:

2. "The tendency is towards active interference for many reasons in cases that might well be left to nature. Those cases, where it is necessary, constitute a very small percentage of present day reasons for interference. By far the commonest one is the demand on the part of the patient to be saved pain and to have labor shortened. The second commonest is the inability of the doctor, with all his other work pressing upon him, to spend time waiting for normal delivery.

3. "I believe that the maternal mortality in this, and in every other country, would be very materially reduced if the practice of Obstetrics were in the hands of thoroughly trained midwives, working in conjunction with and under the direction of properly trained doctors. Or to put it another way, every doctor practising Obstetrics should have associated with him one or more trained midwives, who would conduct the delivery of his normal cases. I make this statement from a knowledge of conditions on this continent and in Scotland. After ten years of practice and of observation in Canada, I returned to Scotland, and in my inaugural address at the University of Edinburgh criticised adversely the midwife system. Four years of observation in Scotland, and a study of figures of other countries in Eupore have made me change my mind to the extent that now, after three years in the United States, I make the foregoing statement."

Dr. Watson then goes into the midwife question at length, and in another issue of the BULLETIN attention will again be directed to this phase of the subject, for some such move as this appears to be under consideration by those who are studying the modern trend in the Practice of Medicine to-day.

S. L. W.

In times of Peace prepare for War is a familiar expression that came to mind when reading a recent number of one of our exchanges, the *Canadian Defence Quarterly*, the October number just coming belatedly to our desk. One wonders if all the talk of disarmament is based upon the firm rock of altruism and the Editor of the *Quarterly* presents another aspect of the matter, when he says:

"Disarmament has been the subject of a mass of vague, confused and illogical thought during the past decade. We are informed that disarmament will prevent war, yet every thoughtful person knows full well that it never has and never will prevent war. We are told that its object is in the interests of humanity, to put an end to the misery and suffering which is associated with war. This, again, is difficult to believe; we know that approximately ten million men were killed during the four years of the Great War; we realize that ten million men, women and children died of influenza in the winter of 1918-19, yet our friends, the humanitarians, neglect entirely this second catastrophe.

"We suggest that progress in disarmament will not develop until the subject is stripped of the camouflage which now smothers it. The true purpose of disarmament is not to end war but to decrease the costs of defensive requirements in peace, and to minimize the effect of the dislocation of industry which follows war, by limiting the strength (physical and material) of the possible contestants. It is a straight commonsense business proposition and should be approached and handled accordingly; its basis is materialism and economy, not altruism."

Correspondence

C. M. A. 1931.

184 College Street,
Toronto 2,
Dec. 3, 1930.

Dear Doctor:—

According to By Law enacted at our annual meeting in 1928, the annual fee becomes due and payable in the autumn for the succeeding calendar year. During the past two years, the plan has worked out very well, and we hope that all of our members will promptly honour the accounts and drafts which will issue shortly to cover the year 1931. Will you please endeavour to give us your co-operation in this matter? By so doing, much time, labour and expense will be saved to the Association, all of which may be more properly applied to the carrying out of our many activities.

If you are not a member of the Canadian Medical Association, may we respectfully urge you to join. The annual fee is \$10.00. We believe our Journal, alone, has an annual value in excess of the fee charged; and the C. M. A. is doing a great many things for the benefit of the medical profession of this country.

The year 1930 will long be remembered as one of the most important in our history. It was our great privilege and pleasure, after a lapse of twenty-four years, to welcome again to Canada the British Medical Association. Those who had the good fortune to attend the Winnipeg meeting when more than three thousand persons registered, will long remember the convention as one of the very finest that has ever been held anywhere. Our Winnipeg hosts covered themselves with glory. The following statement is quoted from the B. M. A. Journal: "The Winnipeg meeting will live long in memory for the excellence of its scientific pronouncements, and for its generous hospitality and unique entertainment."

In many other directions, the Association has reason to be pleased with the activities of the past year. Our Post Graduate Department, unparalleled in the English speaking world, has now completed five years of extra-mural teaching. The following figures are illuminating and interesting:—

Record for the fifth year:—

Speakers	Addresses	Attendance	Cost
300	580	22,036	\$27,961.78

Record for the complete five year period:—

Speakers	Addresses	Attendance	Cost
1,446	3,354	110,693	\$151,487.37

It is with real joy and pride that we announce a sixth grant of \$30,000 from the Sun Life Assurance Company of Canada, which will enable us to continue this service to the medical profession, and to the public of Canada.

During the year, our Departments of Hospital Service, Periodic Health Examinations and Publicity and Health Education have rendered valuable service in their respective fields. So far as we know, no opportunity has been lost by the Association to engage in any work which has been brought to our attention as worthy of the keenest attention of a united Medical Profession. The Canadian Medical Association desires to be known as an organization representing the the best interests of medical practice; and it is our belief that each succeeding year finds us doing better work for one another, and increasing our prestige in the public mind.

The Annual Meeting of 1931.

We are pleased to publish the following message which is sent to you on behalf of the Vancouver Medical Association, our hosts for the annual meeting of next year:—

“The Canadian Medical Association, in 1931, will meet in Vancouver. The scientific programme being planned will be exceptionally good, but many of the best conventions are spoiled by heat and humidity. It is impossible to get real value from the scientific programme when you are making futile efforts to keep comfortably cool and awake. The social side also loses much of its attraction under these oppressive circumstances.

In 1931, the convention will be held in a city that knows nothing of such trouble. That alone should ensure your comfort and ability to enjoy to the utmost all the convention offers you. But other conditions in Vancouver also contribute to making it an exceptionally pleasant place for you to come to. Salt water and mountains combine as they do nowhere else in Canada to make the surroundings beautiful and stimulating. From a golf course swept by a sea breeze, you can in less than two hours be transported to a mountain top where you can take your dinner on the porch of a chalet while you watch Vancouver spread out 4,000 feet below you. You will have opportunities to see salmon fishing, lumbering and mining industries operating within a few miles of the city.

Special tours through British Columbia's mountain play-grounds and along its beautiful sea coast are part of the attractions which transportation companies are arranging as part of your tour to and from Vancouver.

You will never attend a medical convention under more delightful auspices.

Plan your 1931 vacation now and make it west-bound. You will have no regrets if you do; you will have many if you don't.

The time is June 22-26, 1931. The place is Vancouver. Start getting ready now.

The C. M. A. is glad to supply to its members any service within its power. A letter addressed to our offices at 184 College Street, Toronto, will receive prompt attention. Please remember we measure our success by the amount of service we are privileged to render.

Yours faithfully,

T. C. ROUTLEY,
General Secretary.

Public Health Matters.

Bridgetown, N. S.,
12th December, 1930

Dear Dr. Walker:

I have read with interest Dr. MacLeod's paper on Communicable Diseases as published in this month's issue of the BULLETIN.

There is no doubt that the reporting and following up of every case of infectious disease is a matter of vital importance not only to the profession as putting them on their guard as to the incidence of such disease in their immediate neighborhood but the public generally.

We should all of us feel that the prompt notification of infectious disease is a matter of the greatest importance in our practice. It is a duty we owe to the public, not only our own patients, but to all, as in our hands so often lies the prevention of serious consequences arising from perhaps the outbreak of an epidemic which commencing with cases of a mild type, may later take on a virulence totally unsuspected, with deplorable results to the lay population who are putting their trust in the profession to guard them from the consequences of the ignorance and possible neglect of their neighbours.

Notification should be given of every suspicious case and if in doubt the opinion of the M. H. O. sought to corroborate one's own as it is surely better to err on the side of a mistaken notification than to allow a case of infectious nature to remain unisolated and become a danger to its fellows.

I would plead very earnestly for a close liason between the general practitioner and the local M. H. O. and beyond this to the Provincial Health Department. I think we might be helped by the monthly distribution from the Provincial Health Office to each practitioner of a list of infectious diseases notified during the month with the localities in which they have occurred. The provision also of Placcard cards in accordance with the terms of the Public Health Act and bearing the authority of the Provincial Health Officer would be of use, as it would lead to a Standard card being used throughout the Province the appearance of which would soon be recognized by the public who would thereby be warned of the prevalence of infection in their midst.

This would I think be better than the present system of leaving this matter of providing placards in the hands of the local authority.

It would further be helpful if printed instructions as to the disinfection of houses and clothing could be issued in leaflet form to private practitioners for distribution to the householder on whose premises a case of infectious disease might occur and to local Health Officers for use in cases of epidemic.

This would ensure a proper systematised method of disinfection instead of the matter being left in the hands of at times untrained individuals, as in most country places the doctor would not be in a position to give his personal attention to such details.

I also feel sure that much more could be done than at present in the matter of educating the public as to the means at our disposal for the prevention of such diseases as Diphtheria, Typhoid and Scarlet Fever. Although most educated people now know the value of Anti-toxin as a curative agent in the treatment of Diphtheria, surprisingly few have any knowledge of the advantages held forth to them by the use of Toxoid or of Antityphoid inoculation.

Some years ago a series of Health Talks was broadcasted and afterwards issued in pamphlet form. These are no doubt in the hands of every general practitioner and further supplies can I take it, be obtained from the Provincial Health Office. An occasional reminder of the fact that they are obtainable on application would probably stimulate their circulation.

These are just a few suggestions that occur to me as possibly tending to the betterment of our Public Health Organisation in so far as Infectious Disease is concerned.

I would also like to add a word of thanks to the Provincial Health Laboratory for the very prompt way in which swabs, sputum, and other material sent to them are dealt with and which is of the greatest assistance to us all. I only regret that I did not have the opportunity of hearing this paper read at Digby and listening to the discussion which no doubt took place thereon. I leave to your discretion to decide whether you think this worthy of insertion in your correspondence column and remain

Yours very truly,

(Signed) G. F. WHITE, M.D., B.A.

Wishing you a Happy Xmas.

G. F. W.

McGill University, Montreal,
November 28, 1930.

Dear Dr. Walker:

On account of a rush of work due to an accumulation during my absence from here, I did not find time, heretofore, to write to thank you again for all the kindness you showed me during our visit to Nova Scotia.

The arrangements you made were most satisfactory and your own personal attentions greatly appreciated. By the way, in my report to Dr. Routley, I suggested the Provincial Secretaries should arrange the trips so that the visiting doctors need not get up at too early an hour in the mornings.

Was glad to notice in press despatches that Premier Harrington has promised a Minister of Health.

With kindest regards and all good wishes from Mrs. MacDonald and myself,

Yours very truly,

R. St. J. MACDONALD.

Boston, November 28, 1930.

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

Dear Doctor Walker:

Your letter of the 15th inst. recently received and I am sorry indeed that you have been troubled to write me again relative to the manuscript of my paper last July. Although I had thought a great deal about what I was going to present to you I had prepared only topical outlines of the subject matter I wished to cover. It therefore meant quite a little work to write out what I said at length. Besides the final topical outline which I made I had kept a list of the lantern slides in the order shown. Since receiving your letter I have got these together again and am forwarding to you, under separate cover, the paper substantially as given at your meeting.

In showing over 50 lantern slides and talking rapidly for nearly an hour I covered considerable ground. The seven and a half pages of typewritten manuscript by using small type might not occupy more than a few pages in your Journal.*

Since I wrote you last August I have been kept busy with my Hospital service, by the beginning of classes again at the Medical School, the giving of a number of exercises at a Graduate Course to one hundred and fifteen men, my own practice and the duties which fall to a Consulting Surgeon at four Hospitals.

I was very pleased to have met you at the meeting and wish I might have stayed longer. Whenever you come to Boston I would be pleased if you let me know beforehand.

With kind regards,

Sincerely yours,

TORR WAGNER HARMER, M.D.

*This paper will appear in the February Bulletin.

412 St. Sulpice St., Montreal,
December, 1930.

Dear Doctor:

With the approach of the pneumonia season the Optochin Base treatment of pneumonia will be of interest to you.

The value of Optochin Base has been definitely established. As experiences have shown so far Optochin Base is best administered on the two first days of the disease. It is not necessary to wait for the result of bacteriological examination of the sputum since even in cases of pneumonia of a different etiology the administration of Optochin will be of use.

To save valuable time we urge that you carry a bottle of tablets in your grip. The patient may then be given the first dose immediately upon diagnosis.

Very truly yours,

MERCK & CO., LIMITED.

Montreal, November 25, 1930.

The Medical Society of Nova Scotia,
Halifax, N. S.

Attention S. L. Walker, M.D.,
GENERAL SECRETARY.

Dear Sir:

Replying to your letter of November 23rd, regarding the insertion in the Nova Scotia Medical BULLETIN of an appropriate New Year Greeting to be published in December or January numbers.

We enclose herewith copy to appear in the January issue to occupy our regular advertising space.

We are glad indeed to extend to your readers the New Year Greetings and thank you for having called our attention to the possibility of doing so through your journal.

We are,

Very truly yours,

ROUGIER FRERES,
per H. L.

November 27, 1930.

S. L. Walker, M.D.,
General Secretary,
Nova Scotia Medical Society.

My dear Walker:

Enclosed you will find all the stuff.* Delete all you desire but for heaven's sake, why did you not leave a place for a fellow's athletic

*This refers to the biographical questionnaire.

pursuits? Don't you know that if the public ever got hold of this material that the chaps who play Golf, Cricket and Curl would attract far more attention than those who play pee-wee, poker and forty-fives. At least it might assist the former in reaching that state of affluence which is so often enjoyed by the two latter. With best wishes I remain,

Yours very sincerely,

C. M.

Modern Hardships.

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

Neil's Harbour, N. S.,
November 20, 1930.

Dear Dr. Walker:

While filling the Biographic Questionnaire you sent to me, it occurred to me that some of our brethren practising in the city would be interested in the life of a country doctor. For that reason I will relate a country "physician's sample" experience.

Early in April, 1929, when the winter roads were breaking up, and the approach of spring heralded by a heavy thaw, I received a telegram from a woman "in distress" at Bay St. Lawrence, twenty-six miles away. Owing to the condition of the roads there was only one way to negotiate the journey, and that way was on foot. At 1 p. m. I pulled on a pair of rubber boots, gathered whatever I thought necessary for the case into a hunting bag and started. I walked eighteen miles and then I was able to drive five miles and walked the balance. On arriving at the house I immediately set to work (as a doctor is not supposed to be tired). When I got through with the patient I had something to eat and went out to have a look at the weather. I found it had begun to freeze so I wired to my stable boy to start with my team and meet me at a certain farm house twelve miles from my home. Then I borrowed a lantern and started on the return journey a few minutes past 8 p. m. I walked all the way to the farm house where my team was, arriving there at 12.30 a. m., having walked thirty-five miles and attended to the patient in eleven hours and a half. But oh! The last mile of that thirty-five! Only we who have walked thirty-five miles "togged" in rubber boots, and sometimes plunging knee-deep in slush, can understand. At that hospitable farm house I had a good meal. Then I drove home, arriving home at 4.30 a. m.

The above is only one of the trials of the country doctor. Yet there is another side to it, when in summer you drive through the wood lot, listen to the birds singing, see the flowers, shrubs and trees in all their beauty—yes, you feel the nearness of His Majesty.

With kindest regards,

Yours truly,

H. A. GRANT.

A LETTER TREATMENT CONTEST.

The BULLETIN is in receipt of a letter from a well known general practitioner in Nova Scotia which reads as follows:

“Dear Doctor Walker:

I am enclosing a letter I received a few days ago in the hope that the BULLETIN Editorial Staff will be able to advise proper treatment.

(Signed).....”

While it would be easy for the BULLETIN staff to meet this request we have decided to appeal to our readers to submit a number of replies, while the staff will act as Judge or Referee, and announce the authorship of the most appropriate statement of treatment outlined. Please note that names, etc., have been omitted, so that identification would not be embarrassing. But we must insist that the letter is genuine and it should have a reply.

In submitting proposed replies physicians may sign any *nom de plume*, but name and address must be enclosed separately. Please take up this contest promptly and suitable prizes will be available for the best replies.

This is a verbatim copy of the letter from the patient, which is legibly written. This reminds us to suggest that the doctors, replying, have their letters typed, as they are quite unlikely to be legible otherwise.

“C.....”

Nov. 12th, 1930

Dr. X. Y. Z.,

Z.....

Dear Sir:

In reference to my daughter W.....she is very well now and I haven't had my sickness yet so far and she is trouble quite a lot with Constipation and she never has a movement of the Bowels only once a day or may be every 2 or 3 day's at a time and she has been that for 4 or 5 month's off and on and Please let me know what what you can do for her and what was that Medicine for that you have me Doctor Please let me know when you write and Dr. X..... told me the reason why I didnt have my sickness Because I was to fatt and would that have anything to do with my sickness where I had those babies that was after I had my tonsils out at D..... Hospital this is just 5 year ago since I had my tonsils out and I would like to know what you can

do for her Doctor Please and How much will your advice be Please let me know and I will pay you Dr. for your trouble to me Doctor. and you will be surprise at when you here this Doctor my Mother say's that you are a fine man Doctor when she first meet you when you where down here and I don't feel as well as I did 2 yrs. ago and I think she is to fatt for her age she is 21 years age and the most that troubles me is my back at the lower Part of her sprine so please let me know by return mail what you can do for her Doctor.

I remain your's Sincerely,

Miss W.....C.....H.....N. S.

What is the cause of when I have my Periods twice a month Please let me know at once. By return mail sure."

As this is a genuine affair we are asking the Doctor who sent the letter to the BULLETIN to also pass us a copy of his reply, which will be a sort of guide for the Judge in passing upon the form letters received in this office.

Please enter into the spirit of this suggestion.

S. L. WALKER,
Secretary.

Dr. A. B. C. sends the BULLETIN the following news item from the columns of a Halifax City Daily with inquiry,—“How come? How registered?”

“Miss F. F., who was a patient at the Grace Hospital, having undergone an operation for removal of tonsils, has returned to her home in C.”

During December Dr. W. R. Dunbar of Truro was added to the list of Doctors under the weather. At the moment of writing it is very comfortable in the house, and the Doctor seemed happy as usual the day the reporter called on him. Action will be taken in the immediate future to make plans for the Annual Meeting in July, which will be at Truro.

Thanks to several doctors who sent in copies of the **Bulletin** for January, 1930. We hope they read the letter carefully so as not to be disappointed. Perhaps some others not solicited may have a spare copy of this issue that they would spare and would send to the Secretary.

Announcement

Owing to the widespread interest in Vitamin A Therapy and the rapid increase in demand for Vitamin A in concentrated form, we have recently increased our laboratory facilities for the production of

Ayerst

Capsule No. 290

Alphamin

(Vitamin A concentrate)

at substantially reduced prices

We believe that a lower cost to the patient will permit the physician to prescribe Alphamin more freely, as a medium for Vitamin A Therapy.

As Canadian manufacturers, we are endeavouring to cooperate with the desire of the Department of Trade and Commerce to make Canadian Products available on the most economical basis.

McKenna

A Canadian Product by

Ayerst, McKenna & Harrison
Limited

Pharmaceutical Chemists

MONTREAL - 781 WILLIAM STREET - CANADA

OBITUARY

WILLIAM YOUNG FULLERTON, Bellevue Hospital Medical College, 1872, Port Williams, N. S.

Born in Port Williams in 1850, Dr. William Young Fullerton passed away in the early hours of December 9th, 1930, at his home in the same lovely village, after two months of illness preceded by several years of indifferent health. He received his premedical education at Horton Academy, Wolfville and King's College, Windsor. Upon graduating in Medicine from Bellevue in 1872 he located in Halifax and is noted as one of the demonstrators in Anatomy at Dalhousie and medical officer to one of the Battalions stationed in Halifax.

In a few years, however, he returned to his native Cornwallis Valley and for many years has been actively concerned with its business interests. Indeed to the present generation of medical men he has been long regarded as retired from practice and solely devoted to business in which he took a very prominent part. Yet we learn that always when the professional call came for his services he was glad to be of service and regarded this as a duty more binding on him than his many local business affairs. To many of the older people of this section of Kings County he is best remembered as a highly esteemed and loved physician. His professional life was in late years very quiet and unobtrusive and he is now missed more as a citizen and a valued member and supporter of St. John's Church (Episcopal) than a practising physician. Of him a friend says,—“Upright, kindly, professionally able, genuinely good and actively helpful, he will be long and sadly missed.”

To immediately mourn his passing there remains his widow, who was a daughter of the late J. T. W. Rowe, and one daughter, Miss Gwendoline, to whom sympathy is extended.

Medical Visitors to New York

The New York Academy of Medicine desires to extend a welcome to all members of the medical profession who may visit New York. It offers its facilities in the hope that they may be helpful in making the visitors' stay both pleasant and profitable.

The Library (open from 9 a. m. to 5 p. m.) is one of the largest of its kind in the United States. It contains upwards of 140,000 books and theses, and over 100,000 pamphlets, which are fully catalogued. Its files of American and foreign periodicals are very complete. There is a bibliographical and photostat service available for visitors at the usual library rates.

Meetings. Besides two stated meetings of the Academy held each month, there are monthly meetings of the twelve different groups of Fellows organized into sections devoted to various branches of medicine and surgery and to historical and cultural medicine. In addition to these meetings, affiliated and many other medical societies of the city hold their meetings at the Academy. There are usually one or more meetings held each night of the month except Sundays and holidays. (October to June).

Lectures. A series of Friday afternoon lectures on subjects of especial interest to the practitioner is given each year, beginning in November. Lectures on public health and other subjects of current medical interest are frequently held.

The Annual Graduate Fortnight is held the last two weeks in October and consists of a series of evening lectures at the Academy, and co-ordinated clinics, clinical demonstrations in hospitals and teaching institutions, on a subject of outstanding importance in the practice of medicine and surgery.

All meetings and lectures held at the Academy are open to the profession generally.

Bureau of Clinical Information. The Committee on Medical Education maintains at the Academy a *Bureau of Clinical Information* where detailed information is available regarding opportunities for post-graduate medical study in Greater New York, and also in other cities of the United States, Canada and Europe. The Executive Secretary in charge of the Bureau is prepared to answer inquiries concerning special internships or residencies, post-graduate courses in medical schools and teaching hospitals, and opportunities to observe clinical practice in the teaching hospitals of the City. Information in regard to post-graduate medical work in England and on the Continent is being added to and kept up to date by publications and reports received from abroad through European correspondents, international agencies, fellowships and societies, and from interviews with American medical men who have recently returned from a period of foreign study.

The Committee has published a *Synopsis of Approved Opportunities Offered in New York City for Post-graduate Medical Study in the Clinical Specialties*. Copies of the synopsis may be obtained on application to the Bureau.

The operations to be performed each day in the clinics of fifty-eight hospitals are published in a *Daily Surgical Bulletin* issued the previous evening. A *Monthly Bulletin of Non-Operative Clinics and Conferences* held in forty hospitals also is published. Copies of these bulletins may be obtained at the Bureau, and will be mailed to visiting doctors on request.

Physicians are invited to make the Bureau their headquarters while in the city.

A booklet, describing opportunities for post-graduate medical study in hospitals of Greater New York, has been prepared particularly for the use of visitors whose stay in the city is limited.

Fifth Avenue and 103d Street

Locals and Personals

December was a strenuous month for Dr. A. S. Kendall of Sydney, in that he spent much of the time in the City Hospital under the combined care of Doctors Bruce, Lynch, Carter and others. We are glad to learn he survived their combined efforts and made a good recovery from an operation for strangulated hernia. At this present moment of typing these notes he is able to see a few of his many friends. Dr. Kendall is a veteran in many fields of activity and his many friends in the Province will be glad to learn of his restoration to health.

"I hear yer friend Angus has marrit a third wife."

"Aye, Angus is an expensive friend; two wreaths and three presents in seventeen years."

We speak of historic Annapolis, Louisburg, Halifax, etc., but it remains to Dr. F. E. Lawlor, of the N. S. Hospital, to point out many historic spots in the town and vicinity of Dartmouth. This he did in a paper recently presented to the Nova Scotia Historical Society which was much appreciated. Dr. M. D. Morrison of Halifax is the President of this Society for the year 1930-31.

Mrs. Morrison, wife of Dr. J. C. Morrison of New Waterford returned to her home the last of November much improved in health, we are glad to learn. She had been a patient in the Victoria General Hospital for several weeks.

A complimentary address accompanied by a purse of gold were grateful, if embarrassing, features of a reception tendered Dr. H. D. Chisholm and his bride at Sunny Brae the latter part of November. This is a rural district where the doctor's services are greatly appreciated.

The Lunenburg *Progress-Enterprise* extends a very cordial welcome to Dr. W. A. Hewat of Mahone Bay upon his removal to Lunenburg to become a member of the firm of Creighton and Hewat, Physicians and Surgeons. We have often wondered why there were not more doctors working in partnership. "It's a bally good way, you know."

Beardsley-Morse. Dr. J. Murray Beardsley, Dalhousie 1928, was married, October 9, 1930, at Providence to Miss Sarah Ida Morse of that City. Dr. Beardsley is a son of Capt. and Mrs. S. M. Beardsley of Halifax and was a graduate in Arts of Acadia. Mrs. Beardsley holds an M.A. degree from Brown University. The newly weds recently visited in Halifax and are now engaged in Research Work at Harvard.

HYTEX^R

A Health Fabric Developed by Paediatricians

HYTEX—Hygienic Textile—is the result of a series of experiments in the Research Laboratory, Department of Paediatrics, University of Toronto, and Hospital for Sick Children, to discover the ideal fabric for children's underwear, and diapers.

In producing HYTEX it is our aim to combine the heat retention qualities of wool with the absorbitive qualities of cotton. The outside layer of HYTEX is pure Botany wool; the inner is finely combed, decorticated cotton. The result is a fabric which prevents the escape of natural body heat and eliminates wool itch and wool rash. The special decorticated cotton instantly absorbs body

moisture... body clamminess is eliminated. Owing to the special structure of HYTEX knitting, this fabric provides healthful ventilation—it will not shrink.

We invite your further suggestions and comment and, to that end, would be pleased to send you informative literature and free sample garment. Please write us.

Hytex Diaper Fabric

Knitted of combed decorticated cotton, is soft, non-irritant, absorbs three times its weight in water and its knitted construction does not restrict the natural movements of the infant's body but conforms to them. It washes more easily and wears longer than a woven fabric without its efficiency being decreased.

WOODS UNDERWEAR COMPANY, LIMITED

72 CRAWFORD STREET

TORONTO

Shortly after returning to Inverness after their honeymoon Dr. and Mrs. Ratchford were tendered a great reception. Besides the usual well worded address and the presentation of a silver service, there was a nine course dinner served in St. Mary's Hospital. Did they ever do such things when you were young?

The fall months saw a number of Doctors on the sick list. Dr. A. W. Miller of New Waterford was for a time a patient in the Victoria General Hospital, while Dr. George H. Cox of New Glasgow was a patient in Aberdeen Hospital.

He was a canny old Scot and married four times, each time securing quite a *tocher* with his bride. Being questioned about his successful financial matrimonial ventures, Sandy said: "Weel, sir, I make a bit o' siller, all right, but there's no muckle in it, what between the takin' in and the layin' oot, buying wedding rings and tombstones it's a hard job to make a success of matrimony."

Miss Jean Murray, daughter of Dr. and Mrs. R. L. Murray of North Sydney, was married Nov. 12, 1930, to Mr. Kenneth Spencer of Moncton. Mrs. A. K. Roy and Mrs. Nita Rhindress assisted in the wedding reception.

Dr. D. J. Hartigan is Vice President of the New Waterford Hospital Board and Dr. F. T. McLeod is a member of the Executive.

It is suggested that a definite question be asked all applying for registration before the Provincial Medical Board:—"Define the distinction between 'News' and 'Advertising', in medical ethics." To suggest that the question be referred to a regular attendant upon local medical society meetings should not be regarded as a satisfactory answer.

Dr. H. L. Scammell recently spent a short time in Halifax partly to visit friends and in part on official business for the American College of Surgeons. Mrs. Scammell, who accompanied the Doctor to Nova Scotia, spent most of her time in the province with her parents at her former home in Pictou.

The wives of several of the local doctors were chaperones at the Graduation Dance of the Nurses of the Glace Bay General Hospital. We noted Mesdames Calder, Green, Sparrow, Rice, Archibald and MacDonald.

Falling down an open cellar door hatchway at his home just outside of Charlottetown the four year old son of Dr. John S. Jenkins sustained a fractured skull. He was immediately taken to the City

So PURE, It Needs No FLAVORING

Vitamin A is known to possess certain anti-infective properties, particularly in relation to the eyes, lungs and upper respiratory tract, including the sinuses.

Vitamin D is known to prevent and cure rickets.

MEAD'S 10D COD LIVER OIL WITH VIOSTEROL

Many physicians prefer to prescribe vitamins A and D in the form of Mead's Standardized Cod Liver Oil. In cases where extra Vitamin D is required or in cases where the patient cannot tolerate normal doses

for VITAMIN A DEFICIENCIES and

of Mead's Standardized Cod Liver Oil and is thus unable to obtain the necessary amount of vitamin D, Mead's 10 D Cod Liver Oil with Viosterol is indicated because it may be given in half the normal dosage, still assuring adequate amounts of vitamins A and D.

for the PREVENTION and CURE of RICKETS

Hospital where his father was operating at the time, but the injuries were fatal. The little fellow was a grandson of the late Dr. S. R. Jenkins of Charlottetown, so well known to many of the members of the profession in Nova Scotia. Doctor and Mrs. Jenkins have the sincere sympathy of all who know them.

A short time ago the BULLETIN congratulated Dr. Charles S. Morton of Halifax upon the success of his son, Harry, in securing his M.R.C.S. and L.R.C.P. in London. Now Mr. Ralph Morton, son of Dr. A. McD. Morton of Halifax, we note, has been awarded the I.O. D.E. 1930 Overseas Postgraduate Scholarship and will specialise in Journalism in London.

Dr. Edward J. Porteous, retired physician from Northern Nigeria, West Africa, has purchased a farm at Curry's Corner, Windsor, to be managed by his brother. Here the Doctor will spend a portion of each year in pleasant retirement.

Dr. W. J. Egan of Sydney is the President of the local Kiwanis Club for the coming year.

In our list of turf racing members we must now include Dr. A. C. Gouthro of Little Bras d'Or, who has recently bought the free-for-all pacer, Peter Taggart, 2.10. Dr. T. R. Johnson of Great Village, Dr. W. N. Rehfuss and others will welcome Dr. Gouthro to membership in the N. S. Turfman's Club.

A tablet in Windsor commemorates the founding of King's College in 1789, the first university in Canada and the oldest in the British overseas dominions.

Dr. Alexander Kennedy, Antigonish, McGill 1919, has removed to Georgetown, P. E. I., the field recently occupied by Dr. John MacIntosh, now resident at 30 Coburg Road, Halifax.

Gillis-Campbell. The wedding took place at Baddeck, November 14, 1930, of Dr. Raymond A. Gillis, formerly of Sydney Mines to Miss Cecilia Francis, daughter of Mr. and Mrs. John E. Campbell of Baddeck. After a short trip they returned to Baddeck where the Doctor is practising. Congratulations.

We have all heard the description of a person as one who made some thing, person or place famous but that reply received a heavy jolt when the Yankee who asked the Englishman in Trafalgar Square: "Nelson, who the dickens is he anyway?" "Oh, he's the man that made England what she is." "Too bad," said the Yank sadly; "too bad to blame it all on one man."

The Lord Nelson Hotel Halifax

The favored Hotel of professional men and those interested in our hospitals and colleges.

Two hundred rooms, each with private bath and outside view.

1931 HAPPY NEW YEAR 1913

Arriving and departing guests transported by taxi without charge from the station provided they take Yellow Cabs.

OPENED BY THE MEDICAL SOCIETY OF NOVA SCOTIA OCTOBER 15TH to 20TH, 1928



A
COMPLETE RANGE
OF
Ephedrosst

(EPHEDRINE "Frosst")

PRODUCTS

JELLY
INHALANT
SOLUTION
TABLETS
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CRYSTALS

"Worthy of Your Specification"

MADE IN CANADA BY

Charles E. Frosst & Co.

MANUFACTURING PHARMACISTS SINCE 1899

MONTREAL

NOVA SCOTIA NOTES.

A largely attended clinical meeting of the Halifax Branch of the Medical Society of Nova Scotia was held at the Nova Scotia Hospital on the 12th of November. Dr. Lawlor presented interesting cases of dementia praecox and dementia paralytica, showing a case of the latter condition which had improved greatly under treatment by malaria and discussing his experience with this form of treatment which this form of treatment which has, in several cases, been gratifying. Dr. Hopgood showed several cases of melancholia, and followed with a very interesting paper on the mental disturbances associated with the puerperium. The Society passed a resolution expressing regret at the illness of Dr. Morton, assistant medical superintendent of the hospital, and hope for his speedy recovery. After adjournment the Society was entertained at a delightful supper.

The annual meeting of the Halifax Children's Hospital was held on the 11th of November. Much to the regret of everyone, Mr. O. E. Smith, president of the hospital, was unable to be present on account of illness. Mr. J. L. Hetherington, vice-president, presided very acceptably in Mr. Smith's absence, and paid a tribute to Mr. Smith's splendid work on behalf of the hospital. The building for the nurses' residence is now approaching completion, and very soon more room will be available in the hospital building for the reception of patients. Reporting for the Medical Board, Dr. W. Allan Curry stated that the admissions to the hospital had numbered twice as many as in the preceding year, 554 operations had been performed, and the medical staff had been busily engaged throughout the year.

The new building of the Soldiers' Memorial Hospital, Inverness, was opened with appropriate ceremonies on the 25th of November. This institution was established several years ago in an adapted building which soon proved inadequate. In its new quarters, the hospital may be expected to render an even finer service to the community than it has rendered in the past. The old building will be used hereafter as a residence for nurses.

"Recent advances in the biochemistry and pharmacology of the internal secretions" were discussed in a very interesting and instructive manner by Doctors E. G. Young and N. B. Dreyer at a meeting of the Halifax Branch of the Medical Society of Nova Scotia held at the Dalhousie Clinic on the 26th of November. Doctors Young and

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and Dreyer are respectively Professor of Biochemistry and Professor of Pharmacology at Dalhousie University, and they impressed their hearers not only with their ability to present technical matters in lucid language, but also with an exceptional capacity for delightfully harmonious disagreement.

A class of 26 nurses was graduated from the training school of the Victoria General Hospital on the 27th of November. The Hon. George E. Faulkner presided at the ceremony, and the Hon. John Doull, Provincial Secretary, presented the diplomas and prizes. Dr. W. L. Muir delivered the address to the graduates. At the conclusion of the exercises, the graduates and their friends repaired to the Lord Nelson Hotel, where a very enjoyable evening was spent at cards and dancing.

Representatives of the Medical Society of Nova Scotia and of the Association of Medical Health officers recently met the provincial government, by invitation of the government, to discuss means of improving methods of dealing with tuberculosis in Nova Scotia. It is announced that agreement was reached that a substantial sum should be appropriated for additional accommodation for infirmary cases at the Nova Scotia Sanatorium, Kentville, and that a further amount should be appropriated for the erection of a hospital for advanced cases at a suitable place in the island of Cape Breton. In addition the sum of \$80,000.00 is to be used for other anti-tuberculosis activities. The Prime Minister gave assurance that the government would give effect to the recommendations agreed upon.

The Eastern Counties Branch of the Medical Society of Nova Scotia held its ninth annual meeting at the St. Martha's Hospital, Antigonish, on the 14th of October. Visiting speakers were Hon. Dr. G. H. Murphy, Dr. H. B. Atlee, and Dr. Ralph P. Smith, of the Dalhousie Faculty of Medicine. Dr. Murphy's paper was entitled "Surgical Common Sense," Dr. Atlee dealt with the "Delayed Case of Labour", and Dr. Smith discussed "Vaccines", with particular reference to their therapeutic uses. Dr. R. F. MacDonald, in his presidential address, discussed what the general practitioner may do in dealing with foreign bodies in, and injuries to the eye. The annual dinner was served at the hospital and was greatly enjoyed. Dr. H. C. S. Elliot, of Guysboro, was elected president for the ensuing year, with Doctors M. G. MacLeod, of Whycomagh, and P. A. McGarry, of Canso, as vice-presidents. Dr. P. S. Campbell, of Port Hood, was re-elected secretary.