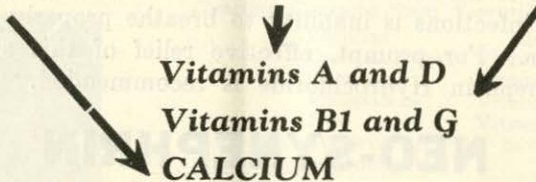


FOR THE
CONVALESCENT

Calcocyte Capsules

CALcium — **CO**d liver oil — **YEAST**
Glycerobhosphate — Vitamin tested — concentrate



The water-soluble Vitamins B1 and G are **permanently protected** in a dry state, having been compressed into a **coated tablet** into which is incorporated the Calcium—

THE TABLET IS INSIDE THE CAPSULE

AND

Ancamalt

CALCIUM, IRON, POTASSIUM, SODIUM, PHOSPHORUS
IN A RICH VITAMIN MALT BASE (40%)

Prescribe the original 12 ounce bottle—
It contains a months treatment.

THE MOST REASONABLE AND EFFECTIVE
TONIC MEDICATION ON THE MARKET

Anglo-Canadian Drugs, Limited

OSHAWA, - ONTARIO

ONE HUNDRED PER CENT CANADIAN

W. M. CLINGER, HALIFAX, N. S., MARITIME REPRESENTATIVE

TO RIDE OUT THE STORM

Daily at this time of the year many physicians are called upon to alleviate the symptoms of certain infections of the upper respiratory tract and thus to help the patient "ride out the storm".

One of the commonest and most distressing symptoms of such infections is inability to breathe properly through the nose. For prompt, effective relief of this symptom Neo-Synephrin Hydrochloride is recommended.

NEO-SYNEPHRIN HYDROCHLORIDE

is a vasoconstrictor which exerts a more prolonged effect than ephedrine or epinephrine and, in therapeutic dosage, is less toxic than either. When used as recommended, Neo-Synephrin Hydrochloride constitutes a highly efficient agent for reducing nasal congestion.

EMULSION $\frac{1}{4}\%$ (1-oz. bottle with dropper).

SOLUTION $\frac{1}{4}\%$ for dropper or spray } 1-oz. bottle.
1% for resistant cases }

JELLY $\frac{1}{2}\%$ (in collapsible tubes with applicator).

Literature and professional sample on request.



FREDERICK STEARNS & COMPANY OF CANADA, LTD.

WINDSOR, - ONTARIO.

MAKERS OF KASAGRA

Detroit, Mich.

New York, N. Y.

Kansas City, Mo.

San Francisco, Calif.

Sydney, Australia

For Mothers and Mothers to Be

Ovaltine is a food supplement concentrating the nutritive values of fresh milk, eggs and a special barley malt extract, lightly flavoured with cocoa. It helps expectant mothers maintain their vitality and it brings better babies into the world.

Ovaltine has these outstanding advantages as a tonic food beverage used during the period of pregnancy and lactation.

- 1—It is a delicious tonic food beverage.
- 2—It contributes essential vitamins and minerals.
- 3—Adds extra nourishment.

Ovaltine Contains these Essentials.

Proteins	and	
Carbohydrates	Vitamin A	
Calcium	Vitamin B	
Phosphorus	Vitamin D	
Iron	Vitamin G	

Your patients will find the flavour of Ovaltine appetizing and delightful.



OVALTINE

TONIC FOOD BEVERAGE

Manufactured by A. WANDER, LIMITED
Peterborough, Canada.

Factories also in England, Switzerland, France, and the United States.

IT'S SPRING AT COLWELL'S

You'll feel better...look smarter...and there'll be a spring in your step when you shed winter-weight clothes and don a new Spring Suit or Topcoat.

We are showing new arrivals daily at moderate prices.



COLWELL BROTHERS, LTD.

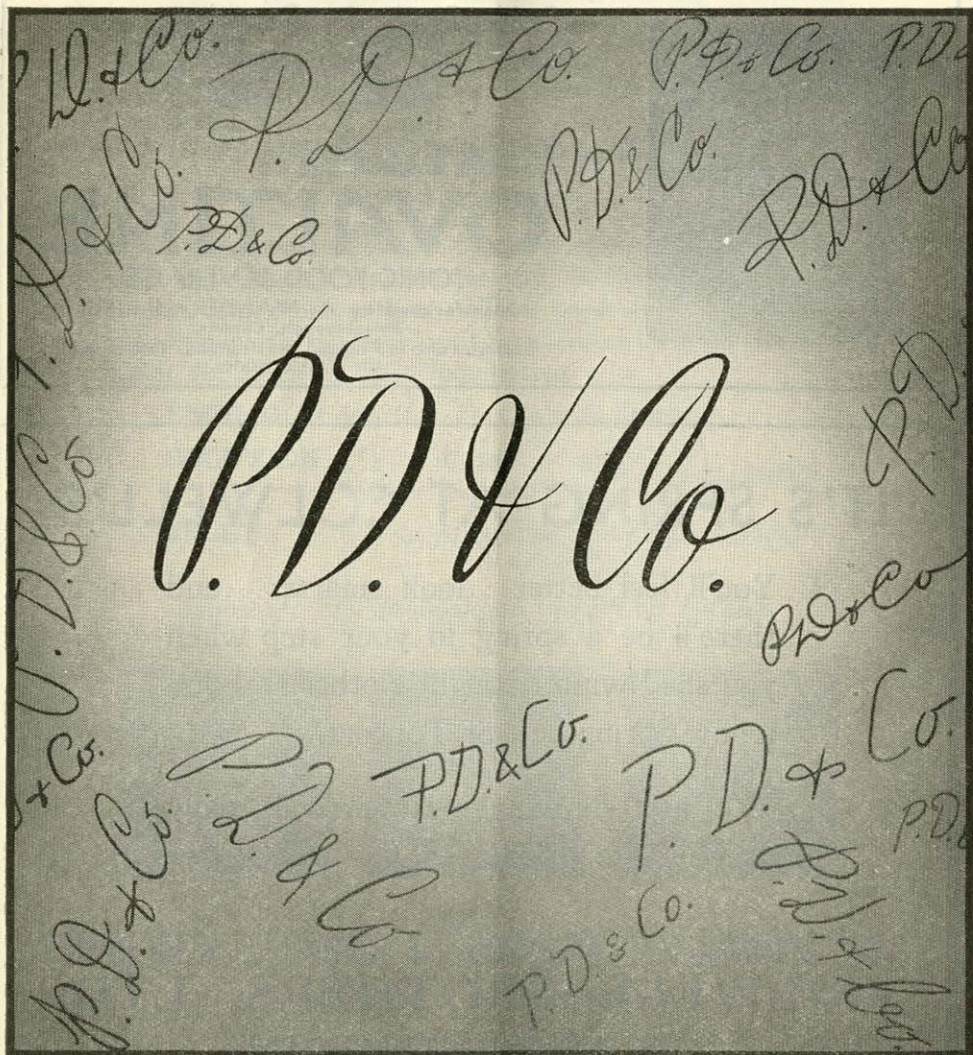
THE ENGLISH CLOTHING SHOP

453-457 Barrington Street

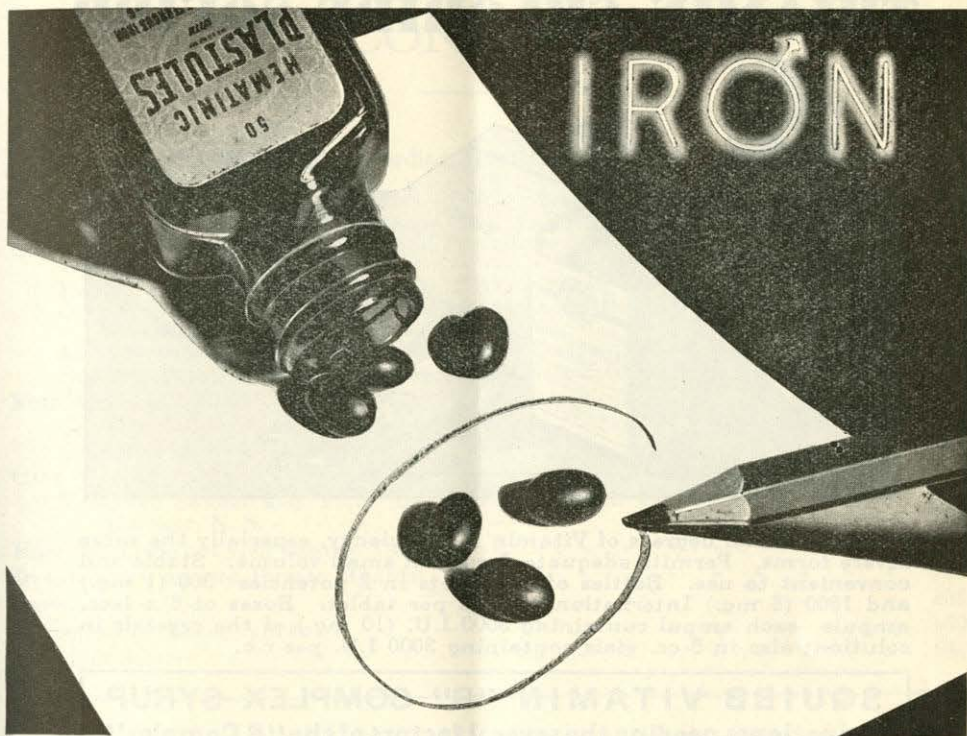
Halifax, N. S.

Doctor — — —

how long does it take you to add
"P. D. & CO." to your prescriptions?



Assure for your patients the quality of medicinal agents made possible by
seventy-three years of scientific research and manufacturing experience



Hematinic Plastules Effective in Small Dosage

The daily dose of three Hematinic Plastules Plain yields gratifying results in the average case of hypochromic anemia. Each Hematinic Plastule Plain contains 5 grains of ferrous iron in a well tolerated, easily assimilated form. Two types of Hematinic Plastules are now available on your prescription—Plain in bottles of seventy-five, with Liver Concentrate in bottles of fifty. Your patients will find the cost of this medication well within their means.

JOHN WYETH & BROTHER, INC.

WALKERVILLE, ONTARIO

THIAMIN CHLORIDE SQUIBB



Indicated in all degrees of Vitamin B1 deficiency, especially the more severe forms. Permits adequate dosage in small volume. Stable and convenient to use. Bottles of 50 tablets in 2 potencies—300 (1 mg.) and 1500 (5 mg.) International units per tablet. Boxes of 6 x 1-cc. ampuls—each ampul containing 3000 I.U. (10 mg.) of the crystals in solution; also in 5-cc. vials containing 3000 I.U. per c.c.

SQUIBB VITAMIN "B" COMPLEX SYRUP for patients needing the several factors of the "B Complex"

The therapeutic usefulness of Squibb Vitamin B Complex Syrup, depends upon the fact that it supplies an abundance of naturally occurring Thiamin (B1), Riboflavin (B2), Vitamin B6, the filtrate factors and the pellagra-preventive factor (nicotinic acid). There is also qualitative experimental evidence, suggesting the presence of factor W and Vitamin B4.

INDICATIONS: Anorexia, Chronic gastro-intestinal mal-function, Constipation, Pregnancy polyneuritis and vomiting, Lactation, Alcoholic polyneuritis, Cardiovascular disturbances, Retarded growth in infants, Retarded growth in older children, Infant feeding, Pellagra.

DOSAGE: Infants, $\frac{1}{2}$ teaspoonful a day; children, 1 to 2 teaspoonfuls a day; adults, 2 to 4 teaspoonfuls a day.
Supplied in 3 and 6 oz. bottles and 12 oz. jars.

Vitamin Content as Shown by Multiple Physiologic Assays:

VITAMIN B1—50 International units per 1 cc. Thiamin, as it occurs naturally.

VITAMIN B2—10 gammas per 1 cc. "Riboflavin" is the accepted new term for the artificial Vitamin B2. In Vitamin B Complex Syrup, riboflavin is present in naturally occurring form.

VITAMIN B6—100 gammas per 1 cc. This vitamin can be prepared in crystalline form; here it occurs in its natural form.

FILTRATE FACTORS—Jukes-Lelpkovsky factor value of 27 per 1 cc.

PELLAGRA—Preventive factor contains an abundance. Recent literature refers to this factor as nicotinic acid.

*For descriptive literature address Professional Service Department,
36 Caledonia Road, Toronto, Ont.*

E. R. SQUIBB & SONS OF CANADA LTD.
Manufacturing Chemists to the Medical Profession since 1858

CONTENTS

SCIENTIFIC:

Congestive Heart Failure (Cardiac Insufficiency)—T. A. Lebbetter, M.D., Yarmouth, N. S. - - - - -	125
Finding and Controlling Carriers—J. S. Robertson, M.D., Yarmouth, N. S.	130
Medical History and Its Importance—J. E. LeBlanc, M.D., West Pubnico, N. S.	133
The General Practitioner's Place in Preventive Medicine—E. L. Eagles, M.D., Port Maitland, N. S. - - - - -	136
Doctor, Where's your Scissors?—Dr. I. M. Quimby - - - - -	138
On the Importance of Examination of the Lower Bowel—A. F. Weir, M.D., Freeport, N. S. - - - - -	142
An Obstetrical Case—C. A. Webster, M.D., Yarmouth, N. S. - - - - -	144
Regional Ileitis or Crohn's Disease—R. B. Eaton, M.D., Amherst, N. S. -	147

EDITORIAL:

Chemotherapy—T. A. Lebbetter, M.D. - - - - -	150
State Medicine—L. R. Morse, M.D. - - - - -	151

CASE REPORT:

Extensive Second and Third Degree Burns—J. R. Corbett, M.D., Clark's Harbour, N. S. - - - - -	153
Have you made out your Income Tax? - - - - -	155
DEPARTMENT OF THE PUBLIC HEALTH - - - - -	158
OBITUARIES - - - - -	161
PERSONAL INTEREST NOTES - - - - -	162
Books for Sale - - - - -	164

MAGSOL

(HORNER)

A COLLOIDAL POWDER. NOT
AN ALKALI.
ANTACID AND ADSORBENT.
INDICATED IN HYPERACIDITY
and PEPTIC ULCERATION.

Relief from pain and control of
acidity.

Immediate and sustained action.

Neutralizing and adsorptive power
prolonged.

Not toxic. Cannot be absorbed or
cause alkalosis.

*Dose: One teaspoonful or more
as required.*

Prove for yourself that pain is quickly relieved, acidity controlled.

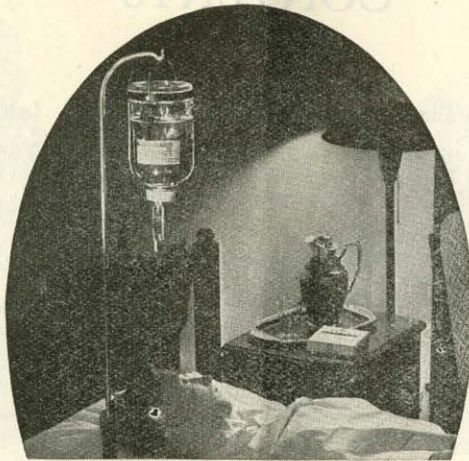
Send for a generous sample.

FRANK W. HORNER LIMITED
MONTREAL CANADA

Magsol is not advertised to the public

N.S.

ONLY THESE SOLUTIONS ARE VACOLITER PROTECTED



B A X T E R ' S

INTRAVENOUS SOLUTIONS IN VACOLITERS

Baxter's Solutions
are safe when you give them
because they are in Vacoliter

Every liter of Baxter's Dextrose and Saline Solutions *in Vacoliter* is pure and sterile and *safe* when it leaves our laboratory . . .

. . . and it is safe and pure and sterile *when you open it for use* for it has been kept sterile in Baxter's famed container, the *Vacoliter*.

No matter what difficult conditions your Baxter's Solutions may face . . . hard

handling, months of storage, they *stay* safe and sterile as long as the patented Vacoliter seal is unbroken.

We think you'll want the assurance that the Vacoliter can give you. We know you can trust the sterility and *safety* of every liter of Baxter's Intravenous Solutions. We pledge constant skill and unending surveillance to merit your trust . . . *and keep it.*

The fine product of
 BAXTER LABORATORIES OF CANADA LIMITED
 TORONTO

Distributed Exclusively By
 INGRAM & BELL LIMITED

TORONTO
 WINNIPEG

MONTREAL

CALGARY



Congestive Heart Failure

(Cardiac Insufficiency)

THOMAS A. LEBBETTER, M.D., C.M.

Yarmouth, Nova Scotia

IN the progression of cardiac disease, circulatory disorders occur, as one of two general types. The first leads to the syndrome which we know as angina pectoris. The second leads to congestive heart failure.

These notes refer to the second syndrome, for congestive heart failure or cardiac insufficiency is a syndrome resulting from the failure of the heart as a pump. This type of failure, by causing a stasis in the capillaries and retarding the venous return, interferes so effectively with the general circulation that chemical changes are produced in the blood and tissues and this syndrome results. As a consequence of these chemical changes, various signs and symptoms appear, the most important of which are:

(1) Dyspnoea.

(2) Fatigue.

These first two symptoms, *fatigue* and *shortness of breath* usually are the first two symptoms to send the patient to consult his physician, so that the first indications of a failing heart are generally experienced by the patients themselves. They may be due to an increase in the cardiac demand as in thyrotoxicosis and hypertension: or the result of a severe anaemia: or to some pulmonary disorder. Otherwise, they may be the first subjective indications of a commencing cardiac failure. This failure occurs in long standing heart conditions rather than in acute cases.

(3) Râles.

These râles are fine, inspiratory, and are heard at the bases. (McKenzie always considered this one of the reliable *early* signs).

The pulmonary circulation intervenes between the left and right ventricle. Therefore, pulmonary congestion can really only develop when a disproportion exists between the output of left and right side of the heart, e.g., if the left heart fails to adjust itself to the afflux of blood from the right heart, then blood from the right ventricle collects in the lungs, hence the advent of inferior-lobe inspiratory râles.

(4) Prominent neck veins.

(5) Enlarged and tender liver. (May be one or both).

The swelling up of the liver is, no doubt, due to congestion. Pain on pressure is indicative of this. If icterus is present, this is due to compression of the intra-hepatic biliary passages through the congestion.

(6) Diminished vital capacity.

This, too, is an early sign, and its importance lies in the knowledge that the vital capacity diminishes as the insufficiency increases. When there is no disproportion between the right and left heart pulmonary congestion does not occur.

(7) Oedema.

May be mild or marked, generally too, the oedema increases with the insufficiency. (One should look for it over the sacrum if patient has been in bed for some time.)

(8) Cyanosis.

Lips, ears, finger-nails. It is a faint reddish-blue tint; quite often there is no cyanosis.

(9) Hydrothorax and ascites are present in the more advanced cases.

(10) Orthopnea is usually present in moderate or advanced grades.

In the rheumatic heart disease of children oedema and congestive liver signs may be inconspicuous or absent.

This clinical picture, then, makes the diagnosis of congestive heart failure obvious at once irrespective of the cardiac auscultatory findings. If to this is added the presence of cardiac enlargement, the evidence is confirmatory, for cardiac enlargement while not constant in early heart disease *is almost always existant* in patients with congestive failure. In fact, oedema in the absence of cardiac enlargement is most likely to prove non-cardiac in origin. Some authorities go so far as to say it is never cardiac in origin unless accompanied by enlargement.

The blood pressure findings may be high, low, or normal. Most commonly the blood pressure rises and as improvement occurs it frequently falls.

Fever is quite frequently present in a large number of patients. Most commonly it is due to the co-existing bronchitis: with long standing pulmonary congestion bronchiectasis is not rare and may be the reason for the temperature.

Cough is a very frequent complication. Any long standing pulmonary affection tends necessarily to produce increased pulmonary pressure which eventually embarrasses the right ventricle, so that an individual with a persistent cough lasting for years may be said to have *potential* cardiac disease.

Anaemia of a moderate degree is frequently present. In fact, signs and symptoms may result from anaemia closely simulating congestive heart failure.

The urine usually contains albumen and casts. If the blood pressure happens to be high it is not infrequent to find a diagnosis of nephritis made. It is now fairly well established that in connection with the ordinary forms of cardiac failure *it is* congestion *back* of the failing chamber rather than the *inadequate output* of the failing chamber, that is the cardinal causative factor. In other words, *inefficiency* rather than *insufficiency* of the Myocardium is the cause. As Harrison has explained, the failing heart here is like a motor car which is being driven in "second" gear. Being inefficient rather than insufficient.

In the occurrence of sudden collapse in a known cardiac case, one may gather a great deal of information from the condition of the veins, as well as the line of treatment to follow. Conspicuous, visible veins in these cases show a heart badly filled; empty veins are indicative of peripheral insufficiency. Also empty veins, plus a small heart signify, quite often, peripheral failure, while full veins, plus a large heart, signify *central* cardiac failure. Certain precipitating causes result in congestive heart failure, by adding additional stress and strain, to an already overtaxed heart.

Cowan and Ritchie list the following causes: exercise, pregnancy, hemorrhage, pulmonary infection, emphysema, gastrointestinal disturbances which

produce disturbances in nutrition, intoxication, operation, mental shock, starvation in any form, acute exacerbation of chronic renal disease, and surgical shock.

Paul D. White states that "in a person with heart disease, failure is often precipitated by a relatively trivial circumstance, such as a slight respiratory infection, overeating, or slight overexertion, but usually heart failure is of gradual onset without any particular precipitating factor. In children, acute rheumatic infection is the most frequent immediate cause." G. R. Herrmann states that the "establishment of a precipitating factor is of significance in the prognosis and future management of any patient with cardiovascular breakdown."

Before advanced degrees of congestive heart failure manifest themselves clinically, there are early signs which are most significant and should be anticipated. I refer first, particularly, to the presence of *gallop rhythm* because the detection of the imminence of failure may mean everything to the patient. The presence of gallop rhythm is more or less a serious sign. Fortunately, however, it is an early sign. It consists of a third heart sound heard in diastole (between the second and the first sound at the apex). It is differentiated from a normal third sound in that this (normal) one occurs in young people who show no evidence of cardiac disease.

Its clinical importance is due to the fact that the presence of gallop rhythm *now*, indicates to you, that congestive heart failure is imminent if not already present. The presence of a gallop (ta-lubb-dup or lubb-dup-ta) is therefore of extreme importance. Its absence is of no importance. It signifies dilatation of one or both of the ventricles. The dilation of the ventricles may in turn produce a relative systolic murmur which, too, is now heard for the first time.

The importance of the gallop clinically cannot be over-estimated because it is a comparatively early sign. In fact, it may be the *only early* objective sign.

Then again, it is worthy of note that the sudden appearance of frequent premature beats may signal the imminence of congestive failure. Other significant signs worth watching for and correctly evaluating are:

(A) Increased dyspnoea.

Since the majority of conditions causing cardiac disease affect the left side of the heart, engorgement first usually develops in the pulmonary vascular bed. So that dyspnoea, at rest, on exertion or continuous may be present.

(B) Diminished vital capacity. (mentioned above)

Progressive decrease of vital capacity is usually the earliest detectable sign of congestion of the lungs.

(C) Venous Pressure.

Perhaps no single sign gives more accurate or more valuable information than the study of the venous pressure. Observing the filling and emptying of the external jugular veins from the supine (with head on two pillows) to the erect position, is a simple way of estimating it. Over-full veins are observed to pulsate freely above the manubrium level and the higher up this level is observed the greater the overfilling. *The height* at which it occurs is what is important, *not the degree* of visible or palpable pulsation. Sir Thomas Lewis says:

"The veins are never full in the neck in a normal unclothed person standing easily in ordinary circumstances in the erect posture: in conspicuous congestion they run the length of the neck like cords.

For a detailed venous pressure calculation, one may use the direct venous pressure apparatus which gives, in millimeters, the exact reading. Normal variations range from 60-120 M.M. Primary cardiac breathlessness is definitely co-related to, and is the result of, congestion of the venous systems. If the latter exists, without the former, some other than a cardiac cause must be suspected.

(D) Tachycardia.

Here it is worth remembering that the normal heart rate constitutes tachycardia for the enlarged heart.

The prognosis is especially serious in infants, young children and elderly people. Generally speaking, the larger the heart of the patient, the poorer the prognosis. No *single* clinical phenomenon should be over-estimated or over-emphasized in giving a prognosis, rather one must judge the *composite* picture which the patient presents in accurately interpreting the changes which take place in the clinical state.

A distinction must be made between cardiac and peripheral circulatory failure. It is, however, not infrequent to find present both central and peripheral cases of failure. In these cases the increase of venous pressure which is so important in the former may be absent if the combination be present. In passing, it is interesting to note that strychnin is coming back to its rightful place as one of the chief drugs of selection in these peripheral failure cases.

The clinical symptoms which we observe with disturbances of peripheral circulation, regardless whether they are due to functional or organic factors, are uniformly caused by the disproportion between the metabolism of the tissues and the oxygen requirement on the one hand, and the actual blood supply and oxygen supply on the other.

Briefly, with regard to treatment. The first pre-requisite is to satisfy yourself that the condition present really is congestive heart failure. If it is, then digitalis is the drug par excellence. Its chief indication is the presence of congestive heart failure when the patient is at rest. Dyspnoea, a subjective symptom, presents the most common and the most urgent need for digitalis. So, too, does the presence of—

- (1) Auricular Fibrillation, and
- (2) Gallop Rhythm.

Digitalis increases the efficiency of the heart. It does this by diminishing dilatation. Therefore, in the presence of marked or increasing dilatation, (recognized clinically by congestive heart failure, or by its imminence), digitalis is urgently indicated; contrawise in conditions which present no cardiac dilatation (e.g. peripheral circulatory disorders) it is contra-indicated. So our first and all important consideration is to satisfy ourselves that the patient *really has congestive heart failure*. Most people with lobar pneumonia, for example, do not die with congestive heart failure but rather with peripheral circulatory failure. In acute coronary thrombosis, when you may have both peripheral and central failure going on synchronously the giving of digitalis is contra-indicated.

This general statement may be accepted, however, that in congestive heart failure, whether the hypertensive, luetic or rheumatic types, whether the pulse

rate be slow or fast, in the presence of a non-valvular or valvular cardiac disorder, of a coronary or non-coronary cause, *digitalis should be given*.

A final word is to religiously avoid over indulgence in *exercise* in potential congestive heart failure cases. In those in whom you may anticipate a recurrence always beware of *infections*. These two conditions are the usual precipitating causes.

Bibliography

- DIAGNOSIS OF HEART DISEASE: Heart Committee of New York Tuberculosis and Heart Association, 3rd. Edition, 1937.
- HEART DISEASE: Paul D. White, Edition 2, New York, 1937. The McMillan Co.
- FAILURE OF THE CIRCULATION: Tinsley Randolph Harrison. The Wilkens and Wilkens Co., Baltimore, 1936.
- DISEASES OF THE HEART: Cowan and Ritchie, W. T. Edition 3. William Wood and Co. Baltimore, 1935.
- SYNOPSIS OF DISEASES OF THE HEART AND ARTERIES: G. R. Herrmann. C. V. Mosby Co., St. Louis, 1936.
- CLINICAL HEART DISEASE: Samuel A. Levine. 1937 Edition.

Finding and Controlling Carriers

J. S. ROBERTSON, M.D., D.P.H.,
Divisional Medical Health Officer,
Yarmouth, N. S.

THE carrier factor in the dissemination of communicable disease is becoming more and more prominent as our knowledge of the modes of transmission of these diseases increases. Diphtheria, typhoid and paratyphoid fever, scarlet fever, meningococcal meningitis and presumably anterior poliomyelitis are to a great degree kept alive by apparently well carriers and it is with the finding and control of such carriers that this article is concerned. In the cases of diphtheria and typhoid fever, there are available laboratory procedures, which make the recognition of these conditions definite. Furthermore the Department of Public Health provide various types of container and swabs combined with free service from the laboratory so that there is very little excuse for not following cases and contacts for a reasonable time, so as to have knowledge of the development of the carrier state. The recognition of carriers is the first and important step in their ultimate control.

Let us first consider diphtheria, which appears suddenly in a community which has been apparently free from the disease for months or even years. Due to this the first case is often missed for some days until the disease is full blown—in the meantime the child has probably been in school with a sore throat with a consequent possibility of infecting many of his or her associates. If the school room happens to be one of the few fortunate ones where most of the children have been protected by three doses of plain toxoid it is likely few or no cases will develop, nevertheless in spite of toxoid these contact children are still capable of carrying in their nose and throats and transmitting to others virulent diphtheria organisms. Consequently younger children or even adults in the homes of such carriers may develop the disease unless these carriers are recognised and isolated—such carriers are almost as great a menace as the definite case of diphtheria. The sufferer from diphtheria should be of course isolated, the premises quarantined until two consecutive swabs taken within twelve hours of each other are pronounced negative. No case should be released till this condition has been fulfilled even though it may mean an extra week or even more of confinement. The failure to obtain release specimens before lifting quarantine in a case of diphtheria is a definite neglect of duty by the attending physician.

Furthermore in a school room where a pupil or teacher has developed diphtheria both nose and throat swabs should be taken of all in the room, and at this time let me stress the importance of nasal swabs in contacts for the reason that a greater number of nasal swabs are positive among diphtheria contacts than are throat swabs. All those with positive swabs should be isolated. A virulence test will show those with dangerous (toxigenic) organisms; they should be kept in strict isolation until consecutive swabs taken within a reasonable time of each other have been pronounced negative. These people may remain positive for some weeks. Various preparations have been recommended for their treatment, silver nitrate, argyrol, oil of verbena

and so on but in many cases the time factor seems to be the most important. The use of diphtheria antitoxin either intramuscularly or applied directly to the affected area in diphtheria carriers has not been shown to be of value. In children the best procedure is tonsillectomy.

Before leaving the question of diphtheria let me quote from the Communicable Disease regulations under the Public Health Act:

QUARANTINE PERIOD FOR CONTACTS

- (a) In the absence of laboratory control, a minimum period of seven days from date of last exposure.
- (b) **If laboratory control is available**, until a negative culture has been obtained from nose and throat respectively.

ISOLATION PERIOD FOR PATIENT

- (c) In the absence of laboratory control, until clinical recovery is complete and all discharges from nose, throat and ears have ceased. Minimum period **twenty-one days** from date of onset.
- (d) **If laboratory control is available**, until two successive cultures from site of lesion made at interval of not less than twelve hours, are negative. Minimum period, ten days from date of onset.
- (e) In the case of a carrier, until a negative virulence test is obtained.

Again let me repeat—once a case of diphtheria is diagnosed all contacts should have nose and throat swabs taken, the positive ones should be isolated and quarantined until consecutive negative swabs taken within a reasonable time of each other have been pronounced negative. The case is similarly treated until two consecutive negative swabs from nose and throat are obtained. Furthermore toxoid treatment should be started immediately on all contacts, especially children; in adults a Schick test should be carried out before starting this. The above procedures would soon become unnecessary if more attention were paid to the toxoiding of all children. If each practitioner would give three doses of diphtheria toxoid to all infants of one year and under who are in his practice, then our children would soon all begin school protected against this menace of childhood and diphtheria carriers would lose their importance.

And now the question of typhoid carriers. In past years it was apparently not the practice to follow cases of typhoid by stool and urine examination during their convalescence with the result that the incidence of convalescent and chronic carriers was never known. Many secondary cases of typhoid fever can be directly ascribed to convalescent carriers where no precautions were taken following recovery from the acute symptoms and it is not uncommon to hear from the older people of typhoid fever being in a house over a period of months, due apparently to relaxing of precautions during convalescence of each case. During this period also it was not the rule to disinfect the stools and urine with consequent possibility of spreading infection from this source. It is with the idea of emphasizing the importance of such convalescent and chronic carriers in the propagation of typhoid fever that this is written.

Of late years we have had no water or milk borne epidemic in Nova Scotia, our troubles being due to sporadic cases caused in nearly every incidence by unidentified carriers, carriers who would have been under supervision if they had been followed for a year or so following their illness.

It has been shown that many cases remain positive for varying periods of their convalescence, those positive up to *three months* after clinical recovery

are known as convalescent carriers, if positive for a longer period then they come into the class of chronic carriers. It has also been shown that there is, a marked tendency for the discharge of typhoid bacilli to be intermittent carriers may be negative for months or even years then suddenly become positive again. Consequently the obtaining of a few negative specimens during convalescence is no indication that the case will not develop the carrier state.

That all contacts of a case of typhoid fever should have stool examination is claimed by many investigators due to the carrier condition being shown in persons who have had no clinical evidence of disease. Consequently in the investigation as to the cause of an epidemic or case too much weight should not be put on a negative history of typhoid.

In any suspected case of typhoid fever the following specimens should be submitted (containers for all these are provided by the Department of Public Health)—during the first ten to twelve days of the illness—blood for blood culture, and stools; during the second week of illness—blood for Widal and blood culture, plus stool specimens; later than this blood for Widal and stool specimens. During convalescence stool and urine specimens should be sent in weekly for at least two months, after this at least monthly specimens of stool and urine should be forwarded for at least a year, longer than this if any positive specimens have been sent in after three months. In brief all typhoid fever cases should be followed by means of urine and stool specimens for at least a year after clinical recovery. The proportion of cases which develop into chronic carriers has been estimated by various investigations as one to four percent, the latter figure is, I believe, rather high. In the South Western Health Division of Nova Scotia we have some twelve chronic carriers under observation, the majority of these cooperate well and it is unusual to have cases ascribed to such after they have been instructed and warned. Several have entered hospital for investigation and finally gall bladder removal. This procedure usually results in consistently negative specimens being obtained.

Typhoid carriers who are food handlers are removed from such occupations, as are carriers handling milk. Other than this control depends on instructions regarding clean hands, disposal of stool and urine, use of separate dishes, immunization of contacts and so on. Such carriers are seen as often as possible and specimens obtained.

“Medical History and Its Importance”

J. E. LEBLANC, M.D.

West Pubnico, N. S.

WE read so much today about Medicine, our Profession. We eagerly devour scientific papers—the best literature available, and we seldom ask ourselves (so rapid are the changes that are taking place) what lies behind us; what is buried in the past, the noble souls, the great men who have laid down the principles upon which our profession is founded. When we went to college, we studied literature, and just as soon as we came in touch with our authors, we at once studied history of British literature. We started with the famous “Beowulf”, the first English poem brought over from the continent; then we studied the Anglo-Saxon period; the Semi-Saxon period the Old English period; the Middle English period; and finally the Modern period; that is, the 16th, 17th, 18th and the 19th centuries. We learned how the English language was formed by going through various changes. In other words, by studying the history of the language, we discovered what the English thought was made of, how it began, and how it grew up to the present day. We shall never forget Chaucer, Spenser, Milton and Dryden, who, according to Pope are the “four landmarks of our poetry”. We could mention a long list of authors, namely, Shakespeare, Tennyson, Addison, etc., but the fact remains that when we studied literature, we not only read poems and prose but went deeply into the biographies of each author in order to grasp well his meaning, the influence he exerted over his contemporaries, and the atmosphere, social, political and religious, in which his works were produced.

John Ruskin has written extensively about the treasures hidden in books, about the way we find them and the way we lost them. Having to do with parents respecting the education of their children, he was always struck by the precedence which the idea of “position in life” takes above all other thoughts in the parents’, more especially in the mothers’ minds. . . . “The education befitting such and such a ‘Station in Life’”, he says, “this is the phrase; this is the object always. They never seek, as far as I can make out, an education in itself: even the conception of abstract rightness in training rarely seems reached by the writers. But an education which shall keep a good coat on my son’s back; which shall enable him to ring with confidence the visitors’ bell at double-belled doors; which shall result ultimately in the establishment of a double-belled door—to his own house—in a word, which shall lead to advancement in life, this we pray for—and this is all we pray for”; and the author goes on to say: “It never seems to occur to the parents that there may be an education which in itself is advancement in life; that any other than that may be advancement in Death, and that this essential education might be more easily got or given than they fancy, if they set about it in the right way.”

With regard to our Profession, what objective have we kept in mind? Have we not often kept in view a “Station in Life”, as so well expressed by John Ruskin? What have we done with the past? There are, as you know, two parts to a man’s life: first which has to do with himself, his profession or

trade; and second, that which has to do with his fellow-men. As a matter of fact, it is a noble faculty of our nature which enables us to connect our thoughts, our sympathies, and our happiness with that which is distant in place or time. We live in the past by a knowledge of its history, and in the future, by hope and anticipation. By commemorating upon those who "build", who laid down the foundations of the Art of Healing; by following their examples and studying their achievements; by partaking of their sentiments and imbibing their spirit, we seem to belong to their age and to mingle our own existence with theirs. We become their contemporaries, as it were, live the lives they lived, endure what they endured and partake in the rewards and successes which they enjoyed.

We know what Science has done: how it has changed our living conditions, human society, in other words. To the mass of mankind, Science means the steam engine, the telegraph, the telephone, the dynamo and the motor car; the wireless telegraphy and the aeroplane. It also means the submarine, the poisonous gas, the high explosives, and all the new devices for the sudden obliteration of human lives. No one would belittle the value of those wonderful inventions which have beneficent purposes. But they all minister to physical comfort. They leave the soul of man untouched. The spirit of man—that which is loftier in him—is not lifted up and strengthened by an automobile or traction engine or an incandescent lamp, but the thoughts of men, of our research students conveyed to us in books, are the real forces which have moved the world. It is indeed human thought and human endeavor, which have led men to the heights of intellectual achievements. In our mania for quickening the work and the pleasures of life, one thing we cannot forget is, that the vital principle without which all these things are dust and ashes, is to be found in books—history in particular—where the thoughts—the imaginings of men—are stored up for the guidance and the hope of succeeding generations.

Thus does history play an important role in the domain of intellectual activity. Its purpose is great, because it offers us means whereby we can drink deep—in the stream of human knowledge. In Medicine, we have the "Greek Medicine"—which gives us the very beginning of our history; then follows the "Greco-Roman Medicine", which coincides with the artistic achievements of the Augustin Age; the "Mediaeval Period" comes next, that is, the Age of St. Thomas Aquinas; then the "Renaissance" or Revival of Learning, and the Reformation; the seventeenth and the eighteenth centuries; and finally the Modern Period.

Can any student in Medicine refrain from going into this study at some length? Has he still the conviction that this knowledge is nothing but a relic of the past and obsolete? We do not believe so. "To ignore the times that came before us", says an ancient author, "is to live in a perpetual infancy." This, we do not want. This, we shall not have as long as the value of history, its great purpose and aim, is well recognized.

The ancient writers were very fond of history. All worthy documents were preserved, and we read in "De Oratore", certain pages which are really precious gems of literature. Here, speaking of history, the author tells us that—"History is the Witness of Ages, 'testis temporum'; the Light of Truth, 'lux veritatis'; the Life of the Memory, 'vita memoriae'; the School of Life, 'magistra vitae'; the Messenger of Antiquity, 'nuntis vetustatis'."

These thoughts are full of meaning and could be much more emphasized, but I shall leave them with the reader with the hope that they will create a new stimulus in the minds of the Profession. In philosophy, we learn that the "cause is superior to the effect", that the one who creates is greater than the end-produce itself. Let us keep this in mind with the determination to preserve our worthy heritage, handed down to us by our forbears. By the study of history, individuals like nations, become more conscious of themselves; are able to understand better their destiny; are aware of the tremendous obstacles they have encountered in the past, thereby pointing the way they must follow in their onward march towards progress and towards civilization.

The General Practitioner's Place in Preventive Medicine

E. L. EAGLES, M.D., C.M.
Port Maitland, Yarmouth County,
Nova Scotia

PREVENTIVE medicine, largely a development of the last century, is the force that has been responsible for increasing our average length of life. Its starting point was the discovery that bacteria are the cause of infectious diseases. On the basis of this knowledge means were developed for controlling the spread of disease bacteria. The measures of Public Health and sanitation such as sewage disposal, water purification, supervision of milk and other food supplies and control of communicable diseases were introduced and have become an integral part of our laws. But despite the reduction in the loss of life from smallpox, diphtheria, tuberculosis, typhoid fever, etc., there is still much needless loss of life, sickness and poor health in Nova Scotia.

The outstanding public health problems in Nova Scotia today are the control of tuberculosis, cancer, diarrhoea and enteritis, venereal disease and other communicable diseases. The status of maternal and infant mortality is unsatisfactory; and there is no doubt that school children are in need of more complete medical and dental supervision. In addition there is the problem of the degenerative diseases of the heart, blood vessels and kidneys affecting those in middle life.

The public treat public health problems often with indifference. For example: throughout this end of the province we have had during the past several months a minor epidemic of diphtheria with several deaths. It has taken this scare to bring to the public here, the realization that they can be protected from diphtheria, if only they will. The cure for this indifference lies in education of the public. However the matter of health and its maintenance is so essentially a personal thing that in the education of the community to these public health problems it is necessary to contact them through one who is in close relationship to them, the family doctor. The more the public is educated and the more health services extend into the lives of a community, the more there will be required an active, up-to-date general practitioner to advise them. But, if the general practitioner is to teach, he must first learn.

Some of the indifference to public health problems is also on the part of the medical profession. Many physicians have in the past aimed to treat disease rather than to maintain health. The general practitioner today must be educated to the needs of his community in the matter of public health and be prepared to explain these to his people. As a result of the confidence of the people of his community which he enjoys, the general practitioner has a unique opportunity to do this. May I suggest several of the ways he can render this scientific service to his people:

(a) By accepting opportunities to instruct them through the media of the service clubs, women's organizations, parent-teachers associations, the

radio and the press. Based on our public health problems he has a number of subjects upon which he should be prepared to give authoritative and up-to-date instruction e.g., tuberculosis and the tuberculosis clinics, cancer, syphilis, prenatal and postnatal care, communicable diseases, periodic health examinations, dental care, school hygiene, dysentery and enteritis, pasteurization of milk, sewage disposal and a pure water supply.

(b) By his counsel to patients who desire advice on health problems.

(c) By an active support of the Department of Public Health in all its endeavors.

(d) By education of his maternity cases to proper prenatal and postnatal care.

(e) By accurate and prompt reporting of notifiable diseases to his District Medical Health Officer. Especially with regard to cases of tuberculosis and venereal diseases. These diseases it is authoritatively said are inadequately reported in Nova Scotia.

Much might be written on any of our public health problems, but I wish to close this article with the discussion of one, namely,—periodic health examinations. A section of the public is coming to realize that these examinations are to their great benefit, but the majority of people do not know what a periodic health examination is let alone its reason for being. Here the general practitioner has a service to perform to his patients by teaching them individually and collectively why they should for their own benefit have periodic health examinations. The situation, briefly, is this: Infectious diseases strike primarily children, but as a result of the control of infectious diseases most of our children, now reach maturity. We have been successful in getting our children raised, but how long are they going to live as adults? Unfortunately general preventive medicine at the present does not give assurance that they will live to the ripe old age that adults can and should attain. The boy or girl who a hundred years ago would have died of smallpox or diphtheria, now lives long enough to have cancer and diseases of the heart, blood vessels and kidneys. These diseases of middle age can only be controlled by a personal preventive medicine which involves the active participation of each individual. Complete periodic physical examinations will give the opportunity for detecting early cancer. Degenerative diseases of the heart, blood-vessels and kidneys develop slowly so that they can usually be detected in their incipiency. When so detected they can be arrested. Although some of these diseases cannot be remedied, they can be delayed and many years thus added to life. One would think that the paramount importance of annual health examinations would at once be apparent to everyone who wished to prolong his life to the full and healthy extent that is now possible.

To arouse the public to its needs in health, and to what it is now possible for preventive medicine to accomplish, the general practitioner must know what these things are himself and realize his importance and responsibility as the connecting link between preventive medicine and the public.

Doctor, Where's Your Scissors?

“DR. I. M. QUIMBY”

NOW that I have completed fifty years in general practice, I feel that I should record some of my interesting experiences. I am encouraged in this by many of my friends who tell me that they are sure I have had as many unusual cases and experiences as those eminent doctors who are writing books about “White Coated Armies”—“Doctor, Here's Your Hat”, “Horse and Buggy Doctors” and, one might almost say, too many others.

I was born in Baddeck, and brought up in a strict Presbyterian home. What a day Sunday was! I wonder if my desire to be a Doctor arose from my observation that a Doctor's Sunday was given over to works of necessity and mercy, and, therefore, he seemed to do as he pleased. Whether that is so, or not, I am not prepared to say, but after my preliminary education I entered the Halifax Medical College and graduated, a full fledged doctor, in 188-. My memories of my teachers remain as clear as if those days were yesterday. Doctor “C”, who used to tell us not to stick our noses too far into to-morrow, lest we should get hurt. Whimsical Doctor “F” whose advice regarding answering calls amused us. He said one of the reasons a doctor should hurry when called, was because the patient might recover before he got there. Regarding convulsions in children, he said, never hurry too much going. If you time it right, the child will have recovered from the fit by the time you get there. After you have prescribed, get away as soon as possible,—the child might have another convulsion before you leave. They were great old men, and tried faithfully to transfer their knowledge to us.

Following my graduation, I started to practise in Anchorville, where I had been told there was an opening for a young doctor. The doctor there had reached that age, when he desired to take life a little easier. When I called on him, he told me that “if I stayed no doubt I would get something to do.” As he had opposed every young doctor who had settled there previously, (so vigorously as to make their stay short), I felt that either I appealed to him, or else he felt I would not be strong opposition. At any rate I stayed and got to know him well in the years before his death. He had graduated from the University of Pennsylvania and had a Post Graduate course in London, so that his education was as good as his day afforded. He was of middle height, sturdy and alert, mutton chop whiskers, and twinkling eyes. His genial laugh; his habit of whistling was well known in every house for twenty miles around. His experiences had been interesting and varied; he was a great believer of rest in bed as a therapeutic measure, although he took little of it himself. He told me of a lesson he had learned in the efficacy of this measure. Some years before he was called to see a woman whose complaints and his examination convinced him that she was suffering mostly from fatigue. He gave her some tablets and told her to stay in bed until he called again. He went away intending to call in one week's time. Pressure of calls drove her from his mind until one month later he was passing her home, and suddenly he remembered her. He went in, expecting to be upbraided for his tardiness.

He was, for he found she had stayed in bed waiting for him to call, as he had instructed her. He said, however, it was worth it, for she was very much improved, and after giving her further instructions regarding a gradual return to work, he left, convinced of the efficacy of rest. "Rest in bed, my boy" he would say, with twinkling eyes, "that's the cure for practically all ailments."

He was resourceful; one morning a neighbor of his—a nervous woman—on arising from bed, stepped on a needle, which penetrated into the sole of her foot, and then broke off, leaving about half the needle imbedded. He was called. He examined the foot, and found that the needle had penetrated deeply, so that only a tiny hole showed in the skin. He probed this, and found nothing. He realized that the best thing to do was to leave it alone for a while, in which case one of two things would happen. Either it would imbed itself and give no trouble, or it would suppurate and come out easily. He knew if he told her this, she would not agree,—or if she did, she would worry herself sick for fear the needle would "travel". So he examined the part of the needle found, and taking it with him, went home "to get some things he needed." At home he found a needle the same size as the broken one,—broke it carefully in the same place as the other, and took the piece corresponding to the piece in her foot. This he placed in some ointment, which he had smeared on some gauze. Going back to his patient, he enlarged the opening in the foot slightly, applied the gauze and ointment, and bandaged it in place. He told her to remove the dressing the next morning, and she would most likely find the needle in the ointment. She did. Her mind was contented. Her foot did not suppurate.

He was quick-witted. Called to see a young woman in an hysterical seizure, and knowing the mentality of both the patient and her family—he examined her carefully and satisfied himself that her attack was purely functional. He then seized her by the head, and violently twisted it from side to side and up and down, until the patient cried out in pain. He stopped, gazed at her steadily, and then repeated the treatment even more violently, until the patient cried out in pain which was quite genuine. He stopped. The patient lay quiet—free from hysteria. He then explained to the patient, and her family, that her attack had come on because her brain had become twisted until it was "wrong end to". He had just succeeded in replacing it in its proper position. Should the attack recur, he could replace it successfully, but he warned them that the next treatment would be much more violent and more painful. She never had another attack.

He was foxy. We were friends, and occasionally he called me in consultation. When he did, his horses were always tired, so that we invariably went in my carriage. To the people along the road it was "The young doctor has had to call the old doctor in consultation again." I enjoyed him, and mourned his death.

About this time occurred the episode which gives this paper its name. Attending a midwifery case in an isolated district in the middle of the winter, I was called to a nearby house and found a young man suffering from a very acute attack of appendicitis. An immediate operation was the only solution. To take him over winter roads to train and hospital was impossible. No time, and too much shaking up. No time to summon more help. I decided to operate alone with the help of the neighbors. I had not come very well prepared, but a scalpel, one pair of small scissors, a few artery clamps, two bent forks for retractors, enough catgut, boiled towels for mops and drapes, enough

chloroform, iodine and other things in my bags. I got them together, and boiled all the instruments in the dishpan. I got him under the anaesthetic, and then instructed a man, who happened to be the undertaker in the district, to keep dropping a few drops per minute on the mask. His abdomen had been prepared and painted with iodine. I opened his abdomen as quickly as I could,—used my fork retractors, and luckily found the appendix quite easily. It was very much inflamed and distended. I removed it, and cauterised the stump with a red hot poker from the fire. I closed the abdomen and put a binder on the patient. I began to clean up my instruments and could not find my scissors. The most careful search failed to find them. They were never found. The patient always claimed they were inside him because, in spite of the fact that he made a good recovery, and fully regained his health, he said every once in a while he had a “cutting pain” in his abdomen. The story went abroad in the district, and “Where’s your scissors, Doctor?” became a saying for a time. I heard it from my friends, and I am sure it was used by others not so friendly.

I seemed to find myself in predicaments which forced me to take my own medicine. Early in my practice I was called one night to see an elderly man suffering from a pain in his left side,—just too high for his stomach, and too low for his heart. What was causing it? My examination gave me no clue. It did not seem severe enough to give him morphia, so I told them to keep him quiet and left him twenty tablets of Calomel, grains 1/10th, with instructions to give him two every half hour while awake. I left, promising to return in the morning, and hoping to myself that something would occur to help me find the source of the trouble. I was only home a few minutes when I received a message to come back at once. Arriving at the house, I was shocked when they told me that they had given him two of the tablets, and a few minutes later he fell back dead. I looked at the dish with the tablets,—eighteen on actual count. I looked at the man,—two tablets in him. He was dead,—that was certain. I looked at the family and said—“Of course the tablets didn’t kill him.” They said—“No-o-o-o”. But still a few minutes after he took them he was dead. I talked with them for a while, and I could see that they were not convinced. It was important to convince them, so I asked for a glass of water, and taking the eighteen tablets in the palm of my hand, I said “Now, just to prove to you that these tablets are NOT poisonous, I am going to take all of them in one dose.” I put them down with a good drink of water, and they watched me closely during the quarter of an hour I stayed before I took my departure. I went home, wondering uneasily if I had possibly made a mistake the last time I filled my calomel vial. Next morning I knew I had NOT.

Another time an old friend of mine, an elderly farmer, consulted me. I found nothing organically wrong, and gave him directions to take more rest,—changed his diet, and gave him a good tonic. Some weeks later, I was called to see him about midnight. I found him in bed,—not ill, but quite apprehensive. After a few questions, he told me his story. A neighborhood friend was a believer in homeopathic medicines, and as he found his progress slow, she persuaded him to stop my medicine and take hers. She warned him, on his life, not to take both on the same day. He took her medicine for a few days. That night he had taken her medicine, after supper, and about an hour later, absent-mindedly, took a dose of my medicine. He then thought of her caution, and began to feel queer. This state of fear persisted until he

felt he had to call me, and find out his danger. I asked his daughter to bring me the homeopathic medicine. It consisted of about a quarter of a teacup full of very small pellets. I tasted a few, and the taste was not strong—rather sweet. Then I said to him—"Donald, there is no need to fear,—you have done yourself no harm. These things are just small pieces of sugar. To prove it to you, I will take all of them at one dose." Taking a glass of water I swallowed all the pellets, and bade Donald go to sleep and not to let himself be fooled again. On my way home, again I wondered uneasily what might be in the pellets. I found out. I wonder what cathartic homeopaths use to be so tasteless and so strong.

On the Importance of Examination of the Lower Bowel

A. F. WEIR, M.D., Freeport, N. S.

NO part of the human body is so neglected and abused as are the rectum and anus. People neglect the "call of Nature" and then, when the sensations of the rectum become dulled after many repetitions of this neglect, they make matters worse by using purgatives and enemas. To appreciate what a soap-suds enema does to the mucosa of the colon, all one has to do is to drop a little soapy water on the conjunctiva. It must be just as irritating to the colon as it is to the eye. They scratch the anus with rough toilet paper and use all manner of self-treatment for what they believe to be piles when they may have a fissure, an abscess or even cancer. To make matters still worse the region is neglected by the medical profession. Too many doctors are prone to accept the patient's diagnosis of "piles" and prescribe ointments or suppositories without ever making an examination. I belonged to this class for several years, until I learned a few lessons. I believe what started me out wrong was the fact that when I studied medicine the practical study of diseases of the rectum was about on a par with practical obstetrics. I gathered the impression that any patient, male or female, did not want a rectal examination. I trust that twenty years has brought about a change for the better, and that more recent graduates are just as ready and competent to examine the rectum as the pharynx. Whether it is due to a lack of proper instruction on the disorders of this region or to a fear of offending a patient's sense of modesty, it has certainly been slighted by us doctors. It is this very neglect on our part that caused the injection treatment of haemorrhoids to fall into the hands of quacks when it is just as ethical and almost as efficient as the injection treatment for varicose veins. It is one of the reasons why so many people treat themselves with remedies so freely advertised for the cure of piles.

Nothing could be much simpler than the making of an examination of the anus and lower rectum. All one needs is a pair of rubber gloves, a tube of lubricant (not vaseline), a long and a short speculum and a good headlight, such as the Klinostic. One should have a table at the proper height and I, for my part, prefer to have the patient in the left latero-prone position. If one is not satisfied with the results obtained after making an examination with such equipment, the case should be referred to a specialist. I am writing this from the viewpoint of a general practitioner. One should not be satisfied until he is reasonably sure that he has diagnosed all the conditions present.

The following are reports of a few cases that will illustrate some of these points:

Case 1. A boy two years old whose mother said "Something came out when his bowels moved". On investigation I found that his mother, an otherwise intelligent woman, had been giving him S. S. enemas daily since he was six months old, because she found that in that way she could generally keep him clean. For the last year she had been seating him on a chamber-mug in a squatting position, so it was small wonder that he had developed a prolapsus ani. Discontinuance of the enemas and the use of a commode-chair cured the prolapse at once, but I was a long time in restoring proper tone to the rectum.

Case 2. A man 55 years old, complaining of itching and a feeling of fullness in the rectum, even after the bowels had moved. When I started to examine I saw some pin-worms coming from the anus, so without any further examination I jumped to the conclusion that the worms were the only cause of his complaints. Treatment with hexylresoreinol got rid of the oxyuris, but the feeling of fullness persisted. So I examined him again and more thoroughly. This time I found a rectal polypus about the size of a hen's egg. On removing this under a general anaesthetic I did get a cure. This case happened several years ago and impressed on me the fact that one should not be satisfied with a superficial examination.

Case 3. A man 58 years of age, complaining of bleeding from the rectum, several bowel movements a day and a desire to strain even after the bowels had moved. On examination I found some internal haemorrhoids, but was not satisfied that there was nothing else wrong. He had a very bad family history as regards cancer and the complaint of straining after stool suggested something higher up in the bowel, even if I could not feel or see it. I referred him to a surgeon and in a few days he came back and said the surgeon had told him he had piles and wanted him to come back later to have them removed, after he had arranged his business affairs so he could leave them. He asked me if I would not treat the piles by injection, as he dreaded an operation. I did so and got a good result as far as the piles were concerned, but when I made my last examination I could see sero-sanguinous fluid trickling down from high up in the rectum and could feel a small mass. This time I sent him to another surgeon and he finally underwent an operation for removal of the rectum and a colostomy. I think that when he went to the first surgeon he minimized his complaints because of his dread of an operation. Otherwise I feel sure that the adeno-carcinoma that was present would have been diagnosed.

Case 4. A summer visitor, 52 years of age, who said he had had "bleeding piles" for 12 years. During that time he had consulted several doctors about his condition. They had all accepted his diagnosis and prescribed suppositories or ointments without making any examination. On examination I found three internal haemorrhoids and suggested to him that I treat them by injection, as they were not prolapsed or inflamed. After the first injection with carbolic and glycerin the bleeding stopped and after about two weeks treatment the piles were sclerosed and he has had no trouble since. This happened six years ago. Any one of the doctors who saw him before I did could have done the same thing if they had only taken the trouble. He was one of my most grateful patients. He even paid me.

To sum up, the points I want to make are:—

1. Patients should be made to realize that the rectum and anus constitute a vital organ that should not be subjected to neglect or abuse. Too many look upon the anus as just the outlet of a sewer.

2. We should always insist on making an examination on any patient having complaints pointing to diseases of the anus or rectum and should make rectal examinations oftener in cases of suspected appendicitis, rectocele, obstetrical deliveries and other conditions of the pelvis.

3. In making such an examination we should not be satisfied until we have made as thorough an examination as possible. If still not satisfied, the case should be referred to someone who can complete the diagnosis and treatment.

An Obstetrical Case

C. A. WEBSTER, M.D.,
Yarmouth, N. S.

THE Tusket River in Yarmouth County, Nova Scotia, empties into Lobster Bay, which is a broad indentation of the Atlantic Ocean on the south-west coast. On the eastern side of the river, lies Wilson's or Sheep Island, about two and one-half miles long. On the west, is the peninsula called "The Wedge", a little to the south of which lie the Tusket Islands. These form the western mouth of the river.

Lobster Bay is a rough place in a gale with the wind from any quarter except the north, as the seas sweep in from the open ocean unimpeded, breaking with immense force on the rocky shores and gradually losing their power as they roll into the mouth of the river.

On Sunday, July 3rd, 1892, a heavy gale, thirty miles per hour, accompanied with very heavy rain and fog, arose. On this day, the iron ship "Peter Stuart", loaded with deal, out of Saint John, N. B., bound for Liverpool, England, was approaching Lobster Bay, trying to beat round Cape Sable Island. At eight o'clock at night she struck on Gannet Rock Ledges, and went to pieces. It was too rough to launch the boats, and out of twenty-seven souls on board, fifteen were lost. The survivors were washed overboard in one of the life-boats and were driven ashore on Chebogue Point.

The same evening, I was called to attend a young woman in her second confinement, who was living on Sheep Island. It was blowing hard, and raining as heavily as it ever does rain. I wore a light summer overcoat, high hip rubber boots, a long rubber raincoat and a sou'wester. As I drove the fourteen miles to the place in Wedgeport where I was to find the boat to put me on to the Island, it was too dark to see anything, but the horse trotted along freely, and in such a storm, there was no likelihood of meeting anyone on the road. Everybody kept close indoors.

About 1.00 a.m. of the 4th, I got the horse in a barn, and being told that the boat was waiting for me at the wharf, and being directed how to find it as I had never been there before, I proceeded alone towards the river, carrying a large wooden box of medicines in one hand, and the usual obstetrical bag in the other. By good luck I found the wharf, and walked out on it expecting that someone would be on the lookout for me. It was absolutely dark, and although I called out several times, I got no reply. Reaching about the centre of the wharf, I fell through a hole, bringing up very suddenly at my arm pits with a bang, as the box and bag clattered on the planks. I was literally suspended between the sky and the sea, my legs dangling in space. Dressed as I was, it was with great difficulty that I was able to extricate myself. I decided that walking in that neighbourhood was a dangerous procedure, so I crawled to the edge of the wharf and followed out to the end along the capstan. There I was able to make out a couple of masts against the sky, but could not see the boat itself. However, much shouting finally aroused a couple of men who got the box and bag and myself aboard a large open fishing sail-boat, as it was before the days of gasoline and motor boats. It was so dark that we could not see one another and the wind and waves made so much noise

that we could hardly hear ourselves either. The men put up only a reefed foresail for the trip of over two miles across the river, which while rough, was uneventful. The sea being too rough to make the lower end of the island where the woman lived, I was landed on some marshes north of the island. Then we had to walk over marshes through woods and fields and rough cart-roads between two and three miles to reach our destination, and it was 4.00 a.m., July 4th, and still raining and blowing when we arrived at the house.

I found the house quite crowded with women and children and the sick woman having considerable pain. After sitting around a while, I examined and found it was a vertex case, too high to be certain of the position, the cervix not dilated and waters intact. There was nothing to do but wait.

In a couple of hours, breakfast was served, and the menu was not extensive. The people (although it was midsummer) had neither milk, butter or sugar. I chose two hard boiled eggs with dry bread and well boiled tea. The family were using lard spread on their bread in place of butter.

Towards noon, it cleared up nice and fine after the storm. The woman kept having pains which did not seem to do much good, and I sat around sampling the various chairs. Unfortunately I had not brought any reading matter, and the time passed very slowly. Dinner time came, and besides the dry bread and boiled tea, we had fish and potatoes.

Finding very little or no progress in the case, and as she was making a great ado, I gave her morphia hypodermically, and telling the woman that she would not be through until night, I escaped into the open air and wandered across the island and found a sunny secluded clearing, where I lay down in the long grass and rested for a few hours, escaping from the lamentations of the patient and the importunities of the attending women, who kept urging that something had to be done.

When I returned near tea time, I found that the patient had had some rest. Tea was a repetition of breakfast, two boiled eggs, dry bread and boiled tea. In the evening the pains became better. All night long they came and went, and the cervix gradually dilated. At 6.00 a.m. on January 5th, the waters broke, but there was no advance of the head, which was occiput posterior. At 7.00 a.m. I applied forceps, but could not bring the head down. Finally the forceps slipped off over the head with a snap. I reapplied them several times, but they kept straightening and slipping over the head, which became very slippery from the injury to the scalp and blood. I was now at the end of my tether, as it was impossible to do a podalic version, and a Caesarian section was out of the question, while craniotomy was likewise impractical.

The men were told to row to Wedgeport and telephone for Dr. Edgar Kelley, and to tell him to be sure to bring a heavy forceps. Dr. Kelly arrived on the island towards noon, accompanied by two priests. I applied his forceps and at 1.00 p.m., the child was delivered, the head rotating into an occiput anterior. The child, which was dead, was a male and weighed nine pounds. The perineum was not torn, and the patient made a good recovery.

While there is nothing very unusual in this case, it shows how uncomfortable, time-consuming and fatiguing obstetrical work in the country may be at times. Had it occurred in the winter, it would have been worse. The afternoon of July 5th, when the men rowed Dr. Kelley, the two priests and myself across the river, was a beautiful summer day.

This case taught me never to be without something to read. It also demonstrated the value of a good forceps. In my opinion the genuine Simpson

is the best for most cases. I emphasize "genuine", as the modern Simpsons are not shaped like the genuine, either in lock or blade.

I also believe that all maternity cases occurring in the country should be taken to maternity houses under the charge of a suitable nurse, instead of the doctors being compelled to travel long distances, and spend needless time attending such cases. This is a matter that has been too long delayed, and is a question up to every community.

The storm, the rain, the darkness, the wierd crossing with unseen men and the unknown point of landing, seem to have made a more vivid impression on my memory than many other happenings, and has enabled me to give an account in greater detail than I otherwise would.

Regional Ileitis or Crohn's Disease

R. B. EATON, Amherst, N. S.

This inflammatory condition of the intestine occurs most frequently in the lower ileum and may produce symptoms and signs closely simulating acute appendicitis. During the past decade considerable attention has been focused on this condition. Few cases have been reported involving such an extensive area as in the following:

History. Mrs. A. B. age 22, admitted to hospital 21:10:38, complaining of colicky abdominal pain of 36 hours duration. She had always been healthy and gave no previous history of any significance.

Her present illness began at 7 p.m. 19:10:38 with rather vague abdominal pains, cramp-like in character and more or less centered about the umbilicus. The pain was paroxysmal, increasing in severity and associated with disinclination for food. Soon after the onset she felt nauseated and vomited once. There was a desire to defecate followed by three loose bowel movements. No blood or mucus was noticed. On the following morning, 20:10:38, after a restless night she felt improved and was first seen by her doctor. Vague abdominal pains continued during the rest of the day. On the morning of 21:10:38 the pain became worse and settled in the lower right quadrant. She was admitted to hospital where I saw her for the first time.

On examination she was a well built young woman, weight 140 lbs., toxic looking, tongue dry and furred, breath offensive. T.99.4, P. 100. The abdomen was slightly scaphoid with restricted respiratory movements. Rigidity was present on the right side, more marked in the lower right quadrant. Tenderness was most marked at McBurney's point, as also was hyperaesthesia. Obturator and psoas signs were positive. On rectal examination she was tender on the right side, otherwise no abnormality. She was menstruating. Urine was normal except for a trace of acetone. W.B.C. 8,000. No other blood or bacteriological examinations were carried out. A preoperative diagnosis of acute appendicitis with flank and pelvic peritonitis was made.

Operation. A right oblique muscle cutting incision (Rutherford Morison) was used. On opening the peritoneum scanty serous fluid was evident. On palpation the appendix was found to be retrocaecal and retroperitoneal; it felt tense and distended and was removed by the retrograde method. It was injected on its serous surface, but on slitting it up, the mucosa appeared normal. It was concluded that here was not the source of her trouble. The wound was therefore extended and on palpating her abdominal organs they felt normal. On eviscerating a loop of the lower ileum, it was inflamed, mottled with haemorrhagic spots, and covered with flakes of fibrinous lymph. On following this loop upwards it was found to involve the whole ileum and the jejunum to within 18 inches of the duodeno-jejunal junction. The affected intestine was moderately distended and the caecum was normal. The abdomen was closed without drainage. A post-operative glucose and saline was given.

Progress. 1 to 7 days. Uneventful. The pain subsided and the temperature and pulse became normal. The skin sutures were removed on the seventh day with the wound healed by first intention.

8th. day. The patient became suddenly ill with T.103.6, P110 and she complained of generalized abdominal pains more marked in the right hypochondriac region. Intramuscular and oral sulphanilamide therapy was instituted.

12th. day. She was greatly improved, T.99,P.80 and she felt quite well apart from vague paroxysmal attacks of abdominal pain. Sulphanilamide therapy was omitted owing to toxic symptoms.

21st. day. She was discharged but still complained of mild attacks of pain once or twice a day. She had lost 19 lbs. from the onset of her illness.

Six weeks later she visited my office and reported she was feeling much better, the pains had subsided, her appetite was improving and she had gained 5 lbs. in weight.

In a recent communication, 15 weeks after the operation, the patient stated that she was in perfect health, gaining weight and doing her housework.

COMMENTARY

This is an example of acute regional ileitis or Crohn's Disease. Moynihan described simple inflammatory tumours of the intestine in 1907. Dalziel in 1917 described chronic interstitial enteritis. Moschowitz and Wilensky also reported 4 cases. It was not until 1932 that the condition became fully recognized when Crohn, Ginzburg and Oppenheimer described in detail 14 cases affecting the terminal ileum. Little has been added to our knowledge of this condition, yet several contributions have appeared especially from the U. S. A. reporting larger series of cases. Most cases described show a predilection for the terminal ileum, yet more recently, isolated cases affecting the colon alone have been reported (James).

Crohn describes 4 clinical groups;

1. With a history closely simulating acute appendicitis.
2. Resembling ulcerative colitis.
3. With abscess formation and external or internal fistula.
4. With signs and symptoms of chronic intestinal obstruction.

Clinical features are fairly typical in subacute and chronic forms. Young males are mostly affected. The common symptoms are abdominal pain, loss of weight, low grade fever, anaemia, diarrhoea and a palpable mass in the abdomen.

Barium meal shows spastic irregularity in the subacute form and a string-like shadow of the affected segment in the chronic (Sproul and Kantor). Etiology is unknown. It is most likely infective in origin, yet no specific organisms have been isolated from the faeces, intestinal wall or lymph glands. *B. dysentericus*, anaerobic streptococcus, tubercle bacillus, a low grade lymphatic obstruction and trauma to the intestinal mucosa have all been blamed. Crohn thinks the appendix may initiate the condition in some cases. Ravdin describes extension from the appendix in fibroblastic types.

Pathology varies according to the stage, and all stages of inflammation are seen. In the acute form the bowel may appear thick and covered with fibrinous lymph, later adhesions may form or still later abscess with internal or external fistula. The chronic form presents as a non-specific granulomatous inflammation associated with ulcers of the mucosa and hyperplastic and exudative changes involving all the coats of the intestine, with an oedematous mesentery and enlarged lymph glands. Giant cells may be seen in this stage

but on careful microscopic examination other characteristics of tuberculosis are lacking. Crohn inoculated guinea pigs with triturated material from the mesenteric glands in 5 cases with negative results.

Differential diagnosis:

1. Acute appendicitis. Before operation it may be impossible, but may be made on the basis of the absence of the usual sequence of pain, the development of symptoms more slowly and a normal leucocyte count.

2. Gastro-enteritis develops more rapidly and there is a persistence of vomiting, diarrhoea and a characteristic history.

3. Ulcerative colitis is characterized by a severe diarrhoea with blood and mucus in the stools.

4. Intestinal tuberculosis is usually diagnosed by finding a tuberculous focus elsewhere in the body.

Treatment may be summarized as follows:

1. The acute cases may undergo resolution, especially those in which the mesentery is not thickened or indurated. If a very limited segment is involved resection may be carried out.

2. In the subacute and chronic cases short circuiting or resection in one or two stages is resorted to.

3. No medical treatment has been found to affect the course of the disease.

As a palliative measure it is suggested that a bland non-roughage diet be given.

References;

1. Moynihan, Edin. Med. Jour. 1907 XXI 228.
2. Dalziel, Brit. Med. Jour. 1913 11 1006.
3. Moschowitz and Wilensky, Amer. Jour. Med. Sci. 1923 CIXVI 48.
4. Crohn, Ginzburg and Oppenheimer, J.A.M.A. 1932 XCIX 1323.
5. Crohn, J.A.M.A. 1934 CIII 2021.
6. Kantor, Ibid. 2016.
7. Sproul Amer. Jour. of Roent. Dec. 1936.
8. James Brit. Jour. Surg. 1938 XXV 99.
9. Ravdin, Annals of Surg. 1937 Vol. 106 3.

The Nova Scotia Medical Bulletin

Official Organ of The Medical Society of Nova Scotia.

Published on the 20th of each month and mailed to all physicians and hospitals in Nova Scotia. Advertising forms close on the last day of the preceding month. Manuscripts, preferably typed and double-spaced, should be in the hands of the editors on or before the 1st of the month. Subscription Price:—\$3.00 per year.

Editorial Board, Medical Society of Nova Scotia.

DR. H. W. SCHWARTZ, Halifax, N. S.
Editor-in-Chief

DR. J. W. REID, Halifax, N. S.

DR. A. L. MURPHY, Halifax, N. S.

and the Secretaries of Local Societies.

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

VOL. XVIII.

MARCH, 1939

No. 3

Chemotherapy.

THE coming of Sulphonamide Chemotherapy has been warmly welcomed by the medical profession all over the world. After the first wave of enthusiasm had passed over, careful critical observation has definitely demonstrated that this is no "hit or miss" therapy.

Its anti-bacterial action is highly selective, and even susceptible bacteria respond differently to the treatment. Some require only a small dose over a short period; others require larger doses over a long period. Then again, certain strains of the same organism do not react at all to sulphonamide. One of the most discouraging facts brought to light is its ineffectiveness against sub-acute bacterial endocarditis.

Sulfanilamide has been shown to possess a cumulative toxicity in rabbits. Repeated oral administration of 0.5 to 1.0 gm per kilo led to nervous symptoms, weakness, emaciation, and a considerable percentage of deaths.

The influence of diet was shown, in that a dosage of the drug which was tolerated by rabbits on a cabbage diet caused a high percentage of deaths in animals on a diet of oats plus cabbage or oats alone.

The extent to which cumulative toxicity of sulfanilamide occurs in man remains to be determined, particularly under those conditions often present during therapy—restriction of diet and toxemia.

The number of bacteria now known to be sensitive to sulphonamide compounds include: hemolytic streptococci, certain non-haemolytic streptococci; members of the coliform group, pneumococci, gonococcus, and meningococcus.

With reference to its particularly selectivity for the pneumococcus, it is interesting to follow the effects produced by the administration of May and Baker's T 693 on clinical lobar pneumonia. T 693 (Dagenan) is a compound of sulphanilamide and pyridine (para-amino benzenesulphonamido-pyridine). This particular preparation (in tablets $7\frac{1}{2}$ grains each shows a bacteriostatic potency equal to sulphanilamide with a much wider anti-bacterial range.

Very interesting reports have come in from its use in pneumonia, all types seeming to be equally affected. In our group in Yarmouth of only five cases

(two of type 2, one type 4, one type 3), the reactions were immediate. Temperature, pulse, respiration and clinical signs responding at once to its administration. It will be interesting to hear through THE BULLETIN of the results observed in the larger centres where, no doubt, many cases will be treated with this new drug. Already reports from Montreal hospitals give similarly encouraging statements.

The conclusions reached following a series of one hundred cases of pneumonia treated in Philadelphia hospitals as recorded in the February 11th edition of the Journal of the A.M.A. reports:

"A conspicuous effect of the drug seemed to be its ability to bring about, within twenty-four to forty-eight hours, a critical drop in temperature followed by prompt clinical improvement."

With the almost prohibitive price of anti-pneumococcic serum and the more or less difficulty in giving it intravenously (especially to allergic adults and all children) a drug of the type of T 693, which can be given orally, is placing a remedy within the reach of every physician and the resources of every citizen. It remains, of course, to be determined whether it will be as effective as early reports seem to indicate.

Pneumonia has seen the fall of many therapeutic empires.

T. A. L.

State Medicine

STATE Medicine has been brought prominently to the notice of the American Republic by the announcement, a few weeks ago, that a Federal Grand Jury at Washington had indicted three affiliated societies and twenty-one leading physicians of the American Medical Association on a charge of violating the Sherman Anti Trust Act. This is news of great importance to everyone and the results of the decision may have an important bearing on public health measures all over Canada and the United States of America.

In these days of unemployment and social unrest everywhere there is a demand for an extension of the present public health services plus some form of health insurance. The laboratory investigation of disease has increased hospital expenditure and the charges for these services have become a real burden to the "white collar class". Eighty-five percent of all Americans (and Canadians) earn \$1400 and less, so that they simply cannot afford to be sick at the present high cost of medical care. An operation or serious illness is often a financial tragedy. To meet this situation, voluntary prepayment organizations or groups have sprung up all over Canada and the United States of America, in which the member pays a small annual fee covering all or part of the expenses of hospitalization. Most of these have been co-operative and no profit making, while others have been business ventures. The Canadian Hospital Council apparently approves, as it issues a booklet on group hospitals in which is given the experiences of various groups throughout Canada as well as instructions for organization.

But the American Medical Association opposes any form of socialized medicine. It objects on three main grounds, fear of bureaucracy, fear of political control, and fear of the loss of individual freedom of the medical profession. Many of us, whose memories go back twenty-five years, can recall the great opposition to the National Health Insurance Act in Great Britain,

which was carried on by the British Medical Association led by Sir Victor Horsley. However, the panel system, as it is known in England, has come to stay for doctors and patients have both decided that it is better than the old system. The medical men are earning more and the patients are getting better care.

Some form of socialized medicine ranging from the contributory insurance plan of England to the complete State control of medicine in Russia has been adopted in many countries of Europe, but on this continent we have not advanced much beyond the voluntary groups which have been formed as cooperatives. The New Deal Government in the United States of America having tried its hand at agriculture, stock market control and many socialized schemes now evidently intends to take up some form of State controlled medicine. It has apparently selected a co-operative health group of government employees in Washington, whose hospitals and medical staff have been under the ban of the American Medical Association as the indictment was based on the evidence of the Association's activities against this Health organization. This all promises to bring to a head the conflict of opinion as to whether the Medical Art shall continue in America to flourish as at present under private enterprise, or as a State controlled institution. It is a matter of interest to the Canadian medical profession and public generally. We are bound to be influenced by events taking place in our big neighbor's country. We wear the same collars, have the same athletic games, are flooded by American magazines, movie films and radio programmes, and when they prosper or have a depression so do we, a little later on.

L. R. M.

CASE REPORTS

Extensive Second and Third Degree Burns

Name: Mr. F. M. B. Age: 42 years. Weight: About 140 pounds.
Occupation: Engineer.

Diagnosis: Extensive second and third degree burn.

History: The patient a tall, wiry, underweight person, stepped in a steam trap Feb. 1, 1935, and severely burned his right leg from the ankle to the knee—his shoe protected his foot. He was first treated at a relief hospital. Two days later I was called. The burned area was covered with an ointment containing 5% tannic acid. For a time there was considerable exudate and little or no healing. The treatment was then changed to 1% picric acid dressings. After 18 days treatment there was little or no improvement. Ulcers had formed at numerous spots where the burn was deepest. Some of the ulcers were discharging, none showed evidence of granulation, and several bled when the dressings were changed.

Treatment and Results: On Feb. 19, 1935, a generous layer of Gadoment was applied to the entire burned area and the dressing was not changed for seven days. At that time the patient was up walking about the house and he stated that he felt very much better. When the bandage was removed the entire area was in a healthy condition with no indication of any infection. A thick layer of Gadoment was again applied and left for seven days. When the second dressing was removed the entire burned area was improved. From this time the dressings were changed at two to three day intervals. At the end of three weeks treatment there was good granulation over the entire area and the ulcers were filling in very rapidly. The Gadoment dressings were discontinued Mar. 15, after 26 days treatment. For a time the burned area was dusted daily with a zinc stearate powder to prevent chafing by the clothing and the patient was discharged May 23, 1935.

SUMMARY

The foregoing case is given as an example of several cases of extensive second and third degree burns treated by me in a similar manner since 1935. It is not my intention to offer definite conclusions concerning the value of Cod Liver Oil ointment in the treatment of burns. However, the results are sufficient to offer definite evidence of the value of Cod Liver Oil ointment in the treatment of burns.

Varicose ulcers, Traumatic ulcers, and Varicose Eczema have been successfully treated with Gadoment.

It is quite evident from clinical studies that Gadoment is a valuable medicinal agent for promoting tissue granulation and regeneration of epithelium.

When skin lesions are accompanied by complications due to Syphilis, Anaemia, Diabetes, or severely dilated Varicose veins, treatment of these contributing factors must be provided previous to or concurrent with the Gadoment treatment. Likewise idiosyncrasies of the patient may require individual treatment.

Gadoment (patch) is an ointment containing 70% Cod Liver Oil, 0.375% Phenol with Benzoin and Zinc oxide, incorporated in a wax base.

The usual method of application of Gadoment is to spread a generous layer of the ointment on gauze or wax-paper, applying this to the affected area. This obviates the necessity of spreading the ointment directly on the exposed sensitive tissues. Sufficient gauze bandage is then applied to hold the dressing in place.

JOHN ROBERT CORBETT, M.D.,

Clarks Harbor,

Shelburne County, N. S.

Have You Made Out Your Income Tax?

RETURNS BY MEMBERS OF THE MEDICAL PROFESSION

As a matter of guidance to the medical profession and to bring about a greater uniformity in the data to be furnished to the Income Tax Division of the Department of National Revenue in the Annual Income Tax Returns to be filed, the following matters are set out:

INCOME

1. There should be maintained by the Doctor an accurate record of income received, both as fees from his profession and by way of investment income. The record should be clear and capable of being readily checked against the return filed. It may be maintained on cards or in books kept for the purpose.

EXPENSES

2. Under the heading of expenses the following accounts should be maintained and records kept available for checking purposes in support of charges made:

- (a) Medical, surgical and like supplies;
- (b) Office help, nurse, maid and bookkeeper; laundry and malpractice insurance premiums. (It is to be noted that the Income War Tax Act does not allow as a deduction a salary paid by a husband to a wife or vice versa. Such amount, if paid, is to be added back to the income).
- (c) Telephone expenses;
- (d) Assistant's fees: The names and addresses of the assistants to whom fees are paid should be furnished. This information is to be given this year on or before the 31st March, but on or before the last day of February in each subsequent year on Income Tax Form known as Form T-4, obtainable from the Inspector of Income Tax. (Do not confuse with the individual return of income, Form T. 1, to be filed on or before 30th April in each year);
- (e) Rentals paid: The name and address of the owner (preferably) or agent of the rented premises should be furnished. (See j);
- (f) Postage and stationery;
- (g) Depreciation on medical equipment: The following rates will be allowed provided the total depreciation already charged off has not already extinguished the asset value:—

Instruments—Instruments costing \$50.00 or under may be taken as an expense and charged off in the year of purchase;

Instruments costing over \$50.00 are not to be charged off as an expense in the year of purchase, but are to be capitalized and charged off rateably over the estimated life of the instrument at depreciation rates of 15% to 25%, as may be determined between the practitioner and the Division according to the character of the instrument, but whatever rate is determined upon will be consistently adhered to; The residual value of instruments not heretofore fully depreciated will be depreciated along with instruments costing over \$50.00 purchased subsequently;

Office furniture and fixtures—10% per annum;

Library—The residual value of library not heretofore fully depreciated will continue to be depreciated at 10% per annum for the years 1932, 1933 and 1934 as well as charging off the actual cost of books purchased in those years. After 1934, only the cost of new books will be allowed as a charge.

(h) Depreciation on motor cars cost:
20%, 1st year; 20%, 2nd year; 20%, 3rd year; 20%, 4th year; 20%, 5th year. The allowance is restricted to the car used in professional practice and does not apply to cars used for personal use.

(i) Automobile expense; (one car): This account will include cost of license, oil, gasoline, grease, insurance, washing, garage charges and repairs;

(Alternative to (h) and (i)—In lieu of all the foregoing expenses, including depreciation, there may be allowed a charge of 8c. a mile for mileage covered in the performance of professional duties).

If Chauffeur is employed for business reasons, so that in the result he is substantially used for business purposes (although incidentally used for personal or family use), the expense will be allowed.

(j) Proportional expenses of doctors practising from their residence—

(a) owned by the doctor;

(b) rented by the doctor;

(a) Where a doctor practises from a house which he owns and as well resides in, a proportionate allowance of house expenses will be given for the study, laboratory, office and waiting room space, on the basis that this space bears to the total space of the residence. The charges cover taxes, light, heat, insurance repairs, depreciation and interest on mortgage (Name and address of mortgagee to be stated);

(b) Rented premises—The rent only will be apportioned inasmuch as the owner of the premises takes care of all other expenses.

The above allowances will not exceed one-third of the total house expenses or rental unless it can be shown that a greater allowance should be made for professional purposes.

- (k) Sundry expenses (not otherwise classified)—
The expenses charged to this account should be capable of analysis and supported by records.
- Claims for donations paid to charitable organizations will be allowed up to 10% of the net income upon submission of receipts to the Inspector of Income Tax. (This is provided for in the Act).
- The annual dues paid to governing bodies under which authority to practise is issued and membership association fees not exceeding \$100.00, to be recorded on the return, will be admitted as a charge.
- The cost of attending post-graduate courses or medical conventions will not be allowed.
- (1) Carrying charges;
The charges for interest paid on money borrowed against securities pledged as collateral security may only be charged against the income from investments and not against professional income.
- (m) Business tax will be allowed as an expense, but Dominion provincial or municipal income tax will not be allowed.

Professional Men Under Salary Contract

- (3) The salary of professional men will be taxed without any deduction therefrom except as hereunder provided unless the individual is under contract which requires of him, in order to maintain his contractual position to operate a motor car of his own, in which case if the principal does not pay the upkeep, running expenses and depreciation, the individual will be allowed to reduce the salary by such expenses as the use of the car in the earning of his income may cost, on the same basis as above provided for, i.e. expenses and depreciation or alternatively 10c. a mile for mileage covered in the performance of professional duties.

The annual dues paid to governing bodies under which authority to practise is issued, and membership association fees, not exceeding \$100.00 to be recorded on the return, will be admitted.

Department of the Public Health

PROVINCE OF NOVA SCOTIA

Office—Metropole Building, Hollis Street, Halifax, N. S.

MINISTER OF HEALTH - - - - HON. F. R. DAVIS, M.D., F.R.C.S., Halifax

Chief Health Officer - - - - DR. P. S. CAMPBELL, Halifax.
 Divisional Medical Health Officer - - - DR. C. J. W. BECKWITH, D.P.H., Sydney.
 Divisional Medical Health Officer - - - DR. J. J. MACRITCHIE, Halifax.
 Divisional Medical Health Officer - - - DR. J. S. ROBERTSON, D. P. H., Yarmouth.
 Statistician and Epidemiologist - - - DR. HAROLD ROBERTSON, D. P. H., Halifax.
 Director of Public Health Laboratory - - DR. D. J. MACKENZIE, Halifax.
 Pathologist - - - - DR. R. P. SMITH, Halifax.
 Psychiatrist - - - - DR. ELIZA P. BRISON, Halifax.
 Sanitary Engineer - - - - R. DONALD MCKAY, B.Sc., A.M.E.I.C.
 Superintendent Nursing Service - - - MISS M. E. MACKENZIE, Reg. N., Halifax.

OFFICERS OF THE PROVINCIAL HEALTH OFFICERS' ASSOCIATION

President - - - - DR. R. A. MACLELLAN - - - Rawdon Gold Mines
 1st Vice-President - - - DR. H. E. KELLEY - - - Middleton
 2nd Vice-President - - - DR. R. C. ZINCK - - - Lunenburg
 Secretary - - - - DR. P. S. CAMPBELL - - - Halifax

COUNCIL

DR. HARVEY F. SUTHERLAND - - - - - Glace Bay
 DR. L. B. W. BRAINE - - - - - Annapolis Royal
 DR. H. E. WALSH - - - - - Springhill

MEDICAL HEALTH OFFICERS FOR CITIES, TOWNS AND COUNTIES

ANNAPOLIS COUNTY

Hall, E. B., Bridgetown.
 Braine, L. B. W., Annapolis Royal.
 Kelley, H. E., Middleton (M. py. & Town).

Murray, R. L., North Sydney.
 Townsend, H. J., Louisburg.
 Gouthro, A. C., Little Bras d'Or Bridge.
 (Co. North Side).

ANTIGONISH COUNTY

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

COLCHESTER COUNTY

Eaton, F. F., Truro.
 Havey, H. B., Stewiacke.
 Johnston, T. R., Great Village (Mepy).

CAPE BRETON COUNTY

Tompkins, M. G., Dominion.
 Fraser, R. H., New Waterford.
 Francis, Bernard, Sydney Mines.
 Sutherland, Harvey, Glace Bay.
 McLeod, J. K., Sydney.
 O'Neil, F., Sydney (County, South Side).

CUMBERLAND COUNTY

Bliss, G. C. W., Amherst.
 Gilroy, J. R., Oxford.
 Hill, F. L., Parrsboro, (Mepy. and Town).
 Cochrane, D. M., River Hebert (Joggins).
 Walsh, F. E., Springhill.

DIGBY COUNTY

Doiron, L. F., Little Brook, (Clare Mepy).
McCleave, J. R., Digby.
Harris, W. C., Barton, (Mepy).

GUYSBORO COUNTY

Chisholm, D. N., Port Hawkesbury,
(M.H.O. for Mulgrave).
Sodero, T. C. C., Guysboro (Mepy).
Moore, E. F., Canso.
Silver, G. L., Sherbrooke (St. Mary's
Mepy).

HALIFAX COUNTY

Morton, A. R., Halifax.
Forrest, W. D., Halifax (Mepy).
Payzant, W. A., Dartmouth.

HANTS COUNTY

Bissett, E. E., Windsor.
MacLellan, R. A., Rawdon Gold Mines
(East Hants Mepy).
Reid, A. R., Windsor, (West Hants Mepy).
Shankel, F. R., Windsor, (Hantsport).

INVERNESS COUNTY

Muir, J. A., Port Hawkesbury.
Grant, T. E., Port Hood.
Proudfoot, J. A., Inverness.
McNeil, A. J., Mabou, (Mepy).

KINGS COUNTY

Bishop, B. S., Kentville.
Bethune, R. O., Berwick, (Mepy & Town).
de Witt, C. E. A., Wolfville.

LUNENBURG COUNTY

Marcus, S., Bridgewater (Mepy).
Rehfuss, W. N., Bridgewater.
Donaldson, G. D., Mahone Bay.
Zinek, R. C., Lunenburg.
Zwicker, D. W. N., Chester, (Chester
Mepy).

PICTOU COUNTY

Blackett, A. E., New Glasgow.
Chisholm, H. D., Springville, (Mepy).
MacMillan, J. L., Westville.
Crummey, C. B., Trenton.
Sutherland, R. H., Pictou.
Whitman, G. W., Stellarton.

QUEENS COUNTY

Murray, D. K., Liverpool.
Smith, Harry, Caledonia, (Mepy).

RICHMOND COUNTY

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

SHELburne COUNTY

Corbett, J. R., Clark's Harbour.
Fuller, L. O., Shelburne.
Banks, H. H., Barrington Passage, (Bar-
rington Mepy).
Lockwood, T. C., Lockeport.
Churchill, L. P., Shelburne, (Mepy).

VICTORIA COUNTY

MacMillan, C. L., Baddeck, (Mepy).

YARMOUTH COUNTY

Hawkins, Z., South Ohio, (Yarmouth
Mepy).
Caldwell, R. M., Yarmouth.
Lebbetter, T. A., Yarmouth, (Wedgeport).
Siddall, A. M., Pubnico Head, (Argyle
Mepy).

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

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

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

Report on Tissues sectioned and examined at the Provincial Pathological Laboratory, from February 1st., to March 1st., 1939.

During the month, 218 tissues were sectioned and examined, which with 8 tissues from 5 autopsies, makes a total of 223 tissues for the month.

Tumours, simple.....	21
Tumours, malignant.....	38
Tumours, suspicious of malignancy.....	2
Other conditions.....	157
Tissues from 5 autopsies.....	8

Province of Nova Scotia Division of Vital Statistics
Provisional Monthly Report—January 1939

	January, 1939				Dec., 1938
	Total	Male	Female	Rate	Rate
No. of live births	1,011	540	471	21.7	21.6
No. of stillbirths	30	16	14	28.8**	25.4**
No. of deaths	573	301	272	12.3	13.7
No. of deaths under 1 year of age	100	57	43	98.9*	86.7*
No. of deaths from puerperal causes	2	...	2	2.0*	4.3*

Causes of Death	January, 1939				Dec., 1938
	Total	Male	Female	Rate	Rate
Measles . . . . .	...	...	...	...	...
Scarlet Fever . . . . .	...	...	...	...	...
Whooping Cough	3	...	3	6.4	...
Diphtheria	4	2	2	8.6	...
Influenza	21	11	10	45.1	25.6
Pulmonary Tuberculosis	26	16	10	55.9	93.6
Other forms of Tuberculosis	7	4	3	15.0	9.4
Cancer and other Malignant tumors	43	19	24	92.4	135.7
Diseases of the Heart	94	53	41	202.0	187.2
Diseases of the Arteries	89	44	45	191.2	161.4
Pneumonia (all forms)	73	39	34	156.8	156.8
Diarrhea and Enteritis under 2 yrs. of age	5	3	2	...	...
Nephritis	34	20	14	73.1	63.1
Diseases of Early Infancy	32	18	14	31.7*	45.5*
Accident	21	12	19	45.1	102.9

* Rate expressed as number of deaths per 1000 live births.
**Rate expressed as number of stillbirths per 1000 total births.

Provisional Monthly Report of Births and Deaths January, 1939.

	BIRTHS							DEATHS																													
	Total Births	Live Births				Still Births		Total	All Causes		Maternal Deaths	Under 1 year of Age	Influenza	Pulmonary Tbc.	Other forms of Tbc.	Cancer	Heart Disease	Disease of the Arteries	Pneumonia All Forms	Diarrhea under 2 years	Nephritis	Diseases of Infancy	Accident														
		Total	Legit-imate		Illegit-imate		Total		M.	F.														M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
			M.	F.	M.	F.																																M.	F.
Nova Scotia	1041	1011	504	435	36	36	30	16	14	573	301	272	2	100	21	26	7	43	94	89	73	5	34	32	21												
Annapolis...	27	27	8	19	15	7	8	1											
Antigonish...	28	28	12	15	20	13	7	1											
Cape Breton	273	263	139	109	8	7	10	4	6	96	56	40	...	29	1	1	1	14	9	21	1	2	4	4	3												
Colchester...	39	37	18	18	1	...	2	2	...	24	11	13	...	5	...	...	1	6	6	5	...	...	...	...	1						
Cumberland	79	76	34	35	4	3	3	...	3	28	13	15	...	2	...	...	...	5	5	5	...	...	...	...	1					
Digby...	54	53	24	24	1	4	1	...	1	22	8	14	...	3	...	...	2	3	3	4	...	...	...	...	2						
Guysboro...	32	32	18	10	1	3	...	...	...	16	7	9	...	0	...	...	...	1	1	5	...	...	...	...	1		
Halifax...	156	149	72	62	8	7	5	2	117	66	51	...	17	5	8	3	14	18	16	14	1	1	1	4	6												
Hants...	42	41	17	20	1	3	1	1	...	25	13	12	...	7	...	...	...	4	4	2	...	...	...	...	1					
Inverness...	45	45	27	18	...	...	...	...	...	28	14	14	...	1	...	...	6	4	4	6	...	...	...	...	...							
Kings...	32	32	18	10	3	1	...	...	...	29	18	11	...	9	...	...	...	7	7	4	...	...	...	...	...							
Lunenburg...	54	52	29	21	1	1	2	1	40	19	21	...	...	...	2	...	3	12	10	1	...	...	...	...	...							
Pictou...	56	55	26	22	4	3	1	1	...	43	25	18	...	7	...	...	3	5	6	4	...	...	...	...	1						
Queens...	27	26	14	10	2	...	1	1	...	6	4	2	...	...	...	...	...	4	4	2	...	...	...	...	1			
Richmond...	29	29	11	17	...	1	...	...	...	15	5	10	...	4	1	1	...	1	2	1	...	...	...	...	1					
Shelburne...	12	12	4	6	...	2	...	...	...	13	5	8	...	...	1	...	3	3	3	2	...	...	...	...	...							
Victoria...	12	12	8	4	...	...	...	...	...	9	2	7	...	...	...	...	...	2	2	1	...	...	...	...	...							
Yarmouth...	44	42	25	15	1	1	2	1	1	27	15	12	...	6	...	2	...	3	3	...	...	...	...	...	3							

Note: These figures are based on the Birth and Death certificates received by the Division of Vital Statistics, Halifax, N. S., up to and including February 10, 1939 and represent the number registered with the Division Registrars during the month of January, 1939.

OBITUARY

THE death occurred at Windsor on the evening of February 17th of Dr. Samuel John MacLennan formerly of Halifax. Dr. MacLennan was 69 years of age and had been in ill health for the past two years.

Dr. MacLennan was born in Sydney on January 17th, 1868. He was a son of the late Duncan MacLennan, in his time a prominent figure in the business and political life of Sydney. Dr. MacLennan was educated at Sydney Academy, Pietou Academy, and Dalhousie University, from which he graduated with a distinguished record in 1888. He graduated in medicine from Bellevue Medical College, New York, in 1894, following which he had post graduate courses in New York, Edinburgh, London, Berlin and Vienna. He was one of the earliest Nova Scotia members of the American College of Surgeons, and in 1932 was elected a member of the Oxford Ophthalmological Society.

He first practised his profession in Glace Bay, but left there in 1912 for a year's study abroad. Upon returning he settled in Halifax as a specialist in diseases of the eye, ear, nose and throat. He then went overseas with the No. 7 Stationary Hospital (Dalhousie Unit) and was later transferred to the Westcliffe Eye and Ear Hospital at Shornecliffe, where he served from January to November, 1916. Upon his return he again opened up practice in Halifax and was attached to the staff of the Camp Hill Hospital. He remained in Halifax until the autumn of 1937 when, on account of ill health, he retired to Windsor.

Dr. MacLennan is survived by his wife, formerly Katherine Clifford MacQuarrie, daughter of the late Archibald MacQuarrie of Glace Bay, by his son, John Hugh, classics master at Lower Canada College, Montreal; and by his daughter, Frances, of the staff of the Halifax Ladies' College, and by his younger sister, May, wife of Dr. E. M. MacDonald, Sydney. Another sister, Annie, Mrs. Neil Ferguson, of Sydney, died in 1917.

THE BULLETIN extends its sympathy to Dr. A. L. Sutherland of Sydney and Dr. H. F. Sutherland of Glace Bay in the death of their father, Mr. Ronald Sutherland, who died at his home in Sydney on February 21st after an illness of about six months, at the age of 73.

Personal Interest Notes

Dr. W. H. Embree, who has been practising at Scotsburn for some months, has moved to Stellarton to assist Dr. R. M. Benvie, with his practice. Dr. Benvie is just recovering from an operation and will not resume practice for sometime.

Dr. J. F. Nicholson, Dalhousie 1937, who after graduation practised at Sherbrooke, has been appointed to the post of house surgeon at the Infirmary at Bury, Lancashire, England. Dr. Nicholson has spent several months at post-graduate study at London, England.

Dr. and Mrs. J. A. Noble of Halifax have returned from Montreal where Dr. Noble was called on account of the illness of his father.

Quite a comprehensive programme of Schick testing was carried out during the month of January at Glace Bay under the direction of Dr. C. J. W. Beckwith, District Medical Health Officer. Over seven hundred children were tested at St. John's School, New Aberdeen. This almost completes the testing of children in and about Glace Bay who had been inoculated with toxoid last year. The results in general show that a very high percentage of the children inoculated have become immune.

Dr. H. A. Creighton of Lunenburg is at present convalescing in Florida after his recent illness.

Dr. Gerald R. Burns of Halifax gave the first of a series of lectures at St. Mary's College under the auspices of the college Alumni. Dr. Burns spoke on "Mediaeval Medicine."

Congratulations to Dr. and Mrs. R. F. Ross of Elmsdale on the birth of a son on February 9th.

Dr. G. R. Forbes of Kentville has just returned from a trip to Boston and New York.

The many friends of Dr. E. K. Maclellan of Halifax will be glad to know that he is making a good recovery from his recent serious illness, and is now up and around, although he has not, as yet, resumed his practice.

Dr. H. E. H. Taylor of Port Morien sailed from Halifax during the latter part of January for an extensive post-graduate course in Pathology at Glasgow, Scotland.

Dr. and Mrs. C. E. Kinley of Halifax have returned from a trip to several of the American and Upper Canadian cities.

The Sun's Gone South

— time for Cod Liver Oil Therapy

10-D COD LIVER OIL

Much richer in the essential "Sunshine Vitamin D".
Biologically tested and standardized, and treated
by a special carbonating process which retards
oxidation and imparts a fine wholesome flavour.
Available in two sizes — bottles of 4 oz. and 16 oz.

Ayerst

ALPHAMETTES

High grade medicinal Cod Liver Oil in
concentrated form

Biologically-standardized to contain, in each capsule, the full Vitamin A and D value of four and one-half teaspoonfuls of cod liver oil, U.S.P. XI. Available in boxes containing 50 and 100 capsules. Alphamette Liquid also is obtainable in 10 and 25 cc. bottles.

AYERST, McKENNA & HARRISON LIMITED

Biological and Pharmaceutical Chemists

MONTREAL

CANADA

BOOKS FOR SALE

The following books are for sale at reduced cost by Mr. P. E. Partridge of Middle Stewiacke, N. S.

Essentials of History: Schafer.

Clinical Microscopy and Chemistry: Senharty.

Nelson's Loose Leaf Living Medicine.

Vol. I. Infectious Diseases.

II. Parasitic Diseases.

III. Metabolism, Endocrine Glands, Lymph Glands.

V. Digestive System, Muscles, Bones, Joints.

Manual of Surgery, Thompson & Miles, Vol. 3, Thorax and Abdomen.

Saunders's Medical Hand Atlas, Fractures and Dislocations.

Manual of Midwifery, Eden, Fifth Edition.

Mental Disorders, Hubert J. Norman.

A Short Practice of Gynaecology, Jellet.

Steadman's Medical Dictionary.

Eye, Ear, Nose, Throat, Ballenger Wippen.

Medical Jurisprudence and Toxicology, Atkinson Robertson.

Manual of Surgery, Thompson & Miles, Vol. II. Extremities Head and Neck.

Peptic Ulcer, A Symposium of the Current Literature.

Manual of Therapy.

The Biology and Treatment of Venereal Diseases, J. E. R. McDonagh.

Surgical Pathology, Boyd.

Gonococcal Urethritis in the Male, Pelouze.

Practice of Medicine, Osler.

Clinical Methods, Tenth Edition, Hutchinson & Hunter.

Manual of Medical Treatment or Clinical Therapeutics, (Vol. I and XI), Yeo.

Wheeler's Handbook of Medicine, William Jack.

Nutrition and Diet, McLester.

Clinical Bacteriology and Haematology, Emery.

Recent Advances in Diseases of Children, Pearson and Wyllie.

Physical and Clinical Diagnosis, Seefort and Mueller.

Operations of Surgery, Jacobson, Sixth Edition, Vol. I.

Handbook of Anaesthetics, J. Stuart, Ross and Fairlie.

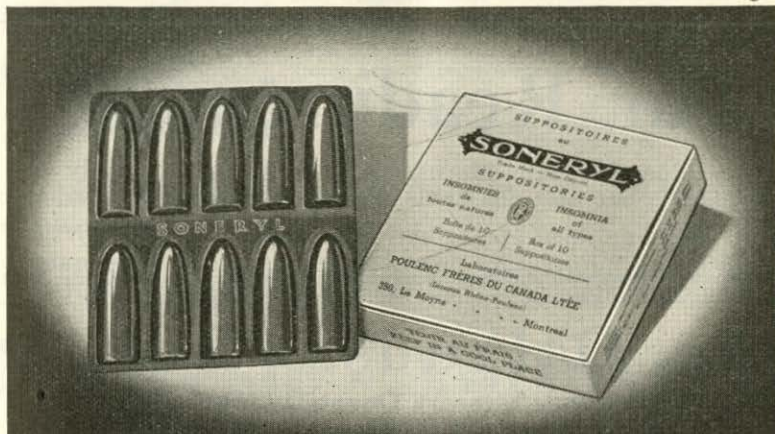
General Surgery, Vol. I, Seventh Edition, Thompson and Miles.

SONERYL

the well-known hypnotic with the analgesic effect is now offered in the form of

SUPPOSITORIES

producing a rapid effect and avoiding all possibility of gastric disturbances



SONERYL is now available as follows:

The well-known pink tablets for oral use, each containing 0.10 Gm. of the active product (Butylthylmalonylurea). Tubes of 20, 100 and 250 tablets.

Suppositories for rectal administration, each containing 0.20 Gm. of the active product and an equal dose of Camphor. Boxes of 10 suppositories.



Specify "SONERYL" for all forms of Insomnia



Laboratory
POULENC FRÈRES
 of Canada Limited
 204, Youville Square - Montreal

STILBOESTROL B.D.H.

(4:4 dihydroxy- α B-diethylstilbene)

This new synthetic oestrogenic substance represents an important advance in the treatment of follicular hormone deficiency.

Clinical trials which have been reported in the *Lancet*, January 7th, 1939, page 5, and the *British Medical Association Journal*, January 7th, 1939, page 10, have confirmed that this new substance, Stilboestrol, is in every respect an effective substitute for the natural ovarian follicular hormone.

Stilboestrol, B.D.H. is now available for clinical use in the treatment of all conditions of follicular hormone deficiency in which the natural hormone would formerly have been used. The advantages of the new substance are, high activity by oral administration continuous daily administration made possible, cost of treatment reduced.

Physicians desiring more particulars may obtain these on request from The British Drug Houses (Canada) Limited., Terminal Warehouse, Toronto.

Your Reading . . .

Education and information is a matter not only of necessity but of pride with every serious minded reader.

Reading must go further than newspapers and novels, and sound information must be sought on the great questions of religion, education, literature, science and politics.

The Dalhousie Review

Canada's Literary Quarterly Magazine
— Supplies This Class of Reading.

The *Dalhousie Review* aims at following the example of the great British magazines in the free, intelligent and independent discussion of public questions.

Annual Subscription only \$2.00, or three
years for \$5.00.

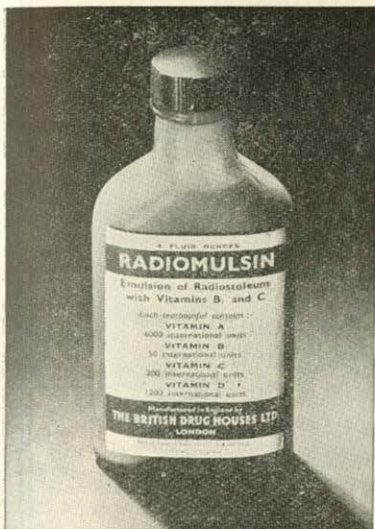
THE REVIEW PUBLISHING COMPANY, LIMITED
P. O. Box 1025 HALIFAX, N. S.

PHYSICIAN WANTED

The Secretary has received a letter from the Rev. Wallace Wadland of Belfast, Prince Edward Island, asking help in securing a physician to locate there. Any Doctor interested should communicate directly with Rev. W. Wadland.

RADIOMULSIN

(Radiostoleum Emulsion with Vitamins B₁ and C)



During infancy and childhood the most urgently-needed vitamins are A, B₁, C and D. Of these, Vitamins A and D have hitherto been administered in the form of fish-liver oils or of Radiostoleum, and Vitamin C as orange juice or tomato juice. Vitamin B₁ is present in human milk and in cow's milk, but in variable and, generally, inadequate amounts. The administration of supplementary amounts of Vitamin B₁ is, therefore, particularly essential, especially since the other dietary sources of this vitamin are not suitable for infants.

The administration of Radiomulsin is a simple means of giving Vitamins A, B₁, C and D in accurately-standardised quantities and in suitable proportions.

Radiomulsin may be given direct from a spoon or mixed with the feeds; it is available from the principal drug stores in bottles of 4 fl. oz. and of 16 fl. oz.

Stocks of Radiomulsin are held by leading druggists throughout the Dominion, and full particulars are obtainable from:

THE BRITISH DRUG HOUSES (CANADA) LTD.
Terminal Warehouse

Toronto 2, Ont.

Rmul/Can/393

Analgesic - Antipyretic

C. T. No. 260

Codophen, E.B.S.

Distinctive in Appearance and Flavour

Each tablet contains:

Ebsal, E.B.S. (Acetylsalicylic Acid).....	3 grs.
Phenacetine	2 grs.
Caffeine Citrate	¼ gr.
Codeine Phosphate.....	¼ gr.

Dose—One to three tablets as required.

Indicated in Influenza, Tonsillitis, Neuritis, Lumbago, Muscular Rheumatism, Sciatica and Febrile Conditions.

Also C.T. No. 260 A Codophen Stronger, E.B.S.—containing Codeine Phosphate ½ grain.

Clinical Samples on Request

The E. B. SHUTTLEWORTH CHEMICAL CO., LTD.
MANUFACTURING CHEMISTS

525 Logan Avenue

TORONTO, 6, Canada

Maritime Representative: F. R. CLAYDEN, 58 John St., Moncton, N. B.

CORAMINE

"CIBA"

Coramine is a 25% aqueous solution of pyridine-B-carboxylic acid diethylamide, available in liquid form for oral use and in sterile ampoules for parenteral administration.

By a direct influence on the centre, it acts as a most efficient respiratory stimulant, increasing both the depth and the rate of respiration, either under normal conditions or when the centre is depressed by drugs or disease toxins.

Coramine stimulates the heart, leading to an increase in the output of blood; at the same time it tends to cause vascular relaxation, so that, with or without a rise in blood-pressure, the rate and efficiency of the circulation are improved.

AMPOULES

(in cartons of 5, 20 and 100)

LIQUID

(in bottles of 15, 100 c. c.)



CIBA COMPANY LIMITED

MONTREAL, P. Q.

"Hurry, Jimmie, or you'll be late for school again. Mother forgot to set the alarm clock. Please don't dawdle like that. Here, take your bun and eat it on the way to school. Hurry, darling, teacher will have a fit! Please hurry!"



The milk is the best item in this child's hurried, harried, worried breakfast, but milk alone is inadequate. The simple replacement of the bun or roll by Pablum would, with added milk, give the child a better balanced and more nourishing meal on which to start the day right at school. Pablum can be prepared appetizingly in a few seconds, without cooking.

THE LAST-MINUTE BREAKFAST

"Going to school on an empty stomach"

—not because his parents are poor or illiterate, but because his mother didn't allow sufficient time for an adequate, nourishing morning meal.

This scene occurs every morning in thousands of homes, and many a school child is a poor scholar because of a poor breakfast.

For little boys and girls* whose mothers don't get up early enough in the morning, or who can't figure time accurately, a good, nourishing, well-constituted, economical and *quick* morning meal is:

- Orange Juice or Tomato Juice qs
- Pablum & milk or cream qs
- Sugar qs
- Capsule, Mead's Viosterol in Halibut Liver Oil I
- More Milk qs

Such a breakfast supplies important amounts of all of the following essential nutritional requirements: Protein✓ Fat✓ Carbohydrate✓ Vitamins: A, B, C, D, E, G✓✓ Minerals: Calcium, Phosphorus, Iron, Copper, Etc., Etc., Etc.✓✓✓ Calories✓

PABLUM can be prepared in less than a minute and does away with pots and pans and endless overnight and early-morning cereal cookery and drudgery. Simply add milk or water of any desired temperature and serve with cream and sugar. Mead Johnson & Co. of Canada, Ltd., Belleville, Ontario.

Pablum (Mead's Cereal thoroughly pre-cooked by a patented process) consists of wheatmeal, oatmeal, cornmeal, wheat embryo, alfalfa leaf, beef bone, brewers' yeast, iron salt, and sodium chloride.

*and, perhaps, also for their fathers who have to gulp a one-minute breakfast before going to work.

BARIUM SULPHATE

Mallinckrodt

Unexcelled Shadow Forming, Perfect Suspension. No hardening and retention of excreta. Satisfactory for oral and rectal use.

Gives Best Results—Least inconvenience to physician and patient when Mallinckrodt Barium Sulphate is used because it is made by the precipitation process, the only method that gives a uniform fine powder remaining satisfactorily in suspension.

Write for folder on
Suspension and
residue tests.

Mallinckrodt

CHEMICAL WORKS

Makers of Fine Medicinal Chemicals

378 St. Paul St. W., Montreal

TORONTO

ST. LOUIS

NEW YORK

Adrenal-Gland Products

Adrenal Cortical Extract contains the active principle of the adrenal cortex and has proved useful in the treatment of certain cases of Addison's disease. In the course of extensive research in the Connaught Laboratories on the preparation of Adrenal Cortical Extract, a highly effective product was evolved for clinical use.

Adrenal Cortical Extract

Adrenal Cortical Extract is supplied as a sterile solution in 25 cc. vials. It is non-toxic, is free from pressor or depressor substances and is biologically standardized.

During the preparation of Adrenal Cortical Extract, Epinephrine is obtained as a separate product. This is the active principle of the adrenal medulla and has long been used for many purposes including stimulation of heart action, raising the blood-pressure and relieving attacks of bronchial asthma.

Two preparations of Epinephrine are available from the Connaught Laboratories:

Epinephrine Hydrochloride Solution (1:1000)

Every physician is familiar with the use of epinephrine hydrochloride (1:1000). It is supplied by the Connaught Laboratories in 30 cc. rubber-capped vials instead of in corked or stoppered bottles. Thus, individual doses may be readily withdrawn from the vials aseptically without occasioning any deleterious effects upon the solution left in the vials for later use.

Epinephrine Hydrochloride Inhalant (1:100)

Recently considerable success has been secured in the alleviation of attacks of bronchial asthma by spraying into the mouth this more concentrated solution of epinephrine hydrochloride. This solution is supplied in bottles containing 1/5 fl. oz. (approx. 6 cc.), each bottle being provided with a dropper fastened into its stopper so that small amounts of the solution may be transferred for inhalation from an all-glass nebulizer.

Prices and information relating to the use of these adrenal-gland products will be supplied gladly upon request.

CONNAUGHT LABORATORIES
UNIVERSITY OF TORONTO
TORONTO 5, CANADA

DR. COLLECTEM

Here's a signboard well
worth heeding, Doctor!

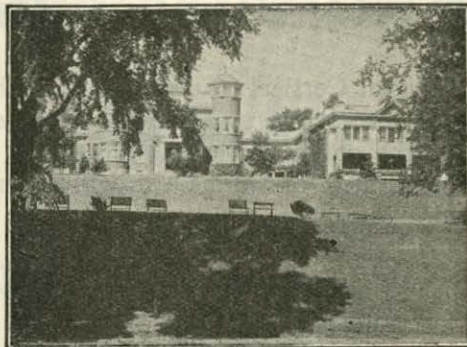


So mail us your list of
past-due accounts To-day!

THE MEDICAL AUDIT ASSOCIATION
44 Victoria Street, Toronto

Homewood Sanitarium

GUELPH, ONTARIO



Nervous cases including Hysteria, Neurasthenia
and Psychasthenia.

Mild and incipient mental cases.

Selected habit cases will be taken on advice of
physician.

For rate and information, write

HARVEY CLARE, M.D.

Medical Superintendent

DRESS UP — IT'S SPRING

It's smart to be well dressed and up-to-the-minute
in your appearance. See our smart showing of
Topcoats, Hats, Shirts and Neckwear.

ROY M. ISNOR

361 BARRINGTON STREET — — MEN'S WEAR

AS YOU LIKE IT—

SO we can do your printing! Whether it be prescription or hospital forms, letters—
or bill-heads, something in the way of social printing—we are here to serve you
with an unusually wide selection of type faces, unique experience in layout and
design, and a friendly understanding service gained in more than thirty years' experience.
We will gladly quote prices on any sort of printing you may require.

IMPERIAL PUBLISHING CO., LTD.,

614 BARRINGTON STREET, HALIFAX, N. S.