

THE MILLENIUM is rounding the corner in Guaiacol and Creosote Therapy

CAN YOU IMAGINE:

15 Minims of Creosote and Guaiacol in one administration ?

with

Absolutely no gastric irritation?

and

Absorption within 8 to 15 minutes?

with

One administration containing 5 to 15 times the oral dose?

All This Is Possible With

Broncho - Rectal Suppositories

Anglo-Canadian

A Strictly Canadian Achievement

Use in every Broncho Pulmonary affection; acute, sub-acute and Chronic Bronchitis; lung abscess, deep seated "Colds", "night cough", excessive cough in broncho pneumonia, and wherever creosote or guaiacol is indicated.

It is thought that one box (12) Broncho Rectal Suppositories, "Anca", when administered produces the equivalent therapeutic action of ONE TO TWO MONTHS ORAL DOSAGE of creosote. The dose is usually one suppository at bedtime (following a low anema if necessary), repeated during the day if required.

Six suppositories daily have been used with no untoward results.

The Most Logical Means of Administering Creosote Ever Offered to the Medical World.

Trial packages available.

ANGLO CANADIAN DRUGS, LIMITED

Oshawa and Montreal

W. M. CLINGER, 110 Willow St., Halifax

Eastern Division Mgr.

Wyeth's 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, Plain and with Liver Extract, are now available in bottles of fifty on your prescription. Your patients will find the cost of this medication well within their means.

SAMPLES ON REQUEST

JOHN WYETH & BROTHER, INC.
WALKERVILLE ONTARIO

MULTIVITE

(Vitamins A and D with Vitamin C and the Vitamin B Complex)

Multivite, which contains within the compass of a small pellet the essential Vitamins A and D with Vitamin C and the Vitamin B complex, fills the need for a comprehensive medicament for administration in conditions of debility and general subnormal health and other familiar manifestations of an all-round vitamin deficiency which prevails as a result of modern sophistication of foods.

Multivite Pellets are specially designed for their suitability in use by adults; children, however, do not find them unpalatable even when eaten as a sweetmeat.

Multivite Pellets are packed in bottles of sixty, suitable for carrying in the pocket or handbag.

*Stocks of Multivite 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.

Mlvt/Can/3710

CONTENTS

SCIENTIFIC:

Canada's Tuberculosis Problem—G. J. Wherrett, M.D., Ottawa, Ont. - - - - 535
 Heart Disease and Pregnancy—C. W. Holland, M.D., Halifax, N. S. - - - - 542
 The Application of Psychiatry to General Medicine—Leo Kanner, M.D., Baltimore 548
 Presidential Address—P. E. Belliveau, M. D., Meteghan, N. S. - - - - 557
 Then and Now—M. R. Young, M. D., Pictou, N. S. - - - - 560

EDITORIAL:

Fornication and Disease—H. W. Schwartz, M.D. - - - - 566

Minutes Provincial Association of Medical Health Officer's meeting - - - - 571

CORRESPONDENCE:

To the Editor, H. A. Grant - - - - 574
 To the Editor, H. B. Atlee - - - - 574

DEPARTMENT OF THE PUBLIC HEALTH - - - - 578

PERSONAL INTEREST NOTES - - - - 582

SOCIETY MEETINGS:

Lunenburg-Queens Medical Society - - - - 584

URASAL

AN EFFICIENT

URINARY ANTISEPTIC

COMPOSITION:

Hexamethylenamine 7½ grs.
 combined with Piperazine
 and Lithia Benzo-Citrate.

INDICATIONS:

●
 CYSTITIS - PYELITIS
 RHEUMATISM, Etc.

Manufactured by

FRANK W. HORNER LIMITED

MONTREAL * * CANADA

Concentrated Food

in a most palatable and digestible form
is to be found in

SCHWARTZ PEANUT BUTTER



Rich in protein, fat, and carbohydrates it will be found most beneficial as part of the growing child's diet.

The many uses to which it may be put as a sandwich filler or spread, or as an ingredient in muffins, cakes, soups etc., make it a most desirable food for adults as well.

MANUFACTURED BY

W. H. SCHWARTZ & SONS LIMITED

HALIFAX, - NOVA SCOTIA

ESTABLISHED 1841

“Say Schwartz and Be Sure”

Canada's Tuberculosis Problem

G. J. WHERRETT M.D., M.R.C.P.

IT is my purpose in this paper to outline to you the situation in regard to tuberculosis as it exists in Canada to-day. It will be noted that the rate varies considerably in the different provinces. Saskatchewan and Ontario have the lowest rates, namely, 29.5 and 37 per 100,000 respectively. The highest rates are to be found in Nova Scotia, New Brunswick and Quebec. Indeed, in the provinces of Quebec, New Brunswick and Nova Scotia are to be found 56 per cent. of the deaths and yet these provinces constitute approximately only 30 per cent. of the population. A practitioner in Nova Scotia will see on the average three times as many cases of tuberculosis in the run of a year as a practitioner in the province of Saskatchewan. Also, we must bear in mind that the rates for the Eastern Provinces are practically those for the White population as the number of Indians in that area is small in comparison. The rate for the four Western Provinces, however, would be reduced by one-third if the Indians were excluded.

Tuberculosis Death Rate 1935

	Population	Deaths	Rate per 100,000
Canada.....	10,935,000	6,591	60.3
British Columbia.....	735,000	565	76.9
Alberta.....	780,000	329	43.0
Saskatchewan.....	978,000	272	29.2
Manitoba.....	739,000	432	60.8
Ontario.....	3,596,000	1,301	35.5
Quebec.....	3,062,000	2,813	91.9
New Brunswick.....	429,000	332	78.1
Nova Scotia.....	527,000	487	92.6
Prince Edward Island.....	89,000	60	65.5

It is true that there has been a tremendous reduction in our losses from tuberculosis. Since 1900 this reduction has amounted to two-thirds. It has been greatest in the provinces showing the highest proportion of facilities for treatment, namely, Saskatchewan and Ontario. Since 1912 in Nova Scotia the reduction has been 48 per cent., while in Ontario it has been 58 per cent. There has been a 50 per cent. reduction since 1921 in the province of Saskatchewan in the White population. From the beginning of vital statistics Nova Scotia seems to have had about the highest rate. The terrific death rate of 215.4 which obtained in 1908 has now declined to 92 per 100,000 in 1935.

There has been much speculation as to the cause of the decline and while improvement in living conditions has doubtless played some part, an increased resistance, as in the case of the Indian, has also been in evidence. The main factor seems to have been the recognition of tuberculosis as a communicable disease and our modern methods of dealing with it based on this principle.

In connection with the standard of living and its relation to tuberculosis, it is of interest that there was no increase in the tuberculosis death rate during the depression. There was a reduction of 25 per cent. from 1930 to 1935 and this obtained in industrial centres of Canada where unemployment and relief reached the greatest incidence.

Increased resistance is a factor that seems of rather doubtful significance in the White race who have been exposed to tuberculosis over such a long period of time. There has, however, been evidence of a marked increase in the resistance of the Indians of Canada, those east of the Great Lakes having a much lower death rate than the Indians of the Western Provinces but here there may be several additional factors which have been in operation. While the eastern Indians has been exposed to tuberculosis for a longer period of time, there has also been a greater mixture of white blood which is shown to be of great importance in raising resistance.

It is becoming more and more apparent, however, that the main factor is the infectious nature of tuberculosis and our success in controlling the disease depends on how thoroughly we have been able to apply modern methods in dealing with the problem. In the application of these methods, the medical profession occupies a strategic position. Sir William Osler stated many years ago that the war against tuberculosis rested in the hands of the general practitioner and stressed the necessity of early diagnosis. This seems to be as true today as it was then. The greatest advances seem to have been made by placing at the disposal of the general practitioner more efficient means for diagnosis and treatment of the disease.

The early diagnosis of tuberculosis has always been a difficult problem. For many years it was thought that the disease could be diagnosed in the early stages by history and physical signs. We believed that it was possible to develop such a remarkable degree of perfection in the recognition of these physical signs that it would be possible to diagnose the disease in its incipient stage. Now we know that while it is possible to become so accurate in the physical examination as to detect physical signs if they are present, we realize that, when these signs become apparent, advanced disease is usually found and by far the greater number of minimal cases present no signs whatever by physical examination of the chest. For this reason it should be stated as a general principle that where tuberculosis is suspected we have not done our duty to the patient unless the disease is excluded by all the aids at our disposal. Too often, while a careful history and physical examination have been carried out, three valuable procedures are often neglected and these I would like to mention specifically. I mention these because of the many times when a diagnosis has been in doubt that might have been settled one way or the other almost at once:

The first is the *examination of the sputum*. The point has been stressed so often that we must not wait for a positive sputum to make a diagnosis that perhaps we have neglected to do it at all.

The second is the *tuberculin test* which has become so useful in ruling out tuberculosis. While this test has been widely used by tuberculosis clinics, it is particularly useful for general practitioners. It is becoming more and more useful in ruling out tuberculosis as the incidence of tuberculin positive individuals falls in the community. It is remarkable the number of young adults who now fail to react to tuberculin and in whom the disease as a cause of symptoms can be so easily ruled out.

It has a definite place also in connection with *the use of X-ray examination.*

Those who react to tuberculin, where tuberculosis is suspected, should be X-rayed before the disease can be definitely excluded.

The tuberculosis clinic operated by the sanatorium or the department of health, as an aid to the general practitioner, has had a phenomenal growth. It seems to have been well received by the medical profession who have co-operated wholeheartedly in the undertaking. It has now been introduced in every province in Canada and has placed at the disposal of the general practitioner a means of more readily disposing of the suspected cases in his practice, to an extent that was unheard of fifteen years ago. Last year at these clinics 160,000 examinations were made and this does not take into account those who were examined and the diagnosis settled by private physicians unaided.

The question might naturally be asked:—Are we diagnosing tuberculosis in an earlier stage? The answer is—Yes! but it needs some qualifications. An analysis of the patients who are admitted to our institutions shows that they divide themselves into two groups,—those who are diagnosed on account of symptoms either by the general practitioner alone or are referred to tuberculosis clinics. This group will fall mainly into the advanced group, and there has been little change over a period of years in the proportion that might be classed as minimal. The second group are those in whom the onset of the disease has been anticipated and they have been routinely examined on account of contact with tuberculosis or during regular surveys of certain groups such as nurses, students or industrial surveys. These are mainly early cases. The first group is advanced having an unfavorable prognosis, requiring long hospitalization including pneumothorax and other surgical measures of collapse therapy. The second group have a good prognosis with possibly only pneumothorax and a shorter period of treatment. The first group become the chronic tuberculous case and a menace in the community. The second group takes in those who make good recoveries.

Adequacy of Diagnosis: As to the adequate diagnosis of tuberculosis, have we any measure of when this is fairly complete? We used to talk of so many cases in a community to each annual death, now we know that the number can be multiplied according to how long we have kept records and as to whether we included arrested and inactive cases on our list. A very useful standard is the number of new cases in the community we discover per year for each death. A good average is three new cases; this means that for each fatal case there has been left a trail of infection causing three new cases a year and that every general practitioner can discover this number for every death in his practice.

For Nova Scotia with its 487 deaths it means that upwards of 1,200 new cases should be found. We can even go further and say that two out of three would be better treated in institutions and at least one out of the three should receive pneumothorax and other surgical measures of lung collapse.

Having diagnosed tuberculosis the next problem is treatment.

This leads us to the need for institutional treatment of tuberculosis. In Canada we have now 8,500 beds in use in sanatoria or hospitals; or a ratio of 1.2 beds per death, and here again we see a wide variation between provinces. In the provinces of Ontario and Saskatchewan they have over two beds per annual death and in all provinces except Quebec the ratio is at least one per death.

The common error in speaking of facilities is to think in "terms of population" rather than "actual needs". For example, if we consider the tuberculosis facilities in New Brunswick and Saskatchewan we find that in the former province with 405 beds they have more than one bed per thousand population whereas Saskatchewan has less than three-quarters of a bed per thousand population. If we consider it on the basis of need, we find that according to the number of deaths New Brunswick has 1.2 beds while Saskatchewan has available in sanatoria and hospitals 2.8 beds per death, although it has not been necessary to use all the beds which are available in general hospitals.

Treatment Beds according to Population and Deaths.

	Beds	Ratio Beds per Death	Ratio Beds per 1,000 population
Canada.....	8,500	1.2	.8
British Columbia.....	651	1.5	.8
Alberta.....	330	1	.4
Saskatchewan.....	707	2.9	.7
Manitoba.....	722	1.6	.9
Ontario.....	3,197	2.5	.8
Quebec.....	1,849	0.65	.6
New Brunswick.....	405	1.2	.9
Nova Scotia.....	541	1.1	1.0
Prince Edward Island.....	60	1	.6

In order to make the best use of treatment facilities, it is necessary to see that non-tuberculous and all active cases of tuberculosis are discharged promptly and that wherever the disease is arrested and the sputum negative, home treatment be instituted if at all possible. Further, a considerable number can be given pneumothorax at home if the disease is quiescent and when a successful collapse is obtained and sputum no longer positive for tubercle bacilli. Where there are facilities for giving pneumothorax refills, this policy will release further sanatorium beds for the treatment of open cases.

We have mentioned pneumothorax and surgical collapse. The extent to which these are being utilized in Canada can be estimated by the fact that many institutions are inducing pneumothorax in over fifty per cent. of new cases admitted. It has proved to be the greatest therapeutic advance that has been made in the treatment of tuberculosis. The use of pneumolysis or cutting of adhesions has also widened the field for pneumothorax and the number of cases of successful collapse has been increased by this comparatively simple surgical procedure. Paralysis of the phrenic nerve, either by temporary crushing or permanently by evulsion of the nerve, has a limited place but is useful in selected cases, mainly for basal lesions.

Thoracoplasty or surgical collapse, by removal of portions of the ribs, is being used in an increasing number of cases where cavities are present that cannot be collapsed by pneumothorax. Where the patient's general condition is good and some evidence is shown of chronicity and resistance, this operation should be considered. Experience has shown that cavity cases which cannot

be collapsed by pneumothorax do badly and the proportion that will be dead in five years is very great. The use of thoracoplasty has changed the outlook in many of these cases. It means that successful closing of their cavities renders sputum negative and facilitates earlier discharge and so makes available institutional beds for other cases. The operation is not the mutilating one that it is sometimes thought to be. Many patients with thoracoplasty are carrying on a normal life and their function is even improved by the operation.

How is the cost of tuberculosis treatment being met? An adequate number of sanatorium beds with surgical facilities for all who require them are not the only requisites for early and efficient treatment. One of the greatest barriers has been the financing of treatment costs. Too often diagnosis of tuberculosis is made by the general practitioner who advises institutional treatment only to find that the patient has no money and treatment is refused by municipal authorities. The sooner we realize that if we want to deal with the problem adequately treatment must be available to all as soon as it is required. Ninety per cent. of the patients in Canada are unable to pay for the treatment required. We can readily realize that this is so when we know the extent to which tuberculosis is found to be a disease of the lower income strata. The lack of beds and free treatment leads to a vicious circle. Early cases are not admitted and become advanced and when finally treatment is necessary they have changed over to the long treatment type cases requiring long and expensive institutional treatment, many of them dying after being a continual focus of infection in their families and communities. The advantages of removal of this financial barrier are seen in comparing the time between diagnosis and admission in the provinces of Saskatchewan where free treatment exists and New Brunswick where payment is still made by the patient and individual municipalities. A survey of patients on treatment in both these provinces on January 1st, 1937, brought out the following facts:

In New Brunswick only 34 per cent. had been admitted during the first month following diagnosis;

In Saskatchewan 77 per cent. had been admitted within a week of diagnosis and 91 per cent. had been admitted within the first month.

**Time Interval between Diagnosis and Admission
in New Brunswick and Saskatchewan**

Time Elapsed	Number Admitted N. B.	Percentage Admitted	Number Admitted Sask.	Percentage Admitted
Within 7 days	40	11.7	380	77.0
7 days to 1 mo.	80	23.3	69	14.0
1 to 3 mos.	63	18.3	12	2.4
3 to 6 mos.	42	12.2	4	0.8
6 to 9 mos.	15	4.4	6	1.2
9 mos. to 1 yr.	14	4.3	3	0.6
1 to 2 yrs.	23	6.6	5	1.0
Over 2 yrs.	22	6.4	6	1.2
Not stated.	44	12.8	9	3.8
Total.	343		494	

Where provision for treatment depends on individual municipalities that vicious circle reaches its worst degree. Realizing that this is a fundamental error, this state of affairs has been remedied in at least four of the provinces,—

In Saskatchewan and Alberta treatment is free to all irrespective of their ability to pay;

In British Columbia treatment is on the advice of the physician or health officer and the ability to pay; is assessed by the Social Welfare Department after admission. A gradual scale of fees is adopted and the principle followed is that inability to pay will not be a bar to treatment.

In Manitoba there is a municipal levy which distributes the cost over the rural areas of the province.

Recently Ontario has made a survey of conditions and believing that the financial situation is a bar to efficient treatment the Premier and Minister of Health have announced that they have under consideration an entirely new setup by which, we understand, facilities will be provided. Treatment costs will be distributed over the entire province and the burden on the municipalities will be lessened. It has been suggested also that treatment of open cases will be made compulsory.

The greatest advances are being made where a co-ordinated programme is being carried out. It matters not whether this programme is under the direction of an independent commission as obtains in Saskatchewan or under the Department of Health as in other provinces. In one province there is a Provincial Director of Tuberculosis with an Advisory Committee. The principles are the same under whatever scheme is followed. These are briefly:

1. The realization that tuberculosis is a communicable disease.
2. The medical profession is the most important factor in the campaign against tuberculosis.
3. Realizing these principles, adequate clinic service must be made available to all physicians in the province for the diagnosis of referred cases suspected of tuberculosis and for the regular examination of all contacts. It is also advisable that surveys be carried out in normal schools and universities. Nurses-in-training should be examined regularly; also industries where a high incidence of tuberculosis exists. (In British Columbia an arrangement has recently been made for the annual examination of all miners in the province). An attempt has also been made in areas having a high death rate to uncover as far as possible all open cases of tuberculosis.
4. Treatment facilities should be made available. These should be used to the best advantage and wherever possible hospital beds utilized to take care of open cases who cannot be cared for elsewhere.
5. Cost of treatment should be provided free wherever necessary and admission made on medical grounds alone.
6. Adequate medical service must be given to all institutionalized cases and pneumothorax and other surgical aids made available wherever these are necessary, either in the sanatorium or hospital units. Every attempt must be made to discharge patients at the earliest possible

moment and to this end pneumothorax should be given at home to all whose conditions are such that they can be discharged without danger of infecting their families and where facilities are possible for carrying out treatment at home.

We believe that we have the medical knowledge to control tuberculosis. We are a long way from being able to put this knowledge to work, but a co-ordinated provincial programme founded on the principles we have enumerated would soon reduce tuberculosis, reduce a good deal of chronic illness and death and lift from the shoulders of the taxpayers a tremendous burden which they are called upon to bear at present.

*Heart Disease and Pregnancy

C. W. HOLLAND, M.D.

TO those who practise obstetrics the problem of heart disease and pregnancy must present itself, at least, occasionally. Statistics reveal that out of every hundred pregnant women one has organic heart disease.

In the heart clinic of the Dalhousie Medical School we have during the past seven years participated in the management of a considerable number of these patients, referred from the prenatal clinic.

The recent literature indicates a general trend towards more successful management of these cases, but there is disagreement on many of the details. Though each case should be treated as an individual problem, there must be some guiding principles applicable to all.

Anything which may affect adversely either the course of pregnancy or the course of heart disease must necessarily be of great importance, not only to the patient, but also to the attending physician. It is generally agreed that pregnancy and labor increase materially the work of the heart, though there is no satisfactory explanation as to how this increase is brought about. A sound heart like a sound bank has ample reserves to meet its liabilities, but if the reserves become depleted and failure threatens, prompt action is necessary to prevent disaster.

The majority of young women get married without a physical examination. Even those who are aware of their heart disease, unless semi-invalids, are not likely to consult a physician as to their physical fitness for married life. In all probability were they advised not to marry, the advice would be ignored. In advising for or against marriage the physician is assuming a great responsibility and he must be, therefore, sure of his ground. I know a woman of sixty years with a well compensated mitral regurgitation, who, when a young girl had rheumatic fever with cardiac involvement. A few years later she was told by her physician to avoid marriage on account of her heart condition. Fortunately she ignored the advice, married, subsequently had two children, and now, forty-two years after the advice was given, her heart is still functioning well.

It is much more likely that the physician will be asked whether pregnancy should be contemplated, or, after it has occurred, whether it should continue. An intelligent opinion will require not only a knowledge of diagnosis and prognosis of heart disease, but also an insight into the social and economic life of the family involved.

The first step is to decide whether or not the patient *has* organic heart disease. A careful history is essential, with special reference to rheumatic fever, chorea, tonsillitis and syphilis, as well as any symptoms referable to the cardio-vascular system. However, many patients with rheumatic heart disease give a negative history, and have no idea that they *have* heart disease until it is discovered in the course of some illness, or during a routine physical

* Paper presented at the Annual Meeting of the New Brunswick Medical Society, Moncton, N. B., July 7, 1937.

examination. In countries where the incidence of rheumatic infection is high, about ninety percent of pregnant women with organic heart disease, have the rheumatic type. Thus in women of child-bearing age, luetic, congenital and chronic myocardial disease are comparatively uncommon.

The following conditions may be dismissed as having no influence on the question of pregnancy:—Functional systolic murmurs, benign irregularities and mild well-compensated mitral regurgitation. On the other hand, there are certain conditions which, when present, make pregnancy inadvisable; namely, subacute bacterial endocarditis, active rheumatic infection, permanent auricular fibrillation, the presence or history of congestive heart failure. A common and difficult problem concerns those patients with mitral stenosis or aortic valve disease. In the absence of evidence or history of failure, and when the response to exercise is satisfactory, they will probably go through pregnancy without mishap.

When possible, the woman with organic heart disease should be cautioned to consult her physician at the first suspicion or indication of pregnancy, so that a decision may be made early as to whether or not the pregnancy should continue. By means of the Asheim Zondek test it is possible to diagnose pregnancy at the third or fourth week. Certainly, if pregnancy is to be terminated, the first three months are the most favourable time. Some writers are so optimistic as to state that any patient with heart disease can be guided through pregnancy, and that therapeutic abortion is seldom justified, whereas others are perhaps too pessimistic in contending that every case of mitral stenosis, auricular fibrillation, and chronic myocardial disease should be aborted. It would seem safest to pursue a middle course in this controversy. Each case is an individual problem. The life of both mother and child may depend upon the physician's ability to forecast correctly the result of Nature's experiment, that is, the test of cardiac efficiency. It is not only a decision on the state of the heart in the first few months, but also what it is likely to be in the last, few months.

In the early months the presence of active rheumatic infection, permanent auricular fibrillation, and a history or evidence of congestive failure are indications for terminating pregnancy. If failure develops in this period it would probably have occurred apart from pregnancy. Of course, the patient, may, for religious or other reasons, refuse to undergo therapeutic abortion, in which event she must be treated by means designed to prevent or overcome the causes of cardiac disaster. In all probability many of these cases will survive childbirth only to become semi-invalids.

In addition to the state of the heart, other factors must be considered; for example, the temperament of the patient, that is, whether she will follow advice regarding physical activities, or ignore it; again, the social and economic status of the family involved. In this respect the well-to-do woman has a great advantage over her less fortunate sisters of the poorer class.

When the question arises as to whether or not a cardiac patient should have a second or third child, the physician should bear in mind that a one-child family is insecure, but that three children constitute a satisfactory family. The decision may be influenced by the experience of the previous pregnancy, but one must remember that heart cases, unlike wine, do not improve with age. If a cardiac is going to have children, she should preferably have them in the earlier years of her married life, so that she will have a better chance of living long enough to rear them.

In addition to the diagnosis of the cardiac lesion, it is of great importance to determine, if possible, the state of the cardiac function. Cases with organic heart disease may be classified as follows:

- Group I. No subjective symptoms; good response to exercise; no physical signs of cardiac failure.
- Group II. Subjective symptoms in response to exercise; perhaps some physical signs of cardiac failure.
- Group III. Symptoms and signs of failure at rest.

It may be difficult to interpret the subjective symptoms of a pregnant cardiac for such complaints as breathlessness, palpitation, chest-pain and fatigue may be due to nervousness and fear. However, dyspnoea on slight exertion or at rest, orthopnoea, cough and haemoptysis are usually evidence of cardiac failure. Important physical signs are, rales at the bases of the lungs, congested cervical veins, cyanosis, tachycardia and auricular fibrillation. Owing to the upward displacement of the liver by the enlarged uterus, congestion of this organ may not be elicitable. Likewise the size of the heart cannot be determined accurately, as a rule, due to upward displacement and large breasts. Oedema of the ankles, unless marked, is not a reliable sign, for it occurs in pregnancy uncomplicated by heart disease. An aid to physical examination is the measurement of vital capacity.

The onset of congestive failure is usually gradual, but it may be sudden, with the development of tachycardia or auricular fibrillation.

If in the early stage of pregnancy, it is decided that emptying the uterus is not indicated, the patient should be given specific instructions regarding her physical activities. She should be cautioned to avoid fatigue, to curtail her housework and shopping trips, and to get plenty of rest each day. It is not necessary to eliminate all exercise, but this should be of a mild character. In the average case digitalis is not required. The development of any respiratory infection calls for complete bed rest and the usual treatment. The most important measure in the management of these cases is careful and constant supervision. The fact that clinic patients, in spite of less favourable home conditions, have a lower mortality rate than private patients is doubtless due to the frequency with which they are examined. In our heart clinic we endeavour to see these women every two or three weeks in the first six or seven months, and thereafter weekly. Thus, any untoward symptoms or signs are elicited early and treatment promptly instituted. The first manifestation of heart failure calls for bed-rest, posturing, diet, digitalis and perhaps sedatives. If near term, or if the response to treatment is unsatisfactory, hospitalization is advised. If failure occurs in the last three months, every effort should be made to carry the patient along until the child is viable. When, at any time during pregnancy, the uterus must be emptied on account of heart failure, it is advisable to postpone operation until there is some improvement in cardiac function.

Patients who respond well to treatment may be permitted to go to term. When heart failure is prevented during pregnancy, disaster during labor and the puerperium is unlikely, though pulmonary oedema and embolism are more common in cardiacs than in non-cardiacs.

As to the mode of delivery, there is a difference of opinion. Some authorities favour normal delivery, but stress the advisability of making the second stage brief as possible by means of forceps; while others prefer Caesarean section. No rule is applicable to all cases. In addition to the cardiac con-

dition, the presence of any obstetrical complication must be considered. Caesarean section would seem to be the method of choice in primiparae, and when pregnancy is to be terminated prematurely. It has the additional advantage of providing an opportunity for sterilizing the patient. (Needless to say, this procedure requires the consent of the patient and her husband). If it is the first baby, sterilization should be postponed unless the pregnancy was threatened by serious cardiac complications. As to the anaesthetic for Caesarean section, ether may be safe for some cases, but for the severe ones the spinal method, or a combination of local with gas and oxygen are preferable.

The foetal mortality rate in cardiac cases is necessarily higher than in normal cases. As to the effect of digitalis on the foetus, there is no evidence that it is detrimental.

During the puerperium attention to the heart condition must be continued. Congestive failure, if previously present, may persist, or if previously absent, may develop and demand prompt treatment. The heart case should be kept in bed longer than the normal one. Congestive failure is a contra-indication to nursing the baby.

A most important point in the management, and yet scarcely mentioned in the text-books, is the continued supervision of the heart condition after the puerperium. The mother, thinking that the risk ended with labor and the puerperium, returns to her household duties, now greatly increased by the addition to the family, and perhaps has a recurrence of congestive failure or develops it for the first time. In most instances this could have been prevented by timely advice.

The following case reports represent the various problems which have confronted us in our clinic:

Case I. Age 23. Colored. Seen in seventh month of her fourth pregnancy with functional systolic murmur and multiple extrasystoles; no symptoms and heart otherwise normal. No treatment necessary. Normal delivery.

CASE II. Age 25. Chronic rheumatic heart disease with mitral regurgitation; seen in third pregnancy. Two previous pregnancies normal; no symptoms and no evidence of decompensation. Normal delivery at term. No heart symptoms since. This case is typical of our largest group, the great majority of whom have passed through several pregnancies without developing cardiac failure.

Case III. Age 24. Chronic rheumatic heart disease with mitral regurgitation; (no history of rheumatic infection). Primipara; first seen at seventh month; symptom-free and manifesting no unfavourable signs. At the eight month oedema of the ankles became quite marked and the blood-pressure rose. Admitted to hospital and with complete rest, these signs disappeared. Normal delivery at term. No cardiac symptoms since. This case illustrates the beneficial effect of complete rest.

Case IV. Age 28. Mitral stenosis and regurgitation. First seen in seventh pregnancy, the previous ones having been apparently normal. The only symptoms were mild dyspnoea on exertion and slight oedema of the ankles at night. She was instructed to rest most of the afternoon and to retire early. No digitalis was prescribed. She was watched closely, but no signs of failure developed. Normal labor and puerperium. When last seen four months after confinement, heart was in good condition.

Case V. Age 19. Mitral stenosis and regurgitation. First seen in second pregnancy at sixth week. The only symptoms were cough and palpitation, but there were no signs of failure. Tonsillectomy was performed at the third month, as it was felt that the cough was due to infected tonsils and her throat was constantly sore. Normal labor and puerperium. This patient was strongly advised to have no more children, but two years later she had her third baby, complicated by pyelitis, and she is now pregnant again. To date she has shown no evidence of failure.

Case VI. Age 25. Mitral stenosis and regurgitation, aortic regurgitation. First seen in 1934 with a history of two full-term children and one miscarriage. The only symptoms were palpitation and fatigue; no signs of decompensation. On regular rest periods, and iron for her anaemia, she improved. Since then she has had two more children with normal labors at term, and no evidence of failure.

Case VII. Age 24. Mitral stenosis and regurgitation. First seen in January 1934, in the fifth month of her first pregnancy. She was working in a store in the afternoons. Symptoms were dyspnoea on exertion, cough, palpitation and occasional praecordial pain. Examination revealed no physical signs of congestive failure except dyspnoea on exercise. Owing to patient's objections, termination of pregnancy was not considered, though the indications seemed sufficient. She was advised to give up her work and get plenty of rest. Six weeks later there were rales at the base of one lung, oedema of the ankles and a troublesome cough. Complete bed rest and digitalis were prescribed. She was admitted to hospital in the seventh month and a few days later developed auricular fibrillation. The digitalis was increased and she improved somewhat. Low Caesarean section was performed at seven and a half months, by Dr. W. G. Colwell, under local plus gas and oxygen anaesthesia, with successful delivery of twins. The patient stood this operation reasonably well and had an uneventful puerperium. Three months later, due no doubt to her strenuous household duties, she had congestive failure, which responded to treatment promptly. Fibrillation persisted. In spite of warnings, patient again became pregnant and was kept under careful observation. A second Caesarean section was performed just thirteen months after the first, under spinal anaesthesia. She stood this operation very well and again had an uneventful puerperium. Since that time the patient has had several attacks of congestive failure, but her heart has always responded to treatment.

This case was the worst of our series and provided a real problem in management. It illustrates how a severe case may withstand pregnancy only to develop failure owing to strenuous household duties and the care of children.

Case VIII. Age 43. When first seen in 1932 with hypertensive heart disease, anaemia and a history of *fourteen* full-time pregnancies. In spite of our warning, she became pregnant again and had another normal confinement. At no time were there any symptoms other than fatigue. In January 1937 she was admitted to hospital in her sixteenth pregnancy with a B.P. $\frac{260}{130}$; albuminuria, and an incomplete abortion. Vaginal hysterectomy was performed. Since that time the hypertension has improved considerably.

Case IX. Age 30. Chronic rheumatic heart disease—mitral regurgitation. When seen was six weeks pregnant and had had recently a second attack of rheumatic fever. She was having some joint pains still. Therapeutic abortion was performed with uneventful recovery. Rheumatic infection has subsided.

Though our series of cases has been comparatively small, we are inclined to feel rather optimistic about the combination of heart disease and pregnancy. Close co-operation between the Obstetrician and the Internist is invaluable in the management of these patients. Intelligent management will reduce the maternal mortality rate, so that we shall hear less frequently that tragic phrase "Died in childbirth".

*The Application of Psychiatry to General Medicine

LEO KANNER, M.D.

Associate Professor of Psychiatry,
The Johns Hopkins University School of Medicine,
Baltimore, Maryland.

WE are living in an era of medical specialization. The rapid progress of medicine and its auxiliary sciences, resulting in an accumulation of innumerable new facts, techniques and insights, has made it practically impossible for one person to master all the intricacies of the many fields of endeavor encompassed in the realm of healing. Even the best-informed physician can no longer, Atlas-like, carry on his shoulders the whole vast universe of medical knowledge, which has assumed the proportions of a truly encyclopedic *universitas scientiarum*. Resting on the pillars of physics and chemistry, zoology and botany, biology and psychobiology, it has come to embrace all activities of man and all the interactions between the human being and his environment. The immensity of the subject has made division of labor desirable and inevitable. But though an all-comprising familiarity with everything medical would be beyond the capacity of even the greatest genius, the cynical definition of a specialist as one who knows more and more about less and less and of a general practitioner as one who knows less and less about more and more does not necessarily hold true. For a good specialist does not allow himself to lose sight of the forest because of his preoccupation with a particular group of trees, and a good practitioner, while walking through the forest, does not fail to orient himself among its different sections. Our medical schools try to turn out all-around physicians with a good general background that enables them to deal intelligently with the common, ordinary, everyday phenomena and avail themselves of the specialist when there is a need for more detailed preparation and acquaintance. The student, without becoming an accomplished ophthalmologist, is taught enough about the diseases of the eye to help patients with uncomplicated minor ailments; he is taught how to examine the conjunctiva and cornea, how to detect errors of refraction, how to look at the eye grounds. This is equally true of his training in all the other specialties, with one significant exception: Most medical schools give him no instruction in psychiatry, or at best instruction in a very perfunctory manner unrelated to the daily practice of medicine. This gap in his training can be understood in the light of the history of psychiatry. So long as psychiatry limited itself to those who had fallen by the wayside and were regarded as permanent and irretrievable losses, physicians had little interest in a specialty that under such circumstances must lead to gloom and therapeutic nihilism. They were glad to leave demented schizophrenics and paretics, raving maniacs, disoriented seniles, homicidal paranoiacs and the idiots and imbeciles to their institutional psychiatric custodians and diagnostic cataloguers. Even then a greater familiarity was indicated

* Presented at the Dalhousie Refresher Course, September 3rd, 1937.

if one considers that more than one-half of all hospital beds are occupied by people suffering from various forms of major mental disorders.

We have demonstrated in a preceding lecture that psychiatry has undergone remarkable changes in the past three or four decades. It has shifted its emphasis from terminal stages to beginnings and early danger signals, from speculative groping to a respect for facts, from brain cells to people, from the laboratory of test tubes to the laboratory of life, from extremes to the psychopathology of everyday performance, from therapeutic inertia to planned and determined action. It has in some instances been helped considerably by better opportunities for physical treatment. Great benefit has been derived from antiluetic, malarial and diathermy treatment of general paresis, from thyroid medication in cretinism, from bromides, barbiturates, potassium borotartrate and ketogenic diet in epilepsy, from neurosurgery in cases of gross cerebral lesions. At this moment, attempts are being made in many places to test the efficacy of insulin shock therapy in the early stages of certain types of schizophrenic reactions. Additional benefit has come from a general improvement of community facilities. Quite a few of our mental hospitals have become modern research institutions. The social agencies and specially trained psychiatric social workers have formed a most helpful and truly indispensable link between the physician, the patient and the community. Mental hygiene clinics and psychiatric out-patient departments in mental and general hospitals have acquired remarkable skill in helping, advising, adjusting and guiding a considerable number of people, whether they be psychotic, near-psychotic, severely or mildly abnormal, or normal in the ordinary sense of the word yet sufficiently in distress to require understanding assistance.

How can the physician who has not specialized in psychiatry profit from all these developments? To what extent and in what manner can psychiatry contribute to the general practice of medicine? What can it teach the man in general and special practice to do for his patients even though he has not had a thorough training in this comparatively recent branch of the science of healing?

As a first postulate, he must be free or, if he has not been, free himself from the erroneous notion that there is anything mystical or tricky about this business of treating people in addition to the occupation with their bodies. The facts concerning the pathology of the person are as accessible to clear recognition and formulation as are the facts concerning the pathology of the heart or the lungs. But they also require the same seriousness, information and responsibility. They can be expressed in simple, understandable words. Some physicians may be somewhat surprised at the term "pathology of the person". For pathology to them has meant structural and biochemical pathology only. The psychiatrist often has patients referred to him with the statement that no pathological findings could be elicited. Such statements are incorrect. There is a pathology of tissues and tissue functions which must be examined and treated by means of methods and instruments devised for the particular organs and their affections. And there is a pathology of whole-functioning, of performance, which must be examined and treated with the help of methods appropriate for the particular individual and his difficulties. These methods are not at all represented by the remarks frequently made by physicians to the suffering patient, "There is nothing wrong with you," "Just nerves", "Go home and forget about it", or, "Your dis-

comfort does not exist except in your imagination." Nor are these methods represented by the slipshod prescription of a placebo or a lecture on the unreasonableness of the complaint. These things do not really help the patient.

A few examples may serve as illustrations of the various forms in which psychopathological problems may present themselves to the physician and the manner in which they were treated successfully. They were culled from the material collected by Dr. Thomas A. C. Rennie at the Johns Hopkins Hospital. In 1935, the combined wards of this hospital made not less than two hundred and sixty-five requests for psychiatric consultation to help in diagnosis and management of patients entered routinely on the general services for conditions not considered psychiatric in nature at the time of admission. In some cases, there were no abnormal physical findings whatsoever that could be made to account for the patients' complaints. In others, somatic dysfunctions were demonstrated but were not sufficient to explain the intensity and duration of the suffering or the lack of favorable response to mere treatment of the organ or organs involved. In still other instances, grave personality difficulties needed attention in addition to organogenic ailments of the body. The internists and surgeons dealt ably and skilfully with the physical disturbances of those patients but recognized that more was required than just the consideration of somatic functioning. They came to realize the value of psychiatric understanding and called in a member of the Henry Phipps Psychiatric Clinic not only for the purpose of helping them to restore those patients to better health and usefulness but also to demonstrate to them his methods so that they might be more adequately equipped to incorporate psychiatric intelligence in their own work with their patients. This liaison work has become very popular at the hospital and proved of benefit to the physicians in the medical wards, the psychiatrist who acted as a consultant and above all the patients themselves.

The following five cases are quoted briefly to show the value of personality study and personality adjustment:

1. Chronic diarrhea of 14 months' duration represented promotion strain and financial worry in a 24-year-old factory foreman, disappointed at giving up college to marry a wife with whom he was no longer compatible, whose parents he disliked and with whom coitus interruptus was the only form of intercourse. The prospect of a longer vacation and change to a more acceptable job brought relief.

2. Loss of voice and pain in the throat beginning with laryngitis represented a tense, depressed state in a 45-year-old lawyer, eager for promotion and baffled by the New Deal machinery, over-loaded with teaching at night school and faced with the prospect of divorce. Modification of attitude, relaxation, explanation and matrimonial reconciliation relieved him of pain and in two months enabled him to resume teaching.

3. A 32-year-old widowed housewife showed many evidences of hyperthyroidism, with tremor, struma and unilateral exophthalmos, but the B.M.R. was only +2. Examination elicited a story of prolonged tension, with death of child and husband, irregular employment and debt. Without iodine or surgery, and with management of her life problems, she fully recovered and the exophthalmos receded.

4. Fullness in stomach and bloated feelings were the complaints of a 38-year-old factory worker who had been told that he had a serious cardiac

lesion. The gastrointestinal discomfort really represented the worry over divorce, custody of the children and a second marriage and had no relation to an uncomplicated mitral stenosis. Reassured about his heart, told what work he could do safely and given a chance to find his way about more clearly in the domestic tangle, he soon returned to active life, minus the disturbing symptoms.

5. Pantopon, codeine, paraldehyde by rectum, transfusion and fever initiated nocturnal delirium in a 48-year-old man with sinus infection, who gave a history of lifelong nightmares and sleepwalking. Eliciting his cooperation, doing away with all sedatives and reassurance accomplished immediate cessation of the delirium.

The following two case histories are quoted in full from the records of the Harriet Lane Home, the pediatric department of the Johns Hopkins Hospital, where psychiatric consultation service has existed since 1930. Approximately ten per cent of all children seen at the out-patient department, in the wards and in the private diagnostic clinic were considered deserving of psychiatric examination and assistance. Approximately four hundred children are referred annually by the pediatricians for study and treatment of their personality difficulties.

6. Margaret C. was brought to the clinic upon the recommendation of her family physician, with the complaint that she had daily attacks of shortness of breath, palpitations, and fear of death.

She was given a thorough physical examination and was found to be essentially healthy. There was not the slightest evidence of heart disease or any other ailment that the parents feared might be responsible for her condition. She was given a psychometric test which proved her to be of average intelligence.

Her attacks had the following background: Margaret had always been treated as a "delicate child" who tired easily, wet her bed until the age of eleven years, was fussy about her food, and was spoiled by her grandmother and later by her mother. In May, 1934, towards the end of the school term, she worried about the possibility of failure in promotion and became sensitive, irritable and excitable. A physician advised tonsillectomy, which was performed under ether on July 10. She dreaded the idea of "being put to sleep" and wondered whether people ever failed to wake up from the effects of the anaesthetic. All went well for a month, except that she was greatly disappointed that, being a "convalescent", she could not visit her grandmother as she had done regularly every summer during the school holidays. On August 10, her stepfather remarked that it was exactly a month after the operation which seemed to have a wonderful effect on Margaret. On the same day, her mother did not give her the requested permission to go to the library, which precipitated a regular temper tantrum. About twenty minutes later, the child suddenly felt as if her knees were giving away, ran to the bathroom, threw cold water on her face, and asked for ammonia. Her mother became alarmed, put Margaret to bed, summoned her husband from his office, and a doctor was called. The doctor said the pulse beat so fast he could hardly count it and that the child had a serious "heart condition". The frightened parents called in three more physicians who hurled at them the "diagnoses" of valvular disease, paroxysmal tachycardia, and possibility of adrenal tumor, all in Margaret's presence. She was kept in bed for two months, was not allowed even to turn over in her bed alone, received high

enemas, ice applications to her chest, and was given digitalis, quinidine, thyroid, iodine, arsenic, luminal, sedatol, and bromides. In spite of all this, she had more and more attacks in which she had palpitations, complained of shortness of breath and pain on the slightest touch anywhere, had "smothering feelings", could not stand any noise about her, and was afraid she was going to die. Her condition became so bad that she had as many as three or four attacks daily, usually towards the evening before she went to sleep. In the intervals she thought of herself as a desperately sick girl whose days were numbered.

Margaret was the younger of two girls. Her father was an irresponsible man, the "black sheep" of a wealthy family, a fact, which his wife did not discover until after the wedding. They had met when she was not quite sixteen and he a soldier in the U. S. Army during the World War. He gave her two children but never even thought of supporting his family. After five years of married life, when Margaret was one year old, her mother finally left her husband, went to work and had her children raised by her parents on a North Carolina farm. The father disappeared and was never heard of since then. When Margaret was six years old, her mother remarried and took the children to live with her in Washington, D. C. The stepfather was a stable, good-natured, and intelligent accountant whom both girls fondly accepted as a father. Margaret's mother, ever since her disappointment with her first marriage, was "very nervous all the time, got choky when she spoke, had to stop and swallow, sometimes got a down and out feeling as if something terrible was going to happen, felt shaky in her knees and inside." Margaret's sister, Dorothy, between eleven and thirteen years of age, went through a period of "nervousness", when she would not eat nor feed herself, shook her head, chewed on her clothes, and grated her teeth in her sleep.

The nature of the difficulty was discussed with Margaret and her mother and stepfather. For the first time since Margaret's first attack, the parents heaved a deep sigh of relief upon learning that the child was not an invalid nor doomed to be an invalid. The child herself received the news with a great deal of joy. All medication was to be discarded right then and there. She was no longer to stay in bed nor to be treated as a sick child. She was, after a few days of gradual adaptation to normal life, to return to school and participate in the games and recreations of her friends and classmates, both of which things she was anxious to do. At the same time, better management of her feeding was discussed in detail with her parents and herself. Her mother was to go to the school and work out a plan with the teacher to help this normally intelligent girl to "catch up" with the class. Both Margaret and her parents cooperated splendidly. She has had no more anxiety attacks since she left the office. She began to eat well, is now doing well at school, enjoys a normal play life, and has lost her irritability and sensitiveness.

7. George R. was referred for psychiatric consultation on February 20, 1933, at the age of 10 years and 8 months. His family physician reported that "following pneumonia in 1932, George had been confined to bed every week from Sunday night to Thursday and was quite well from Friday to Sunday night." He could find "no evident physical cause for the disability." The mother recited the following story:

"When he first started about five months ago, on September 19, 1932, he had pain under his left shoulder. I called a doctor and he said it was pleural pneumonia. He kept him in bed for nine days. George slept most of the

time for three or four days, then he rallied. He did not have fever outwardly, the doctor said he had fever inwardly. He did not cough either, I can't understand that. He felt all right when he got up. While he was in bed, he ate well. The doctor told me his pulse was very slow then. He was up for two days, then he complained of pain in both legs under his knees. He went to bed again for about five to six days, and that pain disappeared; he had no fever. Then he got up, played for about three or four days, then he had those tired spells. He would go to bed and stay in bed for four or five days, sleeping most of the time. He can be waked very easily. But he seems so tired, doctor, he can hardly talk; it seems that all his strength is gone. He usually goes to bed on Sunday night and stays in bed until Friday afternoon, mostly every week, and he is all right from then till Sunday night."

During the five months from September 1932 to February 1933, several physicians called in by the frantic mother "diagnosed" the child's condition successively as pleural pneumonia, rheumatism, tuberculosis, anemia, kidney trouble, coma, and lethargic encephalitis. One physician refused to diagnose the case; he stated that it was a puzzle to him, that it was so unusual that in his many years of general practice he had never seen anything like it before. George was given aromatic spirits of ammonia, Upjohn's medicine "to flush the kidneys", citrocarbonate, milk of magnesia, luminal and other drugs. Forcing of fluids, one glass of water every half hour, was prescribed. He was to remain in bed for weeks at a time, undergoing a "rest cure". Placement in a tuberculosis sanatorium was recommended because someone had found "a spot on the lung"; the family refused to have him admitted. A neighbor, who had spent a long time in a hospital and therefore considered himself an expert in medical matters, came in every day, took the child's pulse and temperature, commented on the appearance of the urine and offered diagnostic and therapeutic suggestions of his own.

George is the youngest of four children, all boys. Pregnancy, labor and birth were normal. His mother was 42 years old at the time of his birth and worried about his development and future health, having heard that "change-of-life babies" have less vitality and strength than children born of younger mothers. For this reason, he was overprotected from the beginning, whereas the three older boys had been raised sensibly. He was bottle fed until over two years of age. His minor illnesses, mumps, chicken-pox, whooping cough and mild scarlet fever, all in pre-school age, were major events in the life of the family. He was smothered with solicitude, affection and indulgence. He was afraid of the dark and had temper tantrums. He learned to make full use of the mother's consternation over everyone of his complaints. Soon after he had entered school, the mother decided that he was too delicate to attend; she took him to a physician, who said that "George was a little nervous and might as well be kept at home". He was kept out of school for a whole year. Frequent harping on abdominal pain led to an appendectomy when he was 8 years old.

Physical examination, including X-ray, lumbar puncture and tuberculin test, proved the boy to be healthy in every respect, except for a sty on the left eyelid and one carious molar. Psychometric rating showed that he had normal intelligence. He kept clinging to his mother's skirt during the entire procedure, and separation was accomplished with great difficulty. Fearing further tests, he preferred to say little about his complaints, but he knew of every "diagnosis" that had been given out regarding his condition. The

social worker's investigation brought to light that the family lived comfortably in a pleasant suburban section. The father, an alcoholic of the mushy, sentimental sort, had managed to go unscathed and remain economically independent throughout the years of depression. The father, the mother, herself a hypochondriac of no mean proportions ("feels shaky inside", "coughs when excited"), had in her twenties a "prostration" lasting $2\frac{1}{2}$ years), and the 3 older brothers had always hovered over George whom they considered a sickly, delicate child. His brother, Harry, 3 years older than George, had always been "waiting on him like a girl".

The treatment began with an interview with both George and his mother, during which the nature of the condition was explained to them frankly and simply. Criticism was avoided. It was taken for granted that the mother had a right to be concerned so long as she believed the child endangered by the fact that he was born shortly before her menopause, and to consider him sick so long as she thought him afflicted with rheumatic heart disease, pleural pneumonia or encephalitis. For reasons of retaining their confidence in their private physicians, the patient and his mother were told that symptoms such as those shown by George may well make one think of diagnoses of the kind offered to them, that indeed we ourselves had not reached our conclusions until after a careful physical examination had been done. At this point an authoritative statement was made to the effect that, except for the sty and the carious molar, the child had been found to be physically healthy. The mother was satisfied that all necessary clinical and laboratory tests had been carried out. George was unreservedly happy; for the first time in his life he heard of himself spoken as a healthy boy, capable of rollerskating, riding on a bicycle, standing up for himself, going to school regularly and associating normally with other boys of his age. The mother was then seen alone. She now realized that, though George's organs had been healthy, there had been something unwholesome about the family's and George's own attitude towards his health. The mother's own hypochondriasis was touched upon as something that had helped to furnish the pattern and needed straightening out; it was suggested that she herself submit to a physical examination. Her notion about change-of-life babies was dispelled. Her idea that the school was a sort of torture chamber where delicate children were overworked beyond their capacity was replaced by the knowledge that George was physically and intellectually able to cope with the work of his grade. The mother took it upon herself to instruct the other members of the family accordingly. Then George was seen alone. While in the waiting room, he had had time to think things over in the light of his new knowledge. He was ready to go back to school on the following day. He wished for a bicycle. He enthusiastically accepted the suggestion that he join one of the boys' clubs.

Our social worker arrived at the house on the following morning shortly before it was time to go to school. This visit proved to be of essential therapeutic significance. George had tried valiantly to get ready for school but the old habit made its last stand. Another of his "tired, sleepy" episodes had set in. But this time the family showed no alarm. The social worker told George that, if there still was doubt in his mind concerning his health, she would be glad to take him back to the clinic for a repetition of the examinations. George got out of bed, at first languidly dragging one foot after the other. He then gathered momentum and left for school in due time. Ever since that morning, George has been going to school regularly, making

good progress. He has never since then complained about his health. He has taken part in the usual boys' activities. The family considers and treats him as a normal, healthy youngster. As a matter of fact, he at first tried to overdo somewhat but his mother, so much wiser now, gave him an opportunity to find his own pace. George has had a few mild colds during the past 4 years since the first clinic contacts; he and the family accepted those colds for what they were worth, without any ado.

These few examples, which may be multiplied ad libitum, show a number of things quite clearly. They show first that many patients present themselves to their physicians with complaints, problems and situations which cannot be attacked helpfully by the consideration of organs only. These difficulties come most frequently to general practitioners, internists and pediatricians but also confront the other clinical specialists. They represent a sizable section of neurological practice. Surgeons, gynecologists, and dermatologists are consulted not too rarely by so-called neurotic patients. We have had both adults and children referred for psychiatric assistance by ophthalmologists who had convinced themselves that the eye condition alone could not account fully for the whole picture or was in itself an expression of a psychogenic difficulty.

The examples show secondly that emotional and situational distress can very well result in various forms of somatic complaints and discomforts. Those familiar with Cannon's work on bodily changes in emotions will easily understand the rôle played by visceral participation in strong conditions of fear, anger, worry and excitement. Even under normal, physiological circumstances the mentally integrated individual reacts to milder emotions with changes in heart beat, blood pressure, respiration rate, appetite, blood distribution and bowel regulation. Palpitation in excitement, blushing in embarrassment and anger, pallor in fear, momentary breathlessness in surprise, the sigh of relief and the proverbial examination diarrhea are well-known phenomena. Vasomotor and sweat gland changes are frequent accompaniments of affective responses. Under abnormal conditions, this visceral participation may be greatly intensified and in the course of time so detached from the underlying emotions and situations that the connection is far less obvious and can be learned only through a painstaking examination of the person and the facts and factors involved. The quoted illustrations demonstrate how disturbing and even alarming proportions the bodily features of personality maladjustment may assume.

The examples show thirdly that it takes no weird terminology nor strange hypotheses to examine and treat pathological reactions of the person. The physician must learn to listen to what the patient has to say as carefully as he listens to respiratory and cardiac sounds. Just as it would not do to confuse one's own tinnitus or the noise of passing automobiles with cardiac sounds and murmurs, so it would be bad practice to confuse one's own prejudices and the noise of marketed theories with the facts offered by the patient's complaints, feelings, reactions and the situations to which he reacts. A few questions asked tactfully will give a preliminary orientation about the conditions in which the difficulty arose, about worries, anxieties, discontent, disappointment, frustrations, degree of satisfaction with one's home and work, one's attitude to the illness, difficulties earlier in life, sexual adjustment, matrimonial relations, religious, economic, vocational and recreational features and their meaning in the life of the individual. Patients ordinarily welcome

rather than resent such questions if they are put sympathetically and understandingly, not in the form of a third degree examination but in the form of a doctor's attempt to acquaint himself with his patient. Knowledge of the facts, common sense and abstinence from hasty conclusions are the physician's best equipment for this type of work. Thorough and competent physical examination is always indispensable. The patient's grasp and intellectual endowment must be taken into consideration. His own cultural pattern, which may differ markedly from that of his physician, cannot be disregarded with impunity.

The examples show fourthly that, once the nature of the maladjustment is recognized, treatment consists of an attempt to help the patient to readjust himself in his environment and, to the extent possible, adjust the environment to the need of the patient. This may involve a change of family attitudes, choice of another occupation, direction of ambitions into more appropriate channels, treatment of organic disorders, reassurance about unwarranted fears, suggestion of adequate recreation or whatever other steps may be found necessary in the individual case. The patient must be made to see the logical relation between his difficulties and the recommendations made by the physician. Therapeutic advice and arrangements must not be decreed dictatorially but should be made plausible in a manner inviting cooperation.

Problems of the character illustrated in the examples almost invariably come to the family physician long before they reach the psychiatrist who rarely gets to see them before they have assumed really disturbing proportions. Thus the physician has an opportunity par excellence to do mental hygiene work in the best and noblest sense of the word. By handling personality difficulties wisely at their very onset, he can prevent the development of chronic hypochondriacal invalid reactions and much unnecessary suffering and unhappiness. If he fails, he is often apt to send the patient on a wild goose chase from doctor to doctor, from clinic to clinic and from cultist to cultist. Many hypochondriacs do not arrive at the psychiatrist's office until they had been almost completely eviscerated, had lost their teeth, tonsils, appendices and gallbladders, had been X-rayed and cystoscoped innumerable times, had had their vertebrae adjusted by chiropractors, had been prayed over by faith healers and had swallowed the contents of a medium-sized drug store, not to speak of injections, lamp treatments, rest cures and massages. All this can be prevented by getting early at the facts and helping the patient to develop a healthier attitude towards health.

It is not too difficult to acquire psychiatric intelligence. It is hoped that the facts of the biology and pathology of the person will in the near future be taught systematically in all medical schools. Gatherings such as this are proof that physicians are ready and anxious to incorporate factual common sense psychiatry in their medical armamentarium and to apply it in their daily professional contacts with human beings.

Presidential Address*

DR. P. E. BELLIVEAU

It gives me great pleasure to preside at this meeting of medical health officers, especially in this old Scottish town of Pictou. Although somewhat different from our French Acadian section in Digby County, at the other end of this province, we have known its hospitality since being here at the meeting of 1929. We know that the same hospitality awaits us this year. We know the hospitality of Nova Scotians, for Nova Scotians we are all! And, as fellow-practitioners and Nova Scotians we should be united in one brotherhood whose talents are spent for the relief of the suffering and for the well-being of all our fellowmen.

Indeed, we know that the ultimate objects of medicine are to prolong human life and to alleviate suffering. These are the objects as seen in medical text books, and these the aims of every doctor in the land. But since doctors do not work only as individuals and have grouped together in public health associations, a wider scope has been given to medicine, and to prevention of disease. To prolong human life and alleviate suffering are therefore the aims of individual doctors and to prevent disease is the great aim of public health organizations.

This task is a noble one, based upon christian charity—the love of our fellowmen. When we graduated in medicine we became members of a profession which should stand high in public opinion and it is our duty, as expressed by Dr. Alan Jackson in the *Canadian Doctor* “as individuals and as organizations to cultivate that irresistible quality of personality that begets love, confidence and friendship in those about us”.

Now, gentlemen, I would say that if the medical profession as a whole, or doctors as individuals, want to “beget love and confidence and friendship in those about us”, we must start at home and have the proper relations among ourselves; we must support our organizations and our organizations must support us. If we ignore medical ethics and have no respect for fellow practitioners, surely the public will at once lose confidence in our profession. The practising physician should also recognize the importance of the health organizations of his locality. Alone, how much can he accomplish in the way of preventing disease? Many men never report communicable diseases to authorities: as a result, public health measures cannot be taken; the public is deprived of proper prophylaxis against disease and blames the profession for not carrying on the work expected of it.

I believe that public health is so important and the discussions taking place at a health officers association meeting are so vital to the practitioner that every member of the profession should be invited to our meetings. The general practitioner is not a thing of the past. Public health authorities need him; it is he who spends sleepless nights and travels through snow banks, looking after a great many indigents without remuneration. Their relations are such that practitioners and health officers must work together, as well as

*Annual Meeting Provincial Association of Medical Health Officers, July 6, 1937.

with other medical associations. Unless we give support to our organizations, we may have to accept legislation that may not be best for the profession or for the people.

It would probably be well to remark here, that our Provincial Association could have closer relations with the Canadian Health Association. At some of the meetings of this organization there have been no delegates from the Maritime Provinces. Most of the discussions have been centered about the problems of the Great Lakes district and the supply of drinking water in that region. Surely there should be some problems of interest to Nova Scotia at the meeting of the Canadian Association. Our problems will not be discussed if we are not there.

Every member of our profession should realize that, in the problems of the day, he is indebted to public health authorities in many ways. Our men alone may do a lot for contagious disease, but as individuals they have not even the right to quarantine. In tuberculosis, again, the clinics are a great asset to the general practitioner in that they help him to recognize early cases.

Tuberculosis, certainly is a disease that we try to stamp out and it is here we may see the need of the combined efforts of medical men, health officers, authorities and institutions. We welcome the clause which permits health officers to send to the sanatorium open cases of pulmonary tuberculosis, regardless of the opinion of municipal authorities. We also appreciate the action of the Kentville Sanatorium when it has clinical sessions for the profession. For, after all, the cases as a rule are approached for treatment through the general practitioner. If he makes his diagnosis too late, then a curable case may become incurable. Besides, the practitioner, himself, must discriminate among his cases; which one may be cared for at home, and which must be sent to an institution, for we have limited accommodation in our sanatoria. The public itself also has to be educated and in this matter the general practitioner again has a very great authority. "Public education is perhaps the most important single factor in the successful maintenance of community health".

The efforts of the health officers in preventing disease should also be directed against diseases which are non-infectious. In 1933, at St. John, N. B., we heard a fine address at the meeting of the Canadian Public Health Association urging the Departments of Public Health into a campaign for the further study of cancer as a community disease. Something has been done in this line, but much remains to be done. Here again, we need cooperation. If we want to operate, we need an early diagnosis, and if radium treatment is indicated, we want to see it used as a curative and not only as a palliative measure. We need a family doctor who can early diagnose his case, and an enlightened public who will see their doctor when treatment is still possible. Periodic health examinations are a very important factor to arrive at the early diagnosis of these cases.

In the prevention of these two outstanding conditions, tuberculosis and cancer, cooperation on the part of the doctor is therefore very essential. We should strive, in every way possible, to interest the profession in all matters of public health as well. I believe that literature, public health journals included, should be sent to every practitioner of the province, whether paid for or not. The problem of community health is so important that it begins with antenatal care, and its efforts cease at death only.

The question of pre-natal care and prevention of death brings us into the realm of venereal disease, for syphilis is often the cause of pre-natal death and

with gonorrhoea is responsible for much misery and hereditary troubles. In smaller towns, many who are infected get a prescription from a doctor but are unable to pay for the remedies; or they consult a druggist without seeing a doctor at all. In the country, the doctor has to furnish the drugs, and should be compensated by the municipality, but as a rule he is not. The rural municipalities will pay expenses made by doctors for venereal diseases, with difficulty. Our Public Health Act gives authority to the medical health officer to go far in the battle against venereal disease. He may enter any house where there are suspects, may examine any suspect, may fine persons who refuse to be treated, or may give directions for their detention and isolation. Still many cases are going at large. I believe that these persons should have better facilities to get treatment as in the American plan which "believes and is already strongly committed to the policy that Federal agencies and State Boards of Health must be enlisted in the fight, and that they must cooperate with hospitals and universities". Federal and provincial authorities should cooperate with our institutions and, I would add, with our physicians. Again cooperation is the essential, coupled with more easy access to an institution or a clinic, or a physician, in rural districts, who is remunerated for his efforts. Another section of the American plan says that "it regards those suffering from venereal disease as patients, not criminals. It believes that society owes these patients quite as careful treatment, quite as sympathetic social service, and quite as expert institutional care as any other patients". This statement certainly deserves our consideration.

These are a few of the problems of public health officers and departments. Much has been done, and much remains to be done in this line. Sir William Osler declared in the last year of his life that "the future of medical practice is in the preservation of health—the prevention of disease". This shall be achieved by the scientific medicine, which has opened a new field for investigation.

It may not be amiss to quote here what Virchow said quite a few years ago: "We are in the midst of a great reform in medicine. . . . Everywhere inquiry presses on into the most intricate circumstances appreciable by the human intellect; knowledge embraces in its expansion countless diverse details which disturb the conception of the simplicity of human life and to many seem more appropriate as adornments of learning than as the implements of action. Especially does this embrace the practitioner of medicine. He to whom the exercise of his profession allows hardly the necessary time for reading. . . . finds himself in a dizzy chaos in which the ruins of the old are inextricably entangled with the building stones of the new".

The busy practitioner still laments his lack of opportunity to read, and is still distracted in his efforts to recognize among the ruins of the old, the building stones of the new. Changes are bound to come. We must keep apace and, with cooperation and good understanding among fellow practitioners and health organizations, we shall have a satisfied public and the medical profession shall be able to attain its object which is not the glorifying of its own, but the betterment of the human race, both in body and in mind.

Then and Now

DR. M. R. YOUNG

WHEN Dr. Campbell, our chief, asked me to give a talk or read a paper at this meeting, I demurred on the ground that I was only a general practitioner and did not know any too much and had not made a special study of any particular subject. However, he reminded me, much to my regret, that I had been a long time steadily at work, and must have had at least a few experiences and impressions that might be worth telling. Be that as it may, I agreed to give a short outline of my impressions regarding some of the communicable diseases, gleaned along a thirty-six year road.

In looking back to the beginning of the present century, I think we will all recognize the wonderful advances which have been made in the prevention and treatment of a great many of these diseases. In a few cases it is possible no advance has been made, notably in smallpox, and perhaps measles. There has been no advance in smallpox because none has been needed, excepting perhaps in prevention. Vaccination was done in 1900 and during the last century, just as effectively as it is to-day. The only difference is that since that date vaccination in Nova Scotia has become compulsory or partially compulsory. I remember distinctly the general epidemic of this disease during the winter of, I think, 1906. Previous to that date for a number of years, vaccination had been neglected and Nova Scotia was a fertile soil for invasion, and there was a general outbreak. I happened to be health officer for the country sections of Pictou County at that time, and saw hundreds of cases, and vaccinated many hundreds. I visited, I think, at least 75% of the rural schools of Pictou County, and vaccinated the pupils and many others. The same thing occurred in the towns of the county, and I think all over the province. This, along with the partial present yearly vaccinations of our school children, has made the province fairly immune to smallpox. However, if some reports which I have had, be true, what with laxity—perhaps sometimes on our part and that of school authorities—and conscientious objectors, only a small proportion of our school children are being vaccinated. Because of this, it may be that after several years we may have to have another bout with our old friend smallpox. What impressed me particularly in the epidemic referred to, was the complete effectiveness of vaccination. I think I could tell by the severity of the case about the time the patient had been vaccinated, or, if not vaccinated himself, whether or not his parents had been. I also formed the belief that an unvaccinated patient would not die of the disease if his parents, or one of them, had been vaccinated; and also that two vaccinations in a lifetime would be sufficient to render the patient immune. In several cases I could not get a "take" where there had been a successful vaccination in early life.

During that epidemic, I did not run across one conscientious objector. The scare, I think, was too great for this class. They crop up after the scare is passed. To my mind, and I think to yours, a lay conscientious objector is either ignorant or stubborn, and has no grounds for his belief. Conscientious

* Presented at the Annual Meeting Provincial Association of Medical Health Officers, July 6, 1937.

objectors would not be heeded regarding penalties for murder or theft, and why should they be in the prevention of disease, especially when the methods of prevention are beyond doubt scientific and effective. The thing is absurd, and do you not think that the clause relating to conscientious objectors should be deleted from the health regulations? To take an oath is only part of the day's work to some people anyway. Probably, however, there is some reason for this clause which has escaped me.

I have often wondered why scarlet fever is considered such a serious disease. During the last thirty-six years I have seen a large number of cases, but never a death, while I have had some deaths due to measles and whooping cough. I have had patients very ill with albumenuria, rheumatism, and throat conditions, but they all completely recovered, and twenty-five or thirty years ago we had many more cases, I think, than now. Pneumonia or meningitis or tuberculosis, complicating or following measles or whooping cough, we all know keep us plenty busy, and are very fatal. Although I have had no deaths from scarlet fever or its complications, I have had several due to the complications of measles and whooping cough. From my experience, I consider the latter the most to be dreaded because of its very distressing symptoms, its long duration, and its frequent complications. I have tried everything, I think, that has been from time to time recommended, including vaccines, but I do not believe that I have ever seen anything do any good. Of course the relatives and neighbors advise various remedies, as they do in all diseases, but a novel one to me was for an exceedingly severe case in a very young child. This was many years ago. I could do little for this child, who was in the sixth week, and gave the parents a bad prognosis. Well, I called on a certain Sunday and was told by the mother that her husband and two neighbors were out trying to get a live trout. Somebody had told them that if they would hold the trout's head in the child's mouth for a few minutes, the trout would contract the disease and the child would be cured. They fished all day and, I suppose because it was one of the winter months, they were unsuccessful. I dissuaded them from further fishing the next day, as I thought I saw some amelioration in the symptoms. The child got better and the trout didn't get the glory. I have since wondered how the caption "Trout cures when doctor fails" would look above an article on whooping cough in the lay press. . . .

If my recollection be reliable, I think I just escaped the throat scrubbing and painting stage in the treatment of diphtheria. Some of the older doctors had at the first of the century been using local applications, etc., but this was soon done away with. Of course, antitoxin was used then with just as much efficiency as it is today. Perhaps, before long, toxoid immunization will be carried out generally, either yearly by the treatment of all our school children, or in some other way; and, with further research, it is probable that scarlet fever and whooping cough will be eliminated.

I think it was about the year 1887 that a very severe epidemic of influenza swept over the world and caused very many deaths,—somewhat similar to the outbreak of 1918 and 1919. The disease took on the popular name of La Grippe, then, and was known by this name, as you know, until 1918. I know that there was an epidemic of La Grippe every year from 1901 until 1918, of about the same severity, the same symptoms and complications, and attacking about the same number of people as during the year from 1920 until the present time. I for one felt rather badly that the suggestive and well-known name "La Grippe" had to give way to the less dignified name "The Flu" in 1918. I have

never heard any well-founded reason for the very much increased severity of the disease in the years 1918 and 1919. I am not sure, but I think it was in 1918 that vaccines for the prevention and treatment of this disease were first used. I know that I used vaccines during that epidemic and every year since then, especially as a preventive, and have come to the conclusion that they are more or less effective. I would like to know what the general opinion is in regard to this.

In all of these diseases mentioned, aside from immunization and attempted immunization, a more or less determined effort to check the spread of these diseases, has always been made in my day by isolation of patients and contacts. Well, I have to say that, from any experience I have had, I am inclined to believe that this is not as effective as may appear on the surface. If the case reported and quarantined was the first case in the community or town at the time, it would be more or less satisfactory. But how often are we called in, say to a family with scarlet fever, because one of the patients began to look serious,—otherwise they did not intend to have a doctor. And how often have we been told that neighbors' children had sore throats and a rash, without a doctor, and I, for one, have had reason to believe them. This applies I think to all of the communicable diseases, although not so much in the case of measles, because the severe pre-rash cough drives them to a doctor, fearing pneumonia. The family of the case we see is penalized because it has, of necessity, to send for a doctor; or, as often happens, of course they do not wish to conceal anything of this nature, while others, not so conscientious, or sometimes not thinking the trouble amounts to anything, escape the net. This applies to diphtheria, measles, but I think, especially to whooping cough, chickenpox and scarlet fever. I have often wondered if a health officer ought to play the detective and thereby get into serious squabbles with his friends and his fellow-practitioners. Statistics may serve a useful purpose, if fairly accurate, but I am of the opinion that they are and always have been extremely incorrect. I would like to know a solution, if any, for this state of affairs. I would also like to know if it is the general medical opinion that cases of influenza and whooping cough and chickenpox ought to be reported and quarantined, or other isolation means employed. I believe that in most communities this is not done. Not one case of influenza was reported to me during the past winter, nor did I report one of my own cases, and I think I am safe in saying that there were at least 800 cases. I do not know, but I presume that the same condition obtained all over the province. What good can be accomplished by obtaining reports of an extremely small percentage of the cases of any disease?

When I look back to thirty-six years ago, I am inclined to think that, considering the difficulties to be encountered and the seriousness of the disease, the efforts to combat tuberculosis, if not the most successful, have been the most praiseworthy. During my early days in practice, rest did not play a great part in treatment, at least not more so than in the treatment of, say, nephritis or diabetes, nor was fresh air in our own climate stressed to any extent. Before that time, particularly, was this the case. The obsession was, to get the patient out of the climate—to California, some Southern district, Denver or the White Mountains. These patients were sent away, as you know suffering from advanced tuberculosis, and perhaps the wonder is that some of them improved. The X-ray, travelling clinicians,—we know here how we look forward to the visits of the genial Dr. MacRitchie, and have welcomed our present chief, and the late Dr. Bayne, and others—, and an easier acquiring

of a sputum report, plus more cooperation on the part of patients, etc., have made it much easier to arrive at a diagnosis than in the old days when a good many cases were not diagnosed until they were far advanced. The laity, too, are much better informed and thus cooperate much more readily in the matter of prevention, isolation and cure. I have seen whole families wiped out, and I think, because I was unable to convince them that fresh air and rest and sputum care were essential for their cure, their firm belief being that closed windows and heat and more heat were the proper thing. Thanks largely to our efficient Department of Health, such conditions are almost unknown today.

Yet with all this, and with the newer surgical measures employed, we still have an abundance of tuberculosis of all forms, which can only mean that the fight to exterminate or greatly lessen the disease is either a losing one or that combative efforts must be greatly increased. Now you may think it is presumptuous on my part to attempt to suggest anything along this line, and my excuse is that I have been several years mixed up with civic work in Pictou and know a good deal about how the financial end of this problem works out. I am convinced that not sixty percent of our Pictou County families are able to support a patient at Kentville without very real difficulty, and a large proportion of this sixty percent not at all. How often have we all suggested to patients in doubtful cases of lung tuberculosis that they have plates taken of the chest and how often have we got the reply that they were unable to pay for this; and when we know, or think we know, that the patient ought to be hospitalized, the jockeying and lobbying for the finances begins. After some weeks, perhaps the municipality in which the patient has a domicile agrees to pay half, and some other organization or organizations assume the balance of the expenses, perhaps, say, for one to four months' treatment. I know that a municipality is liable for a patient's expenses in Kentville if recommended to Kentville, I think, by a health officer, but, so far as I know, this practice is not carried out to any great extent. Even if it were, the old saying that "Too many cooks spoil the broth", holds true, and I am positively of the opinion that it is high time that this whole problem of the prevention and cure of tuberculosis should be administered by our Provincial Government. Of course, when this suggestion is made, we are up against the objection, "Where is the money to come from?" Well, supposing our government should appropriate, say, \$150,000 extra, yearly, for the purpose of control of tuberculosis and the help of the tuberculous needs, a great advance would be made, and I believe that \$150,000 will only hard surface eight or ten miles of road. I am not making criticism of any government, and I believe in the programme of hard surfacing and the other measures of different governments, even perhaps Old Age Pensions—which in a good many cases are well deserved, but in many others may be examples to eat, drink and be merry, for to-morrow we will get a pension—, but I submit that the health of Nova Scotia should be the first consideration of those in charge of its affairs.

And in this connection, one may sometimes wonder, when looking back to the old days and the stringent measures then used to control some diseases, notably leprosy, if we perhaps are not a little too sympathetic today in our efforts to lessen or control tuberculosis. Our governments at least could assume the centralized control, and, if not willing to finance the expense, this could be turned back to the municipalities from which the patients come, as is done now by hospital authorities with non-tuberculous patients,—often unfairly, I think, and without the patient being recommended by any municipal medical man.

Why could not our Government at Halifax, assisted and advised by the Health Department and our medical societies, work out some scheme whereby our tuberculous needy patients have hospitalization quickly and without interminable fuss and delay, and very often no attention whatever? I have often wondered if some such expense as the following would be, or would not be, of great benefit: 1st, The appointment of some number, say ten, specially trained doctors, each one having a portion of the province to look after, who would have complete authority to investigate and dispose of patients and contacts as he saw fit; who would be on call by the medical men of that district to take charge of suspected cases as well; who would be in complete charge of the situation and at once know what to do. 2nd, To enlarge the capacity of the admirable Kentville institution from time to time as might be needed, or arrange for the taking care of patients in some other way or at some other point. I feel sure that the extra amount of money required for some such scheme as this would not be prohibitive, and would tend to lessen the incidence of tuberculosis and give many more infected patients the benefit of three or four months' treatment in sanatorium and the chance to learn about the disease and how to live and conduct themselves for the best benefit to themselves and the least danger to those with whom they come into contact. I feel sure that any individual or any political party would not dare adversely to criticize an additional appropriation for the fight to irradiate or hunt tuberculosis, this insidious disease.

Our governments, I think, could help in various other ways, notably so in the matter of promiscuous advertising of patent medicines, especially with regard to radio advertising, which I think we will all agree is very effective. I have known numbers of patients who had been swilling radio-advertised cough nostrums when they were suitering from lung tuberculosis or pneumonia. They drink radio-advertised so-called stomach, kidney and liver cure alls. In this way, proper diagnosis and treatment are often for months delayed, much to the detriment of the patient and the community. The thing is obviously and palpably wrong, and I think we should unitedly make a determined effort to stop it.

I can distinctly remember that typhoid fever was much more prevalent in the old days than it is today. Thirty and thirty-five years ago, I always had at least a few cases and expected them in the autumn and early winter months. Now, I think, it is rather rare to hear of a case. This improved condition, of course, is due mainly to better supervision of water and milk supplies, improved sanitation generally, more knowledge among the laity, and thus more awareness as to what they eat and drink. It is not too much to expect that typhoid fever will soon become a forgotten disease in Nova Scotia.

I think we all deplore the fact that the same cannot be said regarding the venereal diseases. We always have them, and it seems to me in increasing numbers, due, no doubt, partly to the modern tendency to take a chance on anything, or perhaps to an increasing looseness of morals. Probably sometime some super-intellect may devise a plan to eradicate these diseases, or at least, to limit them.

The treatment,—aside from the newer specific treatments,—years ago was much the same as today, excepting, I think, that in the old days the rest, and dietetic treatment of all acute attacks was more stressed than it is today. Patients were kept at rest longer, and more attention was paid to the diet. Anything outside of a strict liquid diet was taboo, and the day was often stated,

—perhaps a week or two hence, after convalescence had started,—when the patient could sit up for ten or fifteen minutes. Nowadays, I often find when calling that I am told that “Jennie feels better today, and we let her get out of bed for a while”, or that “somebody sent in some bananas and she ate one”, or that “being a nice fine day we let Johnnie sit out in the sun for a while”. This may be because I am getting old and they don’t heed me, or perhaps it is due to the increased hurry of the present day, and as is often expressed, “I haven’t time to be sick”; or perhaps they are more willing to take a chance now. However, it seems that they generally get away with it, and it may be just as well. I know that of late years I have less to say during the convalescent period, and thus the patient hasn’t so much chance to have the last laugh. Years ago of course we did not have such a tremendous variety of prepared medicines and we spent a good deal of our time becoming acquainted and experimenting with them. I for one, very often have to go back to the old shot gun prescription to get better results. Formerly, better cooperation of the patient and relatives applied, I think to every form of disease excepting lung tuberculosis. The doctor’s prognosis then, in any stage of tuberculosis was not hopeful, and the patient firmly believed that he was a goner and that there was no use in trying.

PHYSICIAN WANTED

There is a vacancy at Badger, Newfoundland, within a few miles of Grand Falls: Salary \$175.00 a month and expenses: single man preferred. Further information may be had by writing directly to Dr. F. A. Minshull, Grand Falls, Newfoundland.

The Nova Scotia Medical Bulletin

Official Organ of The Medical Society of Nova Scotia.

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

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. XV.

OCTOBER, 1937

No. 10

FORNICATION AND DISEASE

THESE comments have been prompted by a letter to be found under "Correspondence", in which the writer deploras the absence of a clean cut and definite programme for combating venereal disease.

This is indeed a topsy-turvy world. Huge sums are spent annually in treating those who care to casually avail themselves of the services of the free clinics and hospitals but very little is spent in primary prevention. To stand idly by and permit the infection of our water supply with typhoid and cholera and to devote our whole effort to treating those unfortunate enough to contract these diseases, (and who in their wisdom decided that treatment might possibly be a good thing), would to us of the preventive turn of mind be an excellent example of administrative lunacy and community homicide. As a people we will never rid ourselves of the destructive diseases—gonorrhoea and syphilis—until we have sense and decency enough to deal with them as highly communicable diseases which not only take their toll of those who contract them in the first instance but of those yet unborn.

Why are the venereal diseases treated with such tender solicitude? The reason is that disease and what is called sin are to be found in the same boat—or bed to be more exact. In our professional capacity we have nothing to do with sin, the word should be to us meaningless apart from the breaking of health regulations. To speak of a disease as "bad" and so imply that others are "good" is just so much nonsense. To physicians all diseases are on an equality quite regardless of their etiology or the morphological appearance and staining reactions of the causative organism.

Again we might just as well be plain about the matter. Illicit intercourse, which is usually considered the first stage in the spread of these diseases, must be made as safe an undertaking as possible. "Dear, dear, what's the man suggesting, making the world safe for fornication?" That's exactly it. Has it not been unsafe quite long enough? The wards of our general hospitals and those for nervous and mental diseases, our institutions for the blind and your own medical experience should help you answer the question. We are all agreed that illicit sexual relations should not take place and we deplore them

to the nth degree, but we must also acknowledge that they have taken place for some considerable time and will in all likelihood continue to take place for an equally extended period. Personally I do not feel qualified to pass judgment on the "sin" element. So many factors enter into the matter, the emotional or heredity background, the quality and quantity of the internal secretions, the discipline of appetite engendered in the home and by religious training and the peculiar circumstances existing at the critical moment of temptation to yield to one of the most fundamental urges that the Creator implanted in all animate creation.

"Who made the heart, 'tis He alone
Decidedly can try us;
He knows each chord, its various tone,
Each spring, its various bias:
Then at the balance let's be mute,
We never can adjust it;
What's done we partly may compute,
But know not what's resisted."

When younger I could quite readily classify the saints and the sinners, but with more experience of life and practice, the line of demarcation is not quite so sharp, it has become blurred, I suppose, by a tolerance that recognizes that "there is so much bad in the best of us and so much good in the worst of us that it hardly behooves any of us to talk about the rest of us".

During the War I youthfully suggested to my senior officer that, instead of having so many men incapacitated, precautionary instructions be given and their practice insisted on, thus making it a misdemeanour to develop venereal disease. "My dear boy, the religious element in the country would not stand for such teaching". This I could hardly believe until one of the returned medical officers told me of his experience in Egypt. It appeared that two Australian doctors determined to do something to guard the youth under their care against these infections; accordingly they strongly advised the men against indulging, on the other hand, realizing that to the physically fit and at an age when the reproductive urge is most intense some would probably resort to the normal physiological method of relief urged such as exposed themselves to report for treatment immediately on returning to camp. Believe it or not, and I must say it sounds incredible, the chaplains attached to these battalions used their influence to the end that these conscientious medical officers who attempted to stand between youth and disease were recalled in disgrace, accused of having encouraged immorality among the troops.

The chaplains and the physicians were as one on the matter of advice, beyond that point their ways parted. The medical men wished to protect and guard those for whom they felt responsible and return them physically clean and fit to the women whom they might marry and as suitable parents for the next generation. Those from whom better was expected appeared to be quite satisfied, even if a huge proportion of an army on active service was relegated to hospital, so long as men were "punished for sin." That such medieval ideas as that disease, storms, earthquakes, and so forth are "punishment for sin" at the hands of an outraged Deity should persist as late as twenty years ago is as interesting as it is regrettable. True, breaking and defying the Creator's law as expressed in nature brings inevitable retribution, but the reproductive act is a fulfilling of the law and is only sin in so far as it collides

with our community and social experience of what is wisest and best. What untold harm has resulted from linking the sexual with the idea of wrong, something to be ashamed of, the immoral. The mathematical genius readily calculates in terms of light years, but the genius has yet to be born who can estimate the mass of human misery that has emanated from taking seriously Mother Eve's little affair with the serpent. We got over the absurdity that women should suffer in childbirth because of that fantastic piece of imagery and hope that the physical "punishment for sin" idea is on its last legs. "Oh", but one has heard it argued, "Those diseases are the wages of sin". Spiritual death, that is a separation from, and an ever widening gap between the individual and that which is highest and best, and an ever increasing blunting of the appreciation of "Whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are lovely, whatsoever things are of good report", is the breaking down of the spiritual union between man and his Creator and constitutes the wages of sin, not a gonorrhoeal urethritis or a syphilitic chancre. Illicit sexual intercourse is bad enough, individually and socially speaking, but permitting such to be associated with disease is surely making matters many times worse. I have heard it contended that if the fear of disease were removed people would wallow in "sin", in short that gonorrhoea and syphilis are pillars of morality and purity in our social life. Personally I entertain a much better opinion of my fellow pilgrims along this perplexing path of life. Eliminate disease and it is highly questionable whether illicit intercourse would increase. And if it did is that any argument that the sin has increased? Certainly not, according to the standards of Jesus who taught: "That whosoever looketh on a woman to lust after her hath committed adultery with her already in his heart." That is, the outward expression is the lesser part of the phenomenon. Lust is of the spirit, like hate, envy and greed, and fornication merely the physical expression of the inner defect. It thus rests with the home and the church to care for the fundamental flaw of character, and with the public health authorities to prevent any untoward social complications of its expression.

Supposing for the sake of argument that the frequency of illicit intercourse actually increased with the dissemination of preventive measures, surely freedom from disease would be a worthwhile price to pay. Much as one would deplore an increase, yet, if that increase meant the saving of the vision of one child, how trifling and silly the objection becomes. You would be amazed at the amount of "sin" I could tolerate if my child's vision were at stake.

In this Province any man is at perfect liberty to contract gonorrhoea or syphilis and whilst in the most infectious stage obtain a license to marry and no questions are asked. He may then straightway infect a clean girl with either or both these ghastly diseases and if the wife is not rendered sterile by the one, begets children afflicted with the other. Sooner or later the taxpayer is likely to be burdened with the care of the whole diseased assortment.

In this land of liberty and ultra-freedom people are politely and somewhat bashfully asked if they would care to have their children guarded against smallpox. If an official slip is signed in which the parent claims he is a conscientious objector that settles the matter. That is, by governmental authority, the spread of disease is acknowledged to be the people's privilege. If this is true of smallpox it is even more so of the great pox. In this case the potential victim is not given a chance to be even a conscientious objector, he

is exposed to disease by force of circumstances, that is, by lack of imagination and organization on the part of those responsible for the prevention of the spread of communicable disease.

I have asked a number of doctors of many years experience in Nova Scotia if there existed any provincial regulations for the control of venereal diseases in this Province. Some said definitely "No", others had some vague recollection of a something or other, but when asked for particulars, their memories ceased to function.

It will be interesting for you to learn that this Province has "Regulations Respecting Venereal Diseases" running to 22 sections with the usual sub-sections 1, 2 and 3, or a, b, c and d as the case may be, expressed in the redundant verbiage of the law.

These Regulations are quaint and well-meaning. For example "Every person infected with venereal disease shall place himself under the care and treatment of a qualified medical practitioner", and, "until pronounced non-infective, abstain from marriage, sexual intercourse, or any conduct likely to infect another." The penalties annexed to these commandments vary from fines up to \$500.00 to 12 months imprisonment. Ignorance of the law may be no excuse but from the standpoint of the public health it seems only reasonable that provision should have been made for the continuous and wide spread dissemination of the contents of these Regulations. From this standpoint the matter was to all practical purposes destroyed from the beginning, the only provision made for enlightening the public is that, "When required by the provincial health officer, every local board shall procure and provide for the putting up in public urinals, conveniences, and similar places, of notices and placards dealing with venereal disease, its cause, manifestations, treatment and cure." The public urinal serves a desirable purpose, but seldom has it been contemplated to raise it to the status of a reading room for the medical instruction of the laity. Of those infected probably not one percent would ever frequent such an educational center and, of these, probably not one in a hundred would linger for the purpose of enlightening the mind. These Regulations make possible the infliction of severe penalties on those suffering from venereal diseases who would enter marriage but there is no regulation requiring that a certificate of freedom from disease be filed before a license to marry could be issued.

The only person who stands any chance to receive fairly prompt and thorough treatment is the individual who is fortunate enough to find himself an inmate of a "goal or place of detention." In that case "The medical health officer may cause such person to undergo such physical examination as may be necessary, in order to ascertain whether or not such person is infected with venereal disease" and, "If upon such examination it is found that the person so examined is so infected, the medical health officer shall give such directions for the treatment of such person, and, if necessary, for his detention and isolation and the prevention of infection from him as may be deemed proper".

Do you know that you are required within two days of the first visit to make a comprehensive report on a prescribed form to your district health officer and to give the patient a copy of these Regulations, together with a circular of information?

Space does not permit an exhaustive review of these forgotten or perhaps never known things. No doubt it was considered advanced and radical legislation on the 23rd of August, 1918, in fact so much so that it has been kept more or less of a secret.

Since the opening of the free treatment centers in 1922 under the auspices of the Federal and Provincial governments some progress has apparently been made. Whatever the explanation, it is generally agreed that, in this city for example, fewer cases are seeking treatment. Part of this favourable result is due to the free clinic maintained by the Dept. of the Public Health although much of the effort made and money spent here is nullified and wasted by the tendency to stop taking treatment as soon as symptoms are alleviated, and part to the greater exercise of precautions at or soon after the time of exposure by those of greater intelligence. Fortunately (in a sense) a case of syphilis can be rendered temporarily non-infective fairly promptly by the modern methods of treatment. This is all I believe the Dept. of the Public Health is financially able to undertake since 1932, when help from the Federal government was discontinued. Gonorrhoea continues as of old—Yes, I have heard of prontolyn.

The weakness of our attempt to deal with venereal disease incivillife is that disease must be first contracted before any help is given or even offered. If these diseases are communicable—and probably no fact in the whole field of medicine is so well established—then in the name of a higher morality why not apply to them the principles of preventive medicine?

In an attempt to be constructive one would suggest the following:

1. Let us rid our minds once and for all of the absurd notion that one preventable disease is more respectable than another.
2. That without further ado it be recognized that even marriage is not a sure barrier because intercourse has taken or may take place outside as well as inside the bonds of wedlock and that in consequence innocent wives and husbands are commonly infected. According to Surgeon General Parran of the U. S. P. H. S. "Half the victims of syphilis are innocently infected, the larger part in marriage or congenitally."
3. That it be recognized that venereal disease permeates the whole of society. We have all learned to examine the blood of the colonel as well as that of the corporal, that my lady and her maid may share organisms of a common strain, law makers and law breakers, those who preach and those who listen may all give different histories but similar laboratory findings.
5. That emphasis be placed on prevention and every known measure taken to this end, including a study of the regulations that obtain in the Army and Navy of various countries and apply them to the civil population in so far as it is practical from an administrative standpoint.
6. That freedom from venereal disease be part and parcel of a marriage license.
7. That those who are unfortunate enough to contract these diseases be sympathetically cared for and not treated as a variety of criminal.
8. That all cases of venereal disease **MUST** be registered.
9. That in every case the possible source of infection **MUST** be given.
10. That treatment **MUST** be taken until such time as the infected person is pronounced cured.
11. That any person aware of his or her infection, and who by carelessness causes its transmission, be subjected to punishment of great severity—probably six months imprisonment with hard labor would be a practical minimum.
12. That the present Regulations in this Province be rewritten and transformed from a series of pious aspirations to something capable of accomplishment. The velvet glove of persuasion must always come first, but let provision be made for its removal and compulsion exercised when necessary.

H. W. S.

Minutes of Provincial Association of Medical Health Officer's Meeting, 1937

THE twenty-third annual meeting of the Nova Scotia Provincial Association of Medical Health Officers was held at Pictou Lodge, on Tuesday, July 6th, 1937.

The members assembled for the first session at 10 a.m. with President, Dr. P. E. Belliveau, occupying the chair.

The minutes of last year's meeting were read and approved.

The following were in attendance.

Dr. P. E. Belliveau,	Meteghan.
Dr. J. K. MacLeod	Sydney.
Dr. F. O'Neil	Sydney.
Dr. C. B. Crummev	Trenton.
Dr. C. B. Crummev	Trenton.
Dr. H. J. Townsend	Louisburg.
Dr. F. F. Eaton	Truro.
R. Donald McKay, B.Sc.	Sanitary Engineer, Halifax.
Dr. B. S. Bishop	Kentville.
Dr. J. S. Robertson,	D.M.H.O., Sydney.
Dr. J. J. Cameron,	Antigonish.
Dr. J. J. MacRitchie,	D.M.H.O., Halifax.
Dr. M. R. Young	Pictou.
Dr. P. S. Campbell	Halifax.
Dr. C. E. A. DeWitt	Wolfville.
Dr. H. D. Chisholm	Springville, Pictou Co.
Dr. L. M. Morton	Yarmouth.
Dr. T. R. Johnson	Great Village.
Dr. D. Cochrane	River Hebert.
Dr. H. B. Havey	Stewiacke.
Mayor Thos. R. Hooper	Pictou.

Dr. M. R. Young, Medical Health Officer of Pictou, presented an interesting paper on communicable diseases "Then and Now". He referred particularly to the downward trend in their morbidity and mortality, during the thirty-six years he had been in practice. In the earlier years smallpox was prevalent. In the 1906 epidemic he was Medical Health Officer for Pictou Municipality and in that capacity visited the schools and vaccinated freely. The effectiveness of this procedure was soon evident and it brought about the control of the outbreak. Scarlet fever is not now so prevalent nor is it as virulent as it used to be. While it frequently caused severe illness and while many complications followed in its wake, nevertheless it was never responsible for as many deaths as measles and whooping cough. The last named was, without a doubt the most serious of the more common acute infectious diseases. The problem of venereal diseases was touched upon and matters of isolation, quarantine and disinfection were dealt with. His own experience with typhoid fever, diphtheria and tuberculosis were referred to at considerable length.

A lengthy discussion followed in which the following members took part: Dr. J. K. MacLeod, Dr. J. J. Cameron, Dr. C. E. A. DeWitt, and Dr. P. S. Campbell. Each related certain personal experiences and observations as medical health officers.

Dr. MacLeod made a special point concerning the manner in which infectious diseases are transmitted, viz: by direct contact with persons affected and not to any great extent through external objects. He referred also to the satisfactory decline in mortality from tuberculosis and the splendid work of the Department of Public Health in tuberculosis control.

Dr. J. J. MacRitchie, talking on the subject "Tuberculosis Day by Day", gave an original and unique presentation. He reviewed the written and spoken word, hereditary tendencies often referred to, money spent, causes of decline in incidence of the disease, the place of the various factors used in control, such as nurses, institutions, housing, home care, after care, etc. He referred especially to the infectious nature of tuberculosis and the importance of public health viewpoint in any scheme for its control.

A tuberculosis subject always elicits satisfactory discussion. This occasion was no exception: Dr. Cameron, Dr. MacLeod, Dr. DeWitt and Dr. Campbell took part.

At this stage Dr. J. K. MacLeod asked the privilege of the chair to comment upon the honour recently conferred on the Secretary, Dr. P. S. Campbell in his election to the Presidency of the Canadian Public Health Association. He moved a vote of appreciation, which was seconded by Dr. J. J. Cameron and passed.

The president Dr. Belliveau, named the Nominating Committee as follows: Dr. J. J. MacRitchie, Dr. C. E. A. DeWitt, and Dr. J. K. MacLeod.

The Secretary read a communication from Mrs. D. M. MacMillan of Reserve Mines, Cape Breton County, in which she desired to bring to the attention of the assembled health officers, the importance of proper education of children and the youth of the country on sex matters and venereal diseases.

AFTERNOON SESSION—2.30

The first item of the afternoon session, the presidential address, was one of exceptional merit. It elicited a great deal of favourable comment, and a resolution for publication in the BULLETIN.

Dr. T. R. Johnson, M. H. O. for Colchester Municipality, who was unable to be present in the morning, gave a splendid paper on "Mental Deficiency". He showed clearly the difference between the mentally diseased and the mentally defective; the economic burden of both, particularly the latter, and the amount of money involved in their care. The various factors advocated for preventing defectives or dealing with those existent, such as marriage, sterilization, segregation and training schools, were looked into.

A particularly interesting discussion followed, which was participated in by Doctors, Cameron, DeWitt, Cochrane, Bishop, MacRitchie and Campbell.

Dr. J. K. MacLeod, from whom we always expect a valuable contribution, spoke authoritatively and well, on venereal disease. The public health and social aspects of this group of diseases were referred to and the programs now in use for their control. Dr. Cochrane, Dr. Cameron and Dr. Campbell spoke on the subject.

Dr. H. B. Havey, M. H. O., Stewiacke, followed with a talk on infective jaundice; of which there had been two small outbreaks in his practice in recent years. Its cause and mode of transmission are obscure and as a consequence the condition is a most unsatisfactory one to deal with. Drs.

Johnson, MacFitchie and Eaton offered some suggestions relative to the difficulties encountered in dealing with this disease.

R. Donald MacKay, Provincial Sanitary Engineer, opened up the subject of "Rural Sanitation" in a most capable manner. Water and sewage were dealt with and the importance they bear to good or bad health. He showed the ordinary means taken to protect water supplies being contaminated, and to render safe those contaminated. Simple, safe means of sewage disposal in rural communities was exhaustively dealt with. Individual problems were submitted by some of the health officers and almost all present entered into the discussion.

The nominating committee reported, recommending the slate of officers and committees, herein set forth, for next year:

President	Dr. C. E. A. DeWitt, Wolfville.
1st. Vice President	Dr. R. A. MacLellan, Rawdon.
2nd. Vice President	Dr. H. J. Townsend, Lousiburg.
Secretary	Dr. P. S. Campbell, Halifax.

COUNCIL

Dr. L. M. Morton	Yarmouth.
Dr. C. B. Crummev	Trenton.
Dr. B. S. Bishop	Kentville.

1. Comm. on Maternal Mortality, Dr. F. F. Eaton, Dr. E. E. Bissett.
2. Comm. on School Sanitation, Dr. M. R. Young, Dr. F. O'Neil.
3. Comm. on Cancer, Dr. G. V. Burton, Dr. T. R. Johnson.
4. Comm. on Tuberculosis, Dr. J. S. Robertson, Dr. A. C. Gouthro.
5. Comm. on Legislation, Dr. F. E. Rice, Dr. D. Drury.

By motion of Dr. J. K. MacLeod, seconded by Dr. D. Cochrane, the Executive was instructed to arrange for the next meeting in conjunction with the Canadian Public Health Association meeting.

It was moved by Dr. J. K. MacLeod, seconded by Dr. T. R. Johnson, that the Secretary reply to Mrs. D. M. MacMillan's communication, stating that the Society members will cooperate by every means within their power, both individually and with other groups and bodies, attempting educational work on the matters indicated.

There being no other business, the meeting was adjourned in the usual manner.

P. S. CAMPBELL, SECTY.

PHYSICIAN WANTED.

The Secretary has received a letter from Dr. J. H. T. Harrington of Pool's Cove, Fortune Bay, Newfoundland, telling him of the need of a physician in the district extending from Corbin to Boxey Point, a distance of about twenty miles. The practice is estimated at about \$3,000.00 a year, \$1,200.00 of which is paid by the Department of Public Health and Welfare. Further information may be secured by writing to Dr. Harrington.

Correspondence

Editor N. S. Medical Bulletin.

Sir:—I have been waiting and watching for many years, in order to observe what action our health authorities and statesmen would take to guard us from the evil of *Social Disease*. I do not write in a spirit of criticism, but rather as one who desires to help steer the ship of humanity clear of the rocks of *Idiocy* and *Insanity*.

We have a class of medical men who will compare favourably with that of any nation. A great many of our statesmen are stars in the national firmament. But alas! The greatest problem of our time—*Social Disease*—remains unsolved. It is allowed to rage, attacking men and women, boys and girls, as well as the unborn child. It is crowding our institutions with the mentally unfit. Why? It is a tragedy that people living good, moral lives and unborn children should be in such great danger.

I think the day is at hand when the medical profession should put forth every effort to have legislation placed on our statute books, that would require every person entering into a marriage contract, to have a thorough medical examination before marriage. If they are not free from social disease, they should not be allowed to marry until they are treated and cured. The *Home* is the foundation of our nation. Let us at least see to it, that those setting up new homes are free from this "canker" that is eating at the heart of our nation. By so doing children yet unborn will bless us. If we neglect our duty what will the verdict be?

H. A. GRANT.

Big Bras d'Or, N. S.
August 30th., 1937.

Halifax, N. S., August 27th. 1937

Editor Bulletin.

Dear Sir:—Some weeks ago I was visited by a gentleman introducing a contraceptive and contra-gonorrhoea tablet called Semori. The claim was that here at last was the ideal birth control agent and that the man or woman employing it could get neither pregnant nor gonorrhoea. The tablet worked by creating a foam impenetrable to the stubbornest spermatozoon or gonococcus. The agent gave demonstration with a test tube of water and sure enough there was one magnificent foam. Having known previously of foaming tablets and their capabilities I was sceptical and persuaded the gentleman to let me have a few tablets for trial. The following day I introduced these into two vaginae and watched them at intervals through a speculum. In neither case at the end of fifteen minutes was there any evidence of the magic foam that had occurred in the test-tube and I was led to conclude that an article that would not trot its stuff in fifteen minutes was too slow for ordinary human patience under such urgent conditions as imminent coitus.

I would not bring this matter to your attention had I not received a few days ago a letter from a colleague asking my opinion on the tablets and informing me that the agent had told him that I had said that "it was one of the best productions in that line". I hasten therefore to ask you to publish the above facts lest some of the unwary brethren be led astray, and to state that if that agent made the statement re my opinion which he is alleged to have made that he is indubitably of the lineal descent of Ananias, and the truth is not in him.

Yours truly

H. B. ATLEE.

Halifax, N. S., September 27, 1937.

Editor N. S. Medical Bulletin.

Dear Sir:—Since last writing you re Semori I have had the following two communications from our friend, and feel that in fairness to him I should place them in your hands. With regard to the extracts from the Journal of Hygiene I would like to point out that the experiments with human and guinea pig sperms was done in a test-tube. It is possible that this tablet is the most a-spermicidal of all pessaries, but the point I raised still holds; namely, that in the human vagina the tablet does not dissolve rapidly. In a subsequent experiment I have tried the effect of running a little water into the vagina, enough to make up any amount of extra secretion that might result from sexual excitement, but still the tablet does not dissolve quickly. I therefore maintain that a method of contraception which will not work within fifteen minutes of its exhibition is not an efficient one—taking into consideration the urgency of the aroused sexual instinct.

Yours truly,

H. B. ATLEE,

September, 21st. 1937.

Dear Doctor:

I am enclosing extracts from *The Journal of Hygiene*, about Semori. You will remember I left samples with you about six weeks ago; and at that time I did not have this write-up with me. I hope you tried the samples with satisfactory results, as I was asked all over the country for your opinion of Semori, by doctors in practice. However, I will call on you again next time I am in Halifax.

Yours truly,

J. E. WRIGHT,

Monarch Sales Agencies Co.,
1231 St. Catherine St. West.
Montreal, P. Q.

Extracts from "The Journal of Hygiene"

(Vol. 31, No.3—July 1931).

The spermicidal powers of chemical contraceptives.**III. Pessaries**

By John R. Baker, M.A. D. Phil.

(University Demonstrator in Zoology, Oxford)

The (nine) Pessaries investigated:

(among others)

Semori. This is a foaming tablet weighing 1.04 grm. It consists of dioxyquinolin sulphate, potassium borotartrate, sodium bicarbonate and tartaric acid. It is made by Messrs. Luitpold Werk in Munich.

Experiments were carried out with Guinea-Pig Sperms and Human Sperms.

Part of Discussion

... *Semori* emerges from the test as the most effective pessary sold in England. It is effective with or without foam producers.

Part of Summary

5. *Semori* is the most spermicidal pessary of the nine investigated. Even at one-tenth of the concentration at which it is normally used, it kills every sperm or nearly every sperm in half an hour.

6. Even if the foam producing substances are omitted, *Semori* remains effective.

Tonsillitis - Pharyngitis - Laryngitis

With the onset of the colder weather the incidence of "throat conditions" usually begins to take an upward curve.

In such diseases physicians who use Antiphlogistine as a routine application find that it constitutes one of the best methods of treatment at their disposal, and an ideal adjuvant to other general measures.

The heat which Antiphlogistine imparts not only is very soothing, but the medication of the dressing itself is also of much benefit in reducing the inflammation and effecting resolution.

When applying Antiphlogistine it is, of course, very important that the correct technic be followed. If it is applied comfortably hot, to the thickness of $\frac{1}{4}$ to $\frac{1}{2}$ inch (it should never be spread as an ointment), then covered with cotton and bandaged, full therapeutic effect will be had from the medication.

PERTINENT FACTS ABOUT PYRIDIDIUM

TRADE MARK



- Relief of distressing symptoms.
- Effectiveness in either acid or alkaline urine.
- Gratifying clinical results as evidenced in the literature.
- Convenience of administration in tablet form.
- No special diet required.
- Elimination by the urinary tract without irritation or toxicity in therapeutic dosage.
- Availability as 1% aqueous Pyrididium solution for local therapy.
- Convenience as 3% Pyrididium ointment for application to female genital tract.

"No drug so far advocated, for oral administration, compares with the clinical results obtained with pyrididium."—Quoted from *Published Clinical Reports*

MERCK & CO., LTD.

Manufacturing Chemists

MONTREAL, QUE.

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.A.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.
 Director of Public Health Laboratory - DR. D. J. MACKENZIE, Halifax.
 Pathologist - - - - DR. R. P. SMITH, Halifax.
 Psychiatrist - - - - DR. ELIZA P. BRISON, Halifax.
 Superintendent Nursing Service - - - MISS M. E. MACKENZIE, Reg. N., Halifax

OFFICERS OF THE PROVINCIAL HEALTH OFFICERS' ASSOCIATION

President - - - - DR. C. E. A. DEWITT - - - - Wolfville
 1st Vice-President - - - DR. R. A. MACLELLAN - - - Rawdon Gold Mines
 2nd Vice-President - - - DR. H. J. TOWNSEND - - - - Louisburg
 Secretary - - - - DR. P. S. CAMPBELL - - - - Halifax

COUNCIL

DR. L. M. MORTON - - - - Yarmouth
 DR. C. B. CRUMMEY - - - - Trenton
 DR. B. S. BISHOP - - - - Kentville

MEDICAL HEALTH OFFICERS FOR CITIES, TOWNS AND COUNTIES

ANNAPOLIS COUNTY

Hall, E. B., Bridgetown.
 Braine, L. B. W., Annapolis Royal.
 Kelley, H. E., Middleton (Mcpy. & 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 (Mcpy).
 MacKinnon, W. F., Antigonish.

COLCHESTER COUNTY

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

CAPE BRETON COUNTY

Densmore, F. T., Dominion.
 Fraser, R. H., New Waterford.
 Martin, H. J., Sydney Mines.
 McNeil, J. R., Glace Bay.
 McLeod, J. K., Sydney.
 O'Neil, F., Sydney (County), South Side.

CUMBERLAND COUNTY

Bliss, G. C. W., Amherst.
 Drury, D., Amherst (Mcpy).
 Gilroy, J. R., Oxford.
 Henderson, C. S., Parrsboro.
 Cochrane, D. M., River Hebert (Joggins).
 Withrow, R. R., Springhill.

DIGBY COUNTY

Belliveau, P. E., Meteghan (Clare Mcpy).
 Dickie, W. R., Digby.
 Rice, F. E., Sandy Cove (Mcpy).

GUYSBORO COUNTY

Chisholm, A. N., Port Hawkesbury, (M.H.O. for Mulgrave).
 Sodero, T. C. C.; Guysboro (Mcpy).
 Moore, E. F., Canso.
 Monaghan, T. T., Sherbrooke (St. Mary's Mcpy).

HALIFAX COUNTY

Almon, W. B., Halifax.
 Forrest, W. D., Halifax (Mcpy).
 Glenister, E. I., Dartmouth.

HANTS COUNTY

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

INVERNESS COUNTY

Lindsay, R. D., Port Hawkesbury.
 Boudreau, Gabriel, Port Hood, (Mcpy. and Town).
 Proudfoot, J. A., Inverness.

KINGS COUNTY

Bishop, B. S., Kentville.
 Bethune, R. O., Berwick (Mcpy).
 de Witt, C. E. A., Wolfville
 Cogswell, L. E., Berwick

LUNENBURG COUNTY

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

PICTOU COUNTY

Blackett, A. E., New Glasgow.
 Chisholm, H. D., Springville, (Mcpy.)
 Whitman, H. D., Westville.
 Crummey, C. B., Trenton.
 Young, M. R., Pictou.
 Benvie, R. M., Stellarton.

QUEENS COUNTY

Ford, T. R., Liverpool (Mcpy.)

RICHMOND COUNTY

Deveau, G. R., Arichat (Mcpy).

SHELBURNE COUNTY

Brown, G. W. Clark's Harbour.
 Fuller, L. O., Shelburne, (Town and Mcpy)
 Wilson, A. M., Barrington, (Barrington Mcpy.)
 Lockwood, T. C., Lockeport.
 Churchill, L. P., Shelburne.

VICTORIA COUNTY

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

YARMOUTH COUNTY

Hawkins, Z., South Ohio (Yarmouth Mcpy)
 Morton, L. M., Yarmouth.
 Lebbetter, T. A., Yarmouth (M.H.O. for Wedgeport).
 LeBlanc, J. E., West Pubnico, (Argyle Mcpy).

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

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

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

Report on Tissues sectioned and examined at the Provincial Pathological Laboratory from September 1st, to October 1st, 1937.

During the month, 223 tissues were sectioned and examined, which, with 14 tissues from 4 autopsies, makes a total of 237 tissues.

Tumours, simple	20
Tumours, malignant	32
Tumours, suspicious of malignancy	4
Other conditions	167
Tissues from 4 autopsies	14

**Communicable Diseases Reported by the Medical Health Officers
for the month of September, 1937.**

County	Chickenpox	Diphtheria	Infantile Paralysis	Influenza	Measles	Lethargic Encephalitis	Paratyphoid	Pneumonia	Scarlet Fever	Typhoid Fever	Tbc Pulmonary	Tbc.-other Forms	V. D. G.	V. D. S.	Whooping Cough	Septic Throat	Vincent's Infection of Throat	Impetigo	TOTAL
Annapolis.....	3	..	4	..	..	1	1	..	1	2	2	1	..	..	..	..	15
Antigonish.....	1	..	..	..	..	..	..	..	..	1
Cape Breton...	..	1	..	..	..	..	..	..	14	..	..	..	..	..	..	..	..	..	15
Colchester.....	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	4
Cumberland...
Digby.....	3	..	2	..	..	..	..	3	1	..	4	..	..	..	..	..	13
Guysboro.....	2	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	5
Halifax City..	..	6	1	..	..	..	..	6	..	..	2	..	..	..	..	..	..	..	15
Halifax.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Hants.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Inverness.....
Kings.....	1	24	..	..	..	..	..	..	..	..	6	..	..	2	..	1	34
Lunenburg....	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2
Pictou.....	2	..	..	..	..	2	1	2	..	..	2	2	..	..	..	..	11
Queens.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Richmond.....
Shelburne....	12	..	..	..	..	..	..	..	..	..	..	..	..	..	12
Victoria.....
Yarmouth.....	1	..	..	..	..	..	..	..	..	..	..	..	1
TOTAL.....	..	8	17	24	19	1	1	1	23	6	6	2	15	3	2	2	..	1	131

Positive cases Tbc. reported by D. M. H. O's. 21.

RETURNS VITAL STATISTICS FOR AUGUST, 1937.

County	Births		Marriages	Deaths		Stillbirths
	M	F		M	F	
Annapolis.....	15	13	5	8	5	1
Antigonish.....	12	12	7	5	5	1
Cape Breton.....	103	104	110	47	43	2
Colchester.....	21	17	10	14	13	1
Cumberland.....	32	31	34	14	13	1
Digby.....	16	14	5	11	8	1
Guysboro.....	15	9	8	11	4	0
Halifax.....	119	82	74	43	44	4
Hants.....	18	17	9	11	7	1
Inverness.....	16	7	7	15	9	1
Kings.....	28	12	26	3	4	0
Lunenburg.....	28	22	17	19	9	2
Pictou.....	32	29	28	12	16	3
Queens.....	6	7	3	2	3	0
Richmond.....	8	8	10	4	5	0
Shelburne.....	12	9	8	1	1	0
Victoria.....	2	1	6	2	1	0
Yarmouth.....	31	22	2	11	6	1
	514	416	369	233	196	19

In Obstetrical and Surgical Practice

Pituitary Extract (posterior lobe), an aqueous preparation derived from the separated posterior lobe of the pituitary gland, holds a well-recognized place in materia medica.

In response to requests of physicians and hospitals the Connaught Laboratories have made available a preparation of Pituitary Extract (posterior lobe). This preparation is a highly stable extract, biologically standardized to contain ten International units per cc. It is supplied in packages of five 1-cc. vials having rubber stoppers which make possible the aseptic withdrawal of individual doses without contaminating extract left in the vials for later use. Information relating to Pituitary Extract (posterior lobe) will be supplied gladly upon request.



**CONNAUGHT LABORATORIES
UNIVERSITY OF TORONTO**

Toronto 5 - Canada

Personal Interest Notes

THE marriage took place at St. George's Round Church, Halifax, on the evening of September 29th of Miss Jean Alexandra Shaw, daughter of Mr. and Mrs. James A. Shaw, Marlborough Woods, and Dr. Norman Barrie Coward, son of Reverend and Mrs. F. W. Coward, British West Indies and Surrey, England. The Reverend Canon H. W. Cunningham solemnized the ceremony, assisted by Rev. F. C. Coward, father of the groom. The couple left by motor for New York and on returning will reside at 25 Coburg Road, Halifax.

Dr. and Mrs. C. G. MacKinnon, of Bridgewater, are visiting Montreal.

Dr. G. W. T. Farish has returned from a visit to Boston.

Dr. W. N. Rehfuss and Mrs. Rehfuss, of Bridgewater, recently went to Montreal to meet their daughter who has returned from an extended trip to Europe.

Halifax Physician Celebrates his 93rd. Birthday.

On Thursday, September 30th, Dr. J. N. Mack, of Ogilvie Street, Halifax, celebrated his 93rd birthday. Many of Dr. Mack's friends dropped in to offer congratulations. Dr. Mack came to Halifax in 1901, having previously practised in Newfoundland, Bridgewater and Lunenburg.

Dr. and Mrs. S. W. Williamson, of Yarmouth, have returned home from a visit through New England.

Dr. Fraser Young who has practised in Scotsburn for the past year has moved to Pictou.

Dr. and Mrs. W. G. J. Poirier, of Cheticamp, were recent visitors to Meteghan.

Dr. G. A. Barss, of Rose Bay, recently visited Wolfville where he took his son, Allison, who is entering upon his second year at Acadia University.

Dr. L. J. Lovett, of Bear River, with his wife and daughter are spending their annual vacation at their hunting lodge on White Sands Lake, expecting to remain there until the end of the month.

Vaccination Against Smallpox in Hants County.

Under the direction of school inspector, Murray Campbell and Miss Anne Slattery, county health nurse, a drive was in progress during the month of September to vaccinate children against smallpox. The physicians of the county are in hearty sympathy with this movement and it is expected that over two thousand children will be inoculated.

At the menopause

EMMENIN THERAPY FOR THE CONTROL OF SUBJECTIVE AND OBJECTIVE SYMPTOMS

- The fact that Emmenin is orally-active has been demonstrated by several workers.^{1,2,3,4} In a recent report by Salmon and Frank⁵ on a small series of cases suffering from disturbances of the menopause, spontaneous and castrate, the efficacy of Emmenin was again confirmed. The subjective symptoms (flushes, sweats, headaches, neurovascular symptoms, digestive disturbances) showed a gratifying response to Emmenin therapy.
- In addition, it was shown that Emmenin, through (it is presumed) its inhibitory action on the hypophysis, caused the disappearance of the gonadotropic hormone present in the urine of the patients in the series, coincidentally with the alleviation of the subjective symptoms.
- From the above report, as well as other clinical reports regarding the use of Emmenin at the menopause, we feel justified in again bringing Emmenin to the attention of the medical profession for the treatment of this distressing condition.

EMMENIN » » » the water-soluble, orally-active, oestrogenic placental hormone is prepared and standardized after the technique of Dr. J. B. Collip and supplied with the approval of the Department of Biochemistry, McGill University.

Emmenin Liquid—in original 4-oz. bottles.

Emmenin Tablets—in bottles of 42.

1. Goldberg, M. B., and Lisser, Hans—*Endocrinology* 19: 649 (December) 1935.
2. Atkinson, A. J., and Ivy, A. C.—*J. Amer. Med. Ass.* 106: 515 (February 15) 1936.
3. Macfarlane, Catharine—*Amer. J. Obstet. Gynec.* 31: 663 (April) 1936.
4. Schneider, P. F.—*Amer. J. Obstet. Gynec.* 31: 782 (May) 1936.
5. Salmon, Udall J., and Frank, Robert T.—*Endocrinology* 21: 476 (July) 1937.

AYERST, McKENNA & HARRISON LIMITED

Biological and Pharmaceutical Chemists

MONTREAL

”

”

”

CANADA

Dr. and Mrs. F. D. Charman, of Truro, have returned from a motor trip to Boston.

Plans Ready for New Infectious Disease Hospital at Halifax.

Plans for construction of an infectious disease hospital on the site of the old Trachoma hospital are now completed and tenders for work in connection with the building are shortly to be advertised for, W. H. George, general superintendent of the engineering branch, Department of Pensions and National Health, Ottawa, reported during a recent visit to Halifax.

The proposed new hospital near Rockhead prison will replace the quarantine station now at Lawlor's Island in Halifax Harbor. Because of inconvenience and inadequacy of the Lawlor's Island station an agitation for construction of a new hospital on the mainland was started some years ago.

Accounts for the new building had been already passed at Ottawa and plans completed, Mr. George reported.

Congratulations are extended to Dr. and Mrs. C. W. Holland of Halifax on the birth of a son on October 14th.

SOCIETY MEETINGS

Lunenburg-Queens Medical Society

The annual dinner meeting of the Lunenburg-Queens Medical Society was held at the Fairview Hotel on Monday evening, October 4th. Dr. B. W. Skinner of Mahone Bay was elected president for the ensuing year. Dr. C. A. Donkin, Bridgewater, was re-elected secretary-treasurer for the twelfth consecutive year and Dr. G. D. Donaldson, Mahone Bay, was named vice-president.

The executive of the local society will comprise Dr. H. A. Fraser, Bridgewater; Dr. W. W. Bennett, New Germany, and two representatives of the executive of the Medical Society of Nova Scotia, Dr. Douglas Murray, Liverpool, and Dr. W. N. Reh fuss, Bridgewater.

PHYSICIAN WANTED

There is a vacancy at the Jordan Memorial Sanatorium, The Glades, N. B. for a resident physician, single, salary \$100.00 per month with full living allowances. This is an institution 110 bed capacity, treating all kinds of pulmonary tuberculosis. Further information may be secured from Dr. P. M. Knox, Medical Superintendent.

A scientific adaptation
of the principles of
vaccination for use in
surface lesions

Propidex

An ointment containing aged cultures of Streptococcus,
Staphylococcus and B.
Pyocyaneus (Propidon Vaccine).

Indications

Wounds, accidental or surgical, Burns, Bruises, Blisters,
Frostbite, Cracked Skin, lips or nostrils, Varicose,
Ulcers, Bedsores, Long-standing Ulcerations,
Skin Diseases generally.

●
PROPIDEX is offered in tubes of 1 oz.
●

Please ask for detailed literature.

Laboratory Poulenc Frères
OF CANADA LIMITED - MONTREAL

350 Le Moyne Street, Montreal.

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



How Much Sun ? Does the Infant Really Get ◆

Not very much: (1) When the baby is bundled to protect against weather or (2) when shaded to protect against glare or (3) when the sun does not shine for days at a time. Oleum Percomorphum offers protection against rickets 365¼ days in the year, in measurable potency and in controllable dosage. Use the sun, too.

Oleum Percomorphum Price Substantially Reduced Dec. 1, 1936!

We are hopeful that by the medical profession's continued whole-hearted acceptance of Oleum Percomorphum, liquid and capsules (also Mead's Cod Liver Oil Fortified With Percomorph Liver Oil), it will be possible for us to make the patient's "vitamin nickel" stretch still further. Mead Johnson & Company of Canada, Ltd., Belleville, Ont., does not advertise to the public.

ABERDEEN HOSPITAL

Resident Physician wanted for a period of one year's service beginning November 1, 1937 at Aberdeen Hospital, New Glasgow, Nova Scotia. (100 Beds).

Maintenance only.

M. P. BOA.

Superintendent.

MISS PHILIPPA THYGESEN

(TIELMAN INSTITUTE, COPENHAGEN)

**MASSEUSE & INSTRUCTOR IN
CORRECTIVE GYMNASTICS**

INFRA RED RAY AND RADIANT HEAT TREATMENT

SHIRREFF HALL

PHONE B 5445

SCILEXOL,

E. B. S.

An efficient respiratory sedative.

Each fluid ounce contains:

Scilexol, E.B.S., effectively relieves the hacking cough of Chronic Bronchitis and the troublesome cough affecting many aged patients, without disturbing digestion.

Codeine Phosphate.....	1 grain
Ammonium Chloride.....	16 grains
Chloroform.....	2 minims
Acid Hydrocyanic, Dil. B.P.....	4 minims
Syr. Scillae.....	90 minims
Syr. Tolu.....	120 minims

Dose: One to two fluid drachms in a little water, sipped slowly, each three hours until relieved.

Indicated in Asthma, Influenza, General Colds and in Whooping Cough. It softens and aids in the expulsion of the secretions, thus affording relief and rest to the patient.

Also supplied with Heroin Hydrochloride 1/3 grain per ounce, in place of Codeine Phosphate 1 grain, when specified.

"Clinical Sample on Request"

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

898 St. Clair Avenue, West

TORONTO, Canada

Prompt Attention to Mail Orders

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

A NON-IRRITATING, NON-STAINING ANTISEPTIC



*—for application to
Mucous Membranes*

THE ANTISEPTIC SOLUTION to be applied to a delicate membrane should preferably be non-irritating; yet it should be effective.

Neo-Silvol solutions are bland; they may be used in the eye without injuring or irritating the conjunctiva. But Neo-Silvol is an effective antiseptic agent, useful in affections of the eye, nose, throat, and genito-urinary tract.

Neo-Silvol solutions can be made easily and promptly in your office, or by your patient if desired. The six-grain capsules permit accurate preparation of the strength required.

Neo-Silvol (Colloidal Silver Iodide Compound) is supplied in six-grain capsules, packages of 50 and 100, and in 1-ounce and 1/4-pound bottles.

PARKE, DAVIS & COMPANY • Walkerville, Ontario

THE WORLD'S LARGEST MAKERS OF PHARMACEUTICAL AND BIOLOGICAL PRODUCTS



DR COLLECTEM

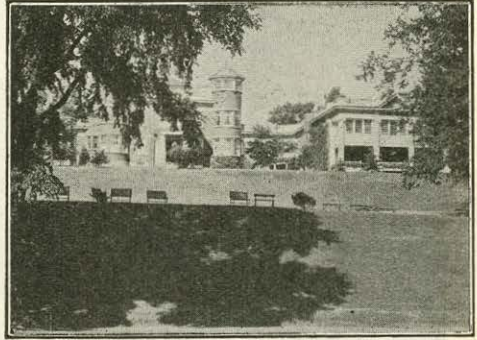
YOU CAN SPEND A
MIGHTY PLEASANT
HOUR, ONE NIGHT
EACH WEEK, LOOKING
OVER OUR TUESDAY
REPORT—WITH OUR
"CHEQUE ENCLOSED"



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

The largest stock of SERUMS and VACCINES (Parke, Davis & Co.
Shermans and Nicholsons.) East of Montreal—Always at your service

ABDOMINAL BELTS, TRUSSES

For Urinary Infections

MANDELIX and MANDELIX OUTFITS (B.D.H.)
SYRUP ANDELATE (Abbotts)

MACLEOD - BALCOM LIMITED

HALIFAX BEDFORD SHEET HARBOUR KENTVILLE

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.