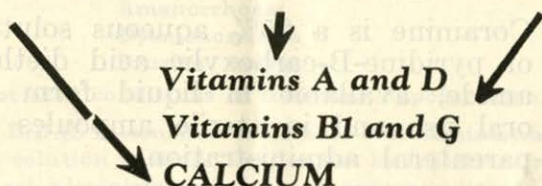


FOR THE
CONVALESCENT

Calcocyte Capsules

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



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

THE TABLET IS INSIDE THE CAPSULE

AND

Ancamalt

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

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

THE MOST REASONABLE AND EFFECTIVE
TONIC MEDICATION ON THE MARKET

Anglo-Canadian Drugs, Limited

OSHAWA, - ONTARIO

ONE HUNDRED PER CENT CANADIAN

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

CORAMINE

"CIBA"

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

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

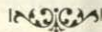
Coramine stimulates the heart, leading to an increase in the output of blood; at the same time it tends to cause vascular relaxation, so that, with or without a rise in blood-pressure, the rate and efficiency of the circulation are improved.

AMPOULES

(in cartons of 5, 20 and 100)

LIQUID

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



CIBA COMPANY LIMITED

MONTREAL, P. Q.

STILBOESTROL B.D.H.(4:4' dihydroxy- α : β -diethylstilbene)**The Oestrogenic Substance for Oral Administration**

Prolonged clinical trials have now established the fact that Stilboestrol B.D.H. is an effective substitute for the natural ovarian follicular hormone for use in the treatment of

Menopausal and climacteric disturbances
Amenorrhoea
Dysmenorrhoea
Pruritus vulvae

and all associated conditions of follicular hypofunction.

Stilboestrol B.D.H. is issued in tablets for oral administration; it is available also in solution in ampoules for use by injection in those cases in which its oral administration may be contra-indicated.

Stocks of Stilboestrol B.D.H. 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.

Stil/Can/394

A Canadian National Welcome awaits you

at

The **NOVA SCOTIAN**
HALIFAX, N.S.



Here in the capital of Nova Scotia is a hotel where you may stay for business or pleasure, and find just the accommodation you desire. Spacious airy rooms, courteous service, and most reasonable rates in the Dining Rooms and at the Lunch Counter.

ROOMS **\$350**
ALL WITH BATH



Hotel is immediately adjacent to Railway station, eliminating taxi and baggage transfer charges.

A CANADIAN NATIONAL Hotel

Adrenal-Gland Products

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

Adrenal Cortical Extract

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

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

Two preparations of Epinephrine are available from the Connaught Laboratories:

Epinephrine Hydrochloride Solution (1:1000)

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

Epinephrine Hydrochloride Inhalant (1:100)

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

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

CONNAUGHT LABORATORIES
UNIVERSITY OF TORONTO

TORONTO 5, CANADA

A Standard for Convalescents

Ovaltine originated as a liquid food for delicate patients and convalescents. In actual practice it has extended far beyond the original conception, but its primary importance for the sick and the convalescent remains.

Ovaltine is a carefully balanced concentration of fresh milk and eggs and a special barley malt extract, lightly flavoured with cocoa. Added to fresh milk, hot or cold, patients enjoy it. It has a pleasant appetizing flavour. It is quickly and easily digested. It nourishes body, nerves and brain. It stimulates natural appetite. It helps restful sleep.

Clinical sample on request.

OVALTINE

TONIC FOOD BEVERAGE

Manufactured by A. WANDER, LIMITED
Peterborough, Canada.

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



Ovaltine Contains These Dietary Factors:

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

ORDER

Tablets Dagenan (M&B)

(Poulenc Frères)

from

ATLANTIC DRUG CO., LTD.

Wholesale Druggists

HALIFAX, N. S.

or

MacLEOD - BALCOM LTD.

HALIFAX

-

KENTVILLE

-

SHEET HARBOUR

CONTENTS

SCIENTIFIC:

Problem of Dementia Praecox—J. D. M. Griffin, M.D., Toronto, Ont.	181
More Odds and Ends—Arthur Birt, M.D., Bridgewater, N. S.	188
Cape Breton Brawn	193
Are We Ready for Health Insurance—H. B. Atlee, M.D., Halifax, N. S.	194
Reminiscences, "An Ancient Mariner" on the Medical Sea	201

EDITORIAL:

H. D. Hebb, M. D.	203
-------------------	-----

CASE REPORTS:

A Case of Renal Tuberculosis—G. A. Winfield, M.D., Halifax, N. S.	205
An Unusual Case of Carcinoma of the Colon—G. V. Burton, M.D., Yarmouth, N. S.	207
Anorexia Nervosa, "Sylphosis"—J. C. Wickwire, M.D., Liverpool, N. S.	212
Gastro-Enteritis and Appendicitis—R. W. Maclellan, M.D., Mill Village, N. S.	213
Acute Poliomyelitis—H. H. Banks, M.D., Barrington Passage, N. S.	214
Influenzal Encephalitis—D. K. Murray, M.D., Liverpool, N. S.	215
Two Case Reports—C. B. Trites, M.D., Bridgewater, N. S.	217
Blood Pressure Changes in Coronary Occlusion—J. D. Dinsmore M.D., Port Clyde	217
The American Congress on Obstetrics and Gynaecology—C. S. Morton	220
ABSTRACTS FROM CURRENT JOURNALS—Surgery	221
Department of the Public Health	224
PERSONAL INTEREST NOTES	228
OBITUARY	230

MAGSOL

(HORNER)

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

Relief from pain and control of acidity.

Immediate and sustained action.
Neutralizing and adsorptive power prolonged.

Not toxic. Cannot be absorbed or cause alkalosis.

*Dose: One teaspoonful or more
as required.*

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

Send for a generous sample.

FRANK W. HORNER LIMITED
MONTREAL **CANADA**

Magsol is not advertised to the public

N.S.



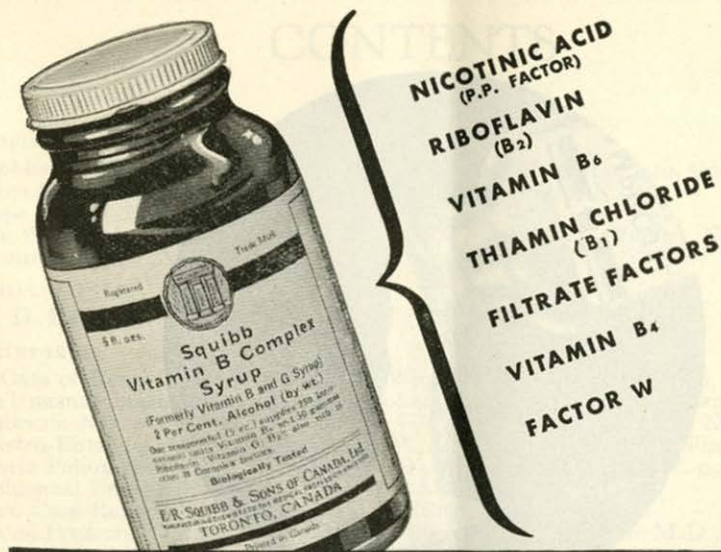
AMPHOJEL

PROVIDES TRUE ACID CONTROL

The striking results obtained with Amphojel in peptic ulcer and gastric hyperacidity are primarily due to the unique manner in which it controls excess hydrochloric acid by stabilizing gastric acidity in the "safe zone" (pH 4.0 to 5.0). Amphojel immediately neutralizes free HCl—relieving pain and instituting ulcer healing—and yet it cannot produce an alkaline reaction in the gastric chyme thereby eliminating secondary acid rise and any danger of alkalosis.

Write for Clinical Samples and Literature

JOHN WYETH & BROTHER, INC.
WALKERVILLE, ONT.



Squibb Vitamin B - Complex Syrup

For the growing group of physicians who believe that better therapeutics in B-deficiency conditions require the use of a preparation rich in **all** the recognized factors which are generally included under the term "Vitamin B-Complex".

Each teaspoonful contains 250 units of Thiamin Chloride. The other factors of the B-Complex occur in the ratio in which they are naturally contained in wheat germ, milk whey and rice polishings.

AVERAGE DOSE: 1-4 teaspoonfuls daily, plain or mixed with milk, tomato juice or similar vehicle.

Supplied in 3, 6 and 12 oz. bottles and 10 lb. containers.

For literature and samples write:
 Professional Service Department,
 36 Caledonia Road, Toronto.

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

Problem of Dementia Praecox*

J. D. M. GRIFFIN, M.D., D.P.M. (Eng.),
National Committee for Mental Hygiene (Canada).

The Extent of the Problem

THE newer methods of treatment for the particular type of mental illness known as dementia praecox has reawakened interest in the whole problem of mental health and disease. As is the case with so many other specific or nearly specific therapeutic procedures, these new treatments have been found to be much more effective in early acute cases than in cases which have become chronic. It is the purpose of this article to re-emphasize some of the basic facts about dementia praecox and to describe some of the more important early signs and symptoms in the hope that it will lead to earlier diagnoses and a consequent increase in the number of suitable patients being brought to mental hospitals for treatment.

Dementia praecox is no longer regarded as a clear-cut clinical entity. Rather is it a syndrome,—a group of signs and symptoms which are associated together sufficiently often in the large number of mentally ill patients to warrant the grouping together of these patients in one diagnostic category. The dementia praecox syndrome is the end-result of several contributing etiological factors. One occasionally sees the praecox picture developing in toxic and infectious conditions. Sometimes it seems to be the logical end-result of a constitutional defect in "personality integration". Reduced to physiological terms this probably represents a faulty integration of the autonomic nervous system itself or a faulty interrelationship between the autonomic and central nervous systems. Although the emphasis in psychiatry is now showing a decided shift in favour of an organic interpretation of mental illness, and especially of dementia praecox, it is still true that the vast majority of praecox patients show no easily demonstrable structural lesions. Pending further investigation into possible organic factors, these cases must, therefore, be regarded as "functional".

The problem of dementia praecox is far more serious than is commonly realized. In 1936 (the last year for which complete statistical information is available) there were 2187 patients with this diagnosis admitted to mental hospitals in Canada¹. 1701 of these were admitted for the first time and represented over 22% of all the first admissions. During this same year only 1045 patients with dementia praecox were discharged from mental hospitals and 460 died. So that the Canadian mental hospitals were left with a positive balance of over 600 patients more at the end of 1936 than they had at the end of the previous year. This has happened consistently ever since statistical reports have been made. Consequently, the number of dementia praecox patients in our mental hospitals is increasing.

The average age on first admission of these patients was about 32—
younger by far than any other type of psychosis, except "psychopathic per-

*In the literature the term *schizophrenia* is often used almost synonymously with *dementia praecox*. The latter term is used here because it has been accepted by the American Psychiatric Association as the official diagnostic term.

sonality"*. A very large proportion of these patients had received high school and even university education. Actually the age "32" gives a false impression, because we know that patients do not come to hospital for the first time until many months or even years after the onset of signs and symptoms of illness. Cameron² reports that, of the praecox patients admitted to the Worcester State Hospital in 1936, 48% had shown symptoms for over two years and only 32% for six months or less.

Of the 1045 praecox patients who were discharged from Canadian mental hospitals in 1936, only 155 were rated as "recovered" (14.8%). The others were regarded as unimproved or as showing some improvement. The average duration of stay in hospital of the discharged patients was 1.9 years. This was longer than the average stay of the discharged patients in any other diagnostic category except epilepsy and Huntington's chorea. A better indication of the problem created in our mental hospitals by these patients is the fact that the average length of the stay of those dying in hospital in 1936 was 12.4 years. This is longer by far than the length of stay of patients suffering from any other psychosis except paranoia.

Thus these patients tend to enter our mental hospitals fairly early in life, and remain there a long time. In this way patients suffering from dementia praecox accumulate in the hospitals until they constitute over 40% of the total patient population.

Spontaneous recovery is comparatively rare. Fuller³ followed a group of 1200 praecox patients for fifteen years after their first admission and reported that at the end of that time over 38% were still in the hospitals, 25% had died, and only 36.6% had been discharged. Of these discharged patients only 12.4% (4.3% of the 1200) were rated as recovered. This agrees with the Canadian statistics quoted above. A careful survey of the literature shows that the percentage of spontaneous complete recoveries is placed by various authorities at from 2.7 to 20%. The average is well under 10%. Literature also plainly indicates that the longer the cases are followed the more relapses are discovered and the fewer the recoveries become.†

The social and economic aspects of the problem are serious indeed. There are now over 39,000 patients resident in Canadian Mental Hospitals. At least 13,000 of these in all likelihood, are suffering from dementia praecox. It is estimated that there are almost as many praecox patients living undiagnosed in the community or in benevolent and charitable homes as there are in the mental hospitals. To this number must be added the hundreds of patients discharged each year as unimproved or partially recovered. Undoubtedly these, infiltrating through the general population, contribute definitely to the national cost of health and social welfare. The cost of treatment and maintenance of the praecox patients resident in the mental hospitals is itself a significant figure. On the basis of a dollar per day per patient this figure approaches \$5,000,000 a year.

In other words, the dementia praecox syndrome accounts for more patients in our mental hospitals than does any other type of psychosis. It begins early in life; it seems to select young people of better than average education and, in most cases, it is a chronic and progressive condition. Apart

*Many psychiatrists feel that a large proportion of patients diagnosed as "psychopathic personality" are really early praecox cases.

†The statistics bearing on the frequency of spontaneous remissions have been summarized in *Recent Advances in the Treatment of Dementia Praecox*, Bulletin No. 4, published by The National Committee for Mental Hygiene, Jan. 14/38.

from the economic wastage represented by the loss in earning power of the patients, this particular type of mental illness is beginning to assume serious proportions as a menace to national health, wealth, and social welfare.

The Results of Modern Treatment

For years psychiatrists have been looking for a method of treatment for dementia praecox which would be effective in reducing the morbidity and bringing about a higher percentage of complete recoveries. The variety of therapeutic procedures invented, was limited only by the imagination of the physicians. During the last decade, however, there have been put forward three or four treatment procedures which have aroused considerable interest. In 1922, Klasi⁴ introduced "deep sleep" therapy, in which patients were given sufficient sedatives to keep them unconscious, or nearly so, for several days at a time. In 1935, Sakel⁵ first published his account of insulin shock treatment, wherein the patients received large doses of insulin causing varying degrees of coma. This coma is produced almost daily in patients over a period of several weeks. Meduna⁶ subsequently introduced his convulsive treatment, by which the patients received an irritant drug intravenously, causing an immediate convulsion. In this treatment the patient is given convulsions every other day, or three times a week, until he has had a course of fifteen to twenty convulsions in all. The one common characteristic of these new and drastic forms of treatment is that they attack the disease at the physiological level. They all bring about a profound disturbance to the physiological mechanism of the organism. Since these treatments have been announced many variations and combinations have been suggested with good results. The proponents of these newer forms of therapy are unanimous, however, in pointing out that their best results are in early cases. Only rarely is a complete recovery or remission brought about in the patient whose illness has lasted much longer than a year or two. There is a growing conviction among psychiatrists that the insulin shock therapy or some modification of it is the treatment of choice. Nevertheless, because of the length of time required for insulin treatment and the large medical and nursing staff needed in order to carry it out effectively, the convulsive (metrazol) treatment is receiving increasing favour in many mental hospitals.

None of these newer forms of treatment have been tried for a sufficient length of time to judge their true worth. For this reason they must all be regarded as being in the experimental stage. Nevertheless, physicians in mental hospitals have adopted them so enthusiastically that already a large body of data is at hand in connection with the immediate results. This is especially true for the insulin shock therapy. The figures quoted in Table I represent the pooled results from the mental hospitals in the State of New York up to October 1938.⁷

The results of this treatment in Canadian mental hospitals are comparable. If the beneficial results are maintained over the years, there is no doubt but that these new treatments constitute a dramatic achievement in psychiatric medicine.

From the Table it will be seen that there is a direct relationship between the proportion of recoveries and the duration of illness. When the illness has lasted less than six months the immediate results of insulin treatment show that nearly 30% of the patients recover and another 30% are much improved. When the illness has lasted six years and over, however, the percentage of recoveries drops to less than 5%. Statistics are now available showing very

TABLE I.—Patients with dementia praecox receiving insulin treatment in the New York civil State Hospitals, classified according to duration of illness before treatment and outcome of treatment.

Duration of illness before Treatment	Number					Per Cent				
	Re-covered	Much Im-proved	Im-proved	Unim-proved	Total	Re-covered	Much Im-proved	Im-proved	Unim-proved	Total
Less than 6 months.	56	58	41	37	192	29.2	30.2	21.4	19.3	100
6 to 12 months.....	45	55	40	55	195	23.1	28.2	20.5	28.2	100
1 year.....	45	72	90	99	306	14.7	23.5	29.4	32.4	100
2 years.....	20	36	55	87	198	10.1	18.2	27.8	43.9	100
3 years.....	9	22	33	50	114	7.9	19.3	28.9	43.9	100
4 years.....	4	7	28	38	77	5.2	9.1	36.4	49.4	100
5 years.....	4	8	20	47	79	5.1	10.1	25.3	59.5	100
6 years and over...	9	22	50	114	195	4.6	11.3	25.6	58.5	100
Total.....	192	280	357	527	1,356	14.2	20.6	26.3	38.9	100

Total Benefited.....61.1%

similar results with both the deep sleep and the convulsive therapies. In insulin shock therapy, as well as the other new treatments, the chances for a good result are immeasurably better when treatment is begun early,—if possible, within the first six months of illness. From all mental hospitals comes the cry that patients are entering hospital too late for the treatment to be really effective. With these new treatments at his disposal, the institutional psychiatrist can, perhaps for the first time, legitimately urge the physicians in the field to send praecox patients into the hospital as early as possible.

Early Symptoms of Dementia Praecox

How early can cases of dementia praecox be recognized? A study of the case histories of hundreds of patients suffering from this disease has revealed the astounding fact that in most cases the syndrome is the end-result of tendencies beginning insidiously early in life, even in childhood. Adolph Meyer,⁸ as early as 1903, pointed out that the children who later developed the praecox type of mental illness were frequently very quiet, shy, and retiring by disposition. Teachers and parents frequently regarded them as model children. Later on in childhood they tended to become odd and occasionally peculiar because of their strangely aloof attitude. Bowman⁹ and others have shown that during childhood the patients frequently showed emotional instability of various types. Temper tantrums were common; enuresis and a variety of behaviour problems also occurred.

These personality traits and characteristics show a gradual accentuation until the patient's behaviour finally indicates the presence of a frank psychosis. Sometimes, when susceptible persons are placed under stress and strain the easily recognizable psychotic behaviour appears suddenly and dramatically. Even when this occurs, however, a careful history will usually reveal personality difficulties existing long before. When the illness appears to start suddenly in this way it may take the form of stupor, excited ecstasy, bizarre obsessional trends, and even suicidal attempts. This is accompanied usually by an increasing difficulty in thinking. Patients seem to be confused and unable to concentrate.

Obviously, any attempt to attack the problem of dementia praecox cannot limit itself to improving the treatment of the full-blown clinical condition. A growing public health consciousness on the part of the people demands prevention where possible; or at least early treatment. Waiting until the easily recognizable end-stage of this illness before making a diagnosis is com-

parable to waiting until cavitation occurs in a tuberculous patient before urging him to seek treatment in a sanatorium.

With such an insidious onset, and with roots of the illness beginning apparently early in childhood, how is it possible to make an early diagnosis? It may be pointed out that while dementia praecox patients frequently have had a childhood personality characterized by shyness, timidity, and emotional instability, etc., it does not follow that all children who have personalities of this type will of necessity become insane in later life. Nevertheless, it is a fruitful field for research in preventive psychiatry. It has been estimated that 6 to 7% of the children in our elementary schools are sufficiently shy, timid, and emotionally unstable to warrant close study and intensive efforts to redirect their personality growth along more healthy lines. We know now that it is possible, in most cases, to lead these children by a carefully arranged school, home, and community environment into habits of thinking, feeling, and acting which characterize a more wholesome personality*. In this field of the child's personality lies our greatest hope for real preventive work and mental hygiene.

But to return to the problem of the early referral for treatment of patients suffering from dementia praecox; when can the diagnosis be made? Naturally, children or adolescents suffering from these comparatively mild forms of personality disturbances should not be subjected to the vigorous treatment of insulin shock. It is possible, however, to distinguish the first and earliest signs of malignant disturbances in personality; and it is for these that the physician should be constantly on the watch.

Cameron¹⁰ recently investigated a series of a hundred cases of dementia praecox admitted to the hospital for the first time. The earliest signs and symptoms recorded he called "non-specific", because similar symptoms could be found preceding development of disorders other than dementia praecox. These non-specific symptoms included increasing seclusiveness, pre-occupation and loss of friends, interest, and ambition. Depression, difficulty in concentrating and keeping up with work, and fatigue were frequently noted. Other common symptoms were increased restlessness, nervous tension, irritability, hypochondriasis, insomnia, and occasionally nightmares. These symptoms must be regarded as warning signs, indicating that dementia praecox is possibly on the way. While they certainly indicate the necessity for treatment, it is not usually necessary to send the patient to hospital. One of the difficulties is to get the patient to consult the physician. The growing trend in favour of routine health examinations is helping to correct this.

The treatment of these early non-specific symptoms should be definite and positive. In addition to the complete physical examination, which in these cases should be very carefully performed, the physician should endeavour to win the confidence of his patient so that the latter will feel free to talk about himself and his troubles. Frequently the physician, simply by common-sense advice, will be able to tide the patient over a period of stress and strain and thus prevent the occurrence of more serious and more specific symptoms of dementia praecox. Occasionally a change of environment at home or at work is necessary. When this is quite impossible, it may be necessary to attempt to change the *emotional* environment by changing the attitudes of friends and family. Sedation should be used sparingly.

*During the last two years the National Committee for Mental Hygiene (Canada) has been engaged in research dealing with these "recessive" children. The results of this work are to be published in the near future.

The early specific symptoms of dementia praecox can be divided into three classes,—disorders of *thinking, feeling, and overt behaviour.*

Disorders of Thinking. Various disturbances in the patients logical thinking are apparent. These frequently begin with an increased sensitivity. The patient has a vague idea that either he is in disgrace or that he is being watched and talked about. The patient may then begin to show more definite delusional thinking and may believe that he is being persecuted, poisoned, or doped. More or less vivid hallucinations may accompany and reinforce these delusional beliefs. Interests and hobbies no longer claim his attention; and he tends to indulge in fantasies and daydreams. He shows a progressive failure in the ability to deal with his everyday tasks and begins to show progressively poor judgment.

Disorders of Feeling. The patient is apt to experience all kinds of odd somatic sensations. These are interpreted as a wide variety of physical ills. He may complain of being dazed and dizzy, and state that the surroundings of his home seem unaccountably changed and unreal. He may feel that friends and relatives are changed also. His emotional life is disturbed in many ways. Occasionally moodiness or outbursts of temper occur, but more frequently the characteristic mood is one of apathy and listlessness. Warmth and spontaneity are lacking in his contacts with people. Occasionally the patient will reveal unfeeling and callous behaviour towards his friends.

Disorders of Behaviour. In addition to the obviously unusual behaviour in connection with the symptoms described above, the common early disturbances include screaming and giggling spells, refusal to co-operate in eating, talking or moving; bizarre exhibitionism and suicidal attempts.

When specific symptoms of this type are present, it is time for rigorous treatment in the mental hospital. It is common experience that a patient showing such symptoms may be protected by his friends and family for months or years before the help of a physician or hospital is sought. This attitude of the patient's family towards the hospital reflects the attitude of the public at large,—namely that the mental hospital is a custodial asylum, the last resort for help after everything else has been tried. This attitude must be corrected by education and by the work of the general practitioners in the field. It would greatly facilitate the early treatment of these patients if there were some facility for their care in the general hospitals. Reception units for psychiatric cases in general hospitals have been set up and have met with great success in several centres in Canada and the United States.

Differential Diagnosis.

It has been stated above that dementia praecox is a syndrome rather than a clinical entity. Consequently, the symptoms, both non-specific and specific may occur as a result of a wide variety of conditions. It is important to distinguish the "functional" praecox condition from conditions producing similar symptoms but caused by definite organic disease,—particularly organic disease of the central nervous system. Brain tumours, especially tumours located in the frontal lobe, may be distinguished from early dementia praecox only after a careful and complete neurological examination. Infective and toxic states occasionally simulate the picture. Each case must be decided on its own merits. By and large, however, organic affections of the central nervous system can be distinguished by the accompanying physical signs and symptoms, and by the fact that in this group intelligence, judgment, and memory are commonly affected more than the emotional life. In dementia

praecox disturbances of feeling, emotional response, and the ability to establish warm relationships with other people usually suffer before memory and intelligence.

It is important to distinguish between the two great "functional" reaction types of mental illness—dementia praecox and manic-depressive psychosis. Occasionally the apathy, listlessness, and stupor of the praecox patient may be mistaken for depression and melancholia. But investigation will reveal that there is very little real sadness associated with the apparent despondency. Similarly, the excited ecstasies of some praecox patients is easy to confuse with manic or hypomanic symptoms. In dementia praecox there is a bizarre and peculiar note about such symptoms which are usually absent in manic-depressive psychosis.

The early non-specific symptoms may frequently be confused with the relatively benign psychoneurosis,—especially with the obsessive types of neurosis and hysteria. Here there is not so much need to differentiate the conditions because the treatment by the general practitioner will be similar in any event. The important thing to keep in mind is that the patient with these non-specific symptoms may be headed for a malignant psychosis unless his habits of living, both with others and with himself, improve.

Summary

A review of some of the social and economic problems connected with dementia praecox in Canada is presented. The disease, because of its early onset and long chronic course accounts for a great accumulation of patients in our mental hospitals. The newer treatments, such as insulin shock, are bringing about recovery in a fairly high percentage of cases among patients in which the duration of illness has been relatively short. This emphasizes the importance of early diagnosis and early treatment. Some of the early non-specific and specific symptoms of dementia praecox are described. The ultimate solution of the problem will depend, at least in part, on preventive work. The physician in general practice can help materially by watching for the signs of unhealthy personality development in children and adolescents, by supervising the home training and education of these individuals, and by urging immediate mental hospital treatment for patients as soon as the unmistakable signs of dementia praecox appear.

REFERENCES

1. Fifth Annual Report of Mental Institutions, 1936, Dominion Bureau of Statistics, Ottawa, 1938.
2. Cameron, D. E.: The Early Diagnosis of Schizophrenia by the General Practitioner. *New England Journal of Medicine*, 218, 5:221-224, Feb. 3, 1938.
3. Fuller, R. G.: Hospital Departures and Re-admissions among Mental Patients during the Fifteen Years following first admission; *Psych. Quart.* 4:642-674, 1930 (Quoted by Cameron).
4. Klasi, J.: Über die therapeutische Anwendung der "Dauernarkose" mittels somnifers bei Schizophrenen. *Zeitschr. f.d.ges. Neurol. u. Psychiat.* 74; 5570592, 1922.
5. Sakel, M.: *Neue Behandlungsmethode der Schizophrenie* Wien und Leipzig: Moritz Perles, 1935.
6. Meduna, L.: New methods of medical treatment of Schizophrenia; *Arch. Neurol. & Psychiat.* 35:361-363, 1936.
7. Ross, J. R.: The Pharmacological shock treatment of Schizophrenia, *Am. J. Psychiat.* 95, 4:769, Jan., 1939.
8. Meyer, A.: An Attempt at analyses of the Neurotic Constitution: *Am. J. Psychol.* 14:354-367, 1903.
9. Bowmen, K. M. and Raymond, A. F.: A Statistical Study of the Personality in Schizophrenic Patients: *Proc. Ass., Res., Nerv. and Ment. Dis.* 10: 1931.
10. Cameron, B. E.: Early Schizophrenia, *Am. J. Psychiat.* 95, 3:567, Nov., 1938.

More Odds and Ends

ARTHUR BIRT, M.D.

"Tuberculous Polyserositis"

NEARLY forty years ago a junior colleague in the country turned over to the writer the case of a seventeen year old girl, with the somewhat hazy diagnosis of "abdominal neuralgia". The patient was slender and somewhat anaemic and there was a slight degree of fever.

On examination the chest seemed negative but the abdomen was "gassy", slightly tender, and had a suggestion of that "doughy" lack of resilience which is so characteristic a sign of peritoneal tubercle. Slight moveable dulness was soon detected from flank to flank. This evidence of free and not pocketed fluid increased rapidly in succeeding days, and in a few weeks she presented a markedly distended abdomen and pressure signs were causing rapid deterioration of her condition generally. Drainage for the free fluid form of tuberculous peritonitis had just come into fashion and the writer decided to operate. With the assistance of Dr. Willis Moore of Kentville the abdomen was explored through a para-central incision. A large *bucketful of fluid* (straw-coloured, quite free in the general cavity and with a monocytic picture on microscopic examination) was drained and the incision closed. The peritoneum explored by eye and by palpation was found to be much injected and *sprinkled throughout with miliary grey tubercles*. In the kidney pouches and throughout the pelvis these were so densely packed that to the touch these parts resembled a "bag of rice". There were no visible adhesions.

The after course was interesting. Within the many weeks of slow convalescence fluid accumulated in both pleural cavities to a considerable extent. One side was aspirated on one or two occasions, the other was left alone, except for local counter-irritants, and complete absorption of fluid finally occurred. At no time during the illness were signs of parenchymatous lesions in the lungs detected. Moderate fever persisted for some time after the drainage, but finally settled down. The pulse rate followed the temperature curve.

About the third week after the abdominal drainage, a complaint of increased dyspnoea and an accelerated and irregular pulse called attention to the heart. *Signs of pericarditis were now evident*. Typical change in cardiac outline, Broadbent's sign at left back, and coarse friction varying with posture, increased by stethoscope pressure and audible during breath-holding. Probably miliary tubercle of the pericardium was the diagnosis. Judging from the peritoneum it was surmised that a *miliary tuberculosis infected in turn or almost simultaneously all the main serous sacs*.

The signs of fluid soon disappeared and beyond some degree of fixation of the apex beat on posturing no residual signs of the pericarditis finally remained. Outdoor treatment was instituted, as soon as possible, and everything we knew was done to raise the patient's general resistance and improve nutrition. We were aided by the girl's own outlook. She was full of pluck, and finally fought the tedious illness and prolonged convalescence.

Some years later the writer was consulted as to the advisability of marriage. After examination he gave a favourable outlook, but was doubtful

about the prospects of a family as the peritoneal infection had been assumed to be via the tubes. However, ten years later he once more met his old patient who proudly introduced him to her eight year old daughter, an adopted child as it proved to be.

Discussion. Looking back on the out-patient days in the Edinburgh Infirmary, the London Hospital, and in others, one is struck by the relative rarity of tuberculous peritonitis in Nova Scotia. My medical friends mostly concur in this observation. The old and all-too-familiar picture of "tabes mesenterica" seems like a ghost from the past. Why is it? One obvious reason is the prevalence even to-day, in the British cattle herds, of tuberculosis. Thanks to our rather spasmodic government regulations tubercle in cattle is fairly well under control, and the human infections by the bovine bacillus resulting in the glandular forms of tuberculosis in childhood from infected milk are simultaneously controlled.

A case such as the one described brings up again the old debate as to whether such an attack, with recovery, really acts as a protection against a pulmonary tuberculosis. However this may be, the fact remains, that after recovery from this general invasion of all the great serous sacs, no anxiety as to the state of the *lungs* has ever arisen in the many years that have elapsed.

The method of drainage with free exposure to the air was based partly on the theory that the relief of a high degree of tension of *free* fluid, caused a secondary oozing of serum with a high content of anti-bodies into the cavity, this tending to obsolescence of the tubercles.

The next stage in the treatment was the recognition of the curative effects of *sunlight*, and its application on a large scale by *Rollier* and others. Another point to note is that this case was an eminently suitable one for the combined treatment of drainage and outdoor hygiene. The free-fluid type. The other groups of *fibro-caseous* tubercle with *pocketing*, and the more tardy *dry adhesive* type offer no such chance of success. My case offers a *phase* only in the progressive handling of abdominal tuberculosis under favourable conditions; and, although it may not be the rarity that it has proven in my small experience, I have thought it rather a freak for *all the main serous members* to show signs of *miliary tubercle with effusions* during one illness, and for a complete recovery to ensue.

N.B. The fluid from both pleurae was of the monocyctic type and straw-coloured. In the pericardium we narrowly escaped an aspiration, so the amount of fluid was considerable. The patient was in good health when last heard from.

Acute Poisoning by the Atropaceae

Poisoning by the Atropaceae with suicidal intent is uncommon. They are not well known to the general public and not speedy enough to be popular. Most of the poisonings from this source are accidental through children eating supposedly edible berries, or from mistakes with eye-drops, medicines, and so on.

Even the writers of murder stories do not seem to select this group of poisons for the machinations of the villain. In the summer of 1888 I admitted to the emergency ward of the Edinburgh Infirmary in the service of Professor Greenfield a family of five who had been brought in from the outskirts of the town where they had been encamped with their travelling wagon. They were not gypsies, just travelling tinkers, and all the family, father, mother and three

boys had developed violent colds. For this reason, as soon as they had picketed their horse the eldest boy (?12) was despatched to a "herbalists" in Leith Walk to get some "horehound" leaves with which to brew a tea to treat their ailments. Unfortunately the herbalist was away, and the lad in charge of the tiny shop couldn't find the horehound leaves. However, after consultation the two boys found a jar of leaves, which they thought would "do as well", and after steeping the concoction, the whole five imbibed varying doses of the brew. Soon afterwards they were all taken so ill, that a doctor was called. He promptly got the history, seized the remains of the "tea", and hurried them to the Infirmary for treatment. They presented quite similar symptoms in varying degree—thus they all showed a hot, dry skin with slight fever, and heavy flush of their faces. They were hoarse and had excessive thirst from dryness of mouth and throat. There was difficulty in swallowing, the pulse was rapid but regular, and the breathing rate was increased. Their eyes looked dark and glistening from the widely dilated pupils, and they moved uncertainly from the paralysis of accommodation. The father showed some muscular tremors. Mentally they were all somewhat abnormal; the mother was rather talkative and emotional, the father more or less disorientated and later became wildly delirious. There was difficulty in urination, and in two or three catheterization was necessary. Besides evacuation of stomach and bladder (the latter is necessary to prevent reabsorption of the drug from that Viscus) such measures as strong tea, warmth, and stimulants, e.g. strychnine were used. Morphine is, of course, contra-indicated as both drugs are respiratory depressants. Morphine is *not* an *antidote for atropine though atropine is helpful in morphine poisoning.*

Treatment. The father, mother and three boys at about twelve, nine and seven, were given different emetics, as follows: from the youngest up mustard and water, ipecacuanha, tartar emetic, and apomorphine hypodermically. The father who was already on the verge of delirium had stomach lavage in spite of strenuous resistance. All the remedies acted promptly; the vomited matter giving traces of atropine in one or two instances. During the night the mother was excited and talkative; the father, who had, it appeared, taken the largest dose, was wildly delirious and very aggressive. The three boys, with their greater resistance to atropine and more rapid excretion, made a rapid recovery, and on the second day were practically well. This applies also to the mother. The father barely escaping a broncho-pneumonia, was the last to clear up, but in a few days was also discharged.

A guess at the actual amount of alkaloids taken had finally to be abandoned, but it was considered that the father probably had a lethal dose aboard, if untreated.

Reporting on the remains of the "tea" the pharmacologist (Professor Sir T. R. Fraser) stated there was a mixture of leaves mainly of the atropaceae group with stramonium (*datura stramonium* or thorn apple) as the main constituent. This contains atropine, hyoscyamine and small quantities of hyoscyne.

Emetics. Where, for any reason, it is impossible or undesirable to use *gastric lavage*, it is useful to keep in mind some of the more commonly used emetics; they are:

Mustard; drachms I to drachms IV in tepid water (repeat in 15 minutes if necessary).

Sodium chloride in concentrated solution in tepid water.

Copper sulphate grs. XV to XXX.

Alum; grs. XV to XXX.

Wine of Ipecac; drachms $\frac{1}{2}$ to drachms I.

Tartar emetic; grs. $\frac{1}{2}$ to II.

Wine of Antimony; m. X to XXX.

Apomorphine hydrochlor; (hypo) grs. 1/10-1/5. The last mentioned has the advantage of speed (5-10 mins.) and the collapse which may accompany the vomiting is very rarely fatal. Lethal dose of atropine grs. 1/20-1/10 has killed in about six hours.

Children stand comparatively large doses. It is excreted rapidly—hence chronic poisoning by this group is unknown.

Coal-tar Poisoning and Cyanosis

In assessing the cause of a cyanosis which "may be stated to be a quantitative expression of the amount of reduced haemoglobin at any particular site" we have to consider several groups.

(1) We have *cardiac cyanosis* which tells us plainly that the myocardium is not maintaining a velocity in the blood-stream of sufficient rate for tissue nourishment. The result is that de-oxygenation is practically accomplished before the blood has reached the peripheral vessels, and venous blood appears in the arterioles.

(2) We have the *cyanosis of congenital heart disease*, usually cleared up by the physical examination of heart and the history, along with finger-clubbing.

(3) Going outside the heart we have *pulmonary cyanosis* as in marked emphysema, and notably in the rare Ayerza's Disease (syphilitic fibrosis of the pulmonary artery).

(4) A rare condition, of which I recently saw an example in the practice of Dr. W. N. Rehfuess of Bridgewater, was *enterogenous cyanosis*. In this condition the haemoglobin is converted into methaemoglobin and sulphaemoglobin in the vessels of the alimentary tract. In these forms the haemoglobin is no longer capable of transporting oxygen.

The spectroscope is required for the diagnosis of this condition, which may be traced in some cases to abnormal bacterial action in the bowel.

(5) Another cause of cyanosis is the polycythaemic condition—primary or secondary.

(6) In such a case as the one here reported of *drug cyanosis*, multiple factors may be surmised, e.g. stasis of blood stream from myocardial poisoning, peripheral vaso-motor paresis, the factor of reduced haemoglobin, etc., etc.

Case Report

About twenty years ago I was called in consultation along with the late Dr. D. A. Campbell on a young woman suffering from "nervousness", prostration, a rapid heart action with praecordial pains and some dyspnoea. She was obviously seriously ill and much below weight. The striking point at first glance was her colour—she showed a dusky *cyanosis* of lips, face and extremities which was not explained by the findings in either lungs or heart.

The history showed that, in the self-treatment of headaches and neuralgias, she had for some time taken considerable dosage of headache tablets and

powders in which the coal-tar products were important constituents. She was also found to have the remainder of a prescription calling for twenty-four powders of acetanilid (4 grs. each). The consultants agreed on a diagnosis of chronic poisoning by coal-tar derivatives, and opined that the toxic influence must still be active. The attending physician maintained that this type of remedy had not been prescribed within a period that could allow of this last conjecture being true. To settle the point recourse was had, to urinary examination by an expert. The bright orange-coloured urine gave the following reactions—a slight amount of albumen, haematoporphyrin plus, no blood.

The value of a complete analysis of urine in competent hands is clearly shown by such a case. Against the advice of the writer, the patient was subjected within a short time to a minor gynaecological procedure, the shock of which proved too much for the poisoned heart muscle. The damage done amongst the general population by the wholesale and reckless use of the coal-tar pain-killers and sedatives, purchased freely over the counter and recommended by amateur therapeutists to their friends, must be very considerable.

The risks of the newer barbiturates have now to be taken into account. Habit formation seems quite frequent, and has, in recent years, attracted attention of the medical authorities at Ottawa in connection with the returned soldiers.

With our ever-growing list of new remedies, pressed on the profession by skilled salesmanship, we are apt to forget our old medical caution—*Nil Nocere*.

Gangrenous Pancreatitis

A girl in her teens, feeble minded and of poor physique, was admitted this year to Dr. Rehfuss' service at the Bridgewater Hospital, under the diagnosis of acute (probably perforating) appendicitis. Her condition was so serious that detailed scrutiny of the diagnosis was impossible, and the abdomen was opened as soon as preparation could be made.

The appendix was not involved, but an early peritonitis of the upper zone was under way, and although the gall-bladder and ducts could not be implicated at the moment, the pancreas was evidently the main offender. A few areas of fat necrosis were recognized, and the whole gland was dark, and pultaceous and was clearly in a state of acute necrosis. The patient's condition was such that direct transperitoneal drainage with a large tube seemed the only thing to do, aided by the usual measures for surgical shock.

Convalescence was very stormy and prolonged. Masses of necrotic tissue mixed with pus were discharged over a period of weeks until it seemed that practically the entire organ must have been evacuated in the form of this gangrenous debris.

The amount of laboratory work available on the case was strictly limited, but, on discharge, I understand, the urine was free from sugar (not present on admission) and the blood sugar was practically normal. It is obvious that many gaps are present, which full laboratory support might have filled in and so rendered this report more valuable.

At operation the uterus and pelvic viscera generally were undeveloped. Otherwise the pancreas was the sole viscus involved. Recovery in the end seemed complete.

The one point I wish to emphasize is a surgical one. Under the conditions operation and drainage *had* to be from the front and transperitoneal, but could a diagnosis of acute pancreatitis have been made before opening, modern surgical opinion seems to point to the great advantages secured in such a case from the *left lateral retro-peritoneal* approach. Both in safety and for mechanical reasons it would in the present case have offered a much better chance of a rapid and uncomplicated recovery. As it is, I think that a clean *surgical* recovery from such a crisis, involving the sloughing and external evacuation of the bulk of such an important viscus, and the attainment, for a time at least of apparently fair health, must be rather an uncommon event.

Moral. However urgent the acute abdomen, always make a rapid but serious attempt to identify the main offending viscus with an eye to the ideal method of drainage if this is likely to be made.

Cape Breton Brawn

To the Editor of the BULLETIN:—

I frequently read, in the press, of hardship endured by doctors practising in some of the isolated districts of the province. May I, through the BULLETIN, relate one of my own experiences?—Not in a spirit of boastfulness.

I was then in practice in a certain part of this province where we usually had a heavy snowfall, and when the spring came along travelling was very difficult. In April 1931, on a mild day which softened the road so that no horse could travel, and while I was enjoying my dinner, I was called to see a patient twenty-six miles away. The first ten miles of the journey was over a mountain without an inhabitant. After I finished my dinner, I pulled on a pair of hip rubber boots and made a pack of such instruments and medicines as I thought necessary, and started on my hike. After crossing the mountain I was able to drive about five miles. The rest I walked. After arriving at my destination I attended to the patient and soon had her quite comfortable. Then I had something to eat and went out to inspect the weather. The night was fine but very dark, and it had started to freeze. I wired my stable boy to hitch up one of my horses as soon as the road became hard enough, and come to a place twelve miles from home, to meet me. That was as far as he could come with a sleigh. I borrowed a lantern and started my return walk, to meet my team. I arrived at the meeting place a few minutes before midnight, but believe me the last mile was a weary one. During the afternoon I had walked thirty-five miles and rode five. At the meeting place we were given a real hearty meal and then started for home. We arrived home at 5 a.m., but the most difficult part of the journey was still to be accomplished—getting out of the sleigh and walking into the house. How was that for a fifty-two year old country doctor, having a pair of hip rubber boots for hiking equipment?

COUNTRY DOCTOR.

Are We Ready for Health Insurance?

FOREWORD

THE following correspondence has been received from the Chairman of the Committee on Economics, Canadian Medical Association. As will be seen from it the Canadian Medical Association is preparing the ground for the possibility of health insurance either as a Federal or Provincial matter, and is asking the co-operation of our Society in arriving at an opinion, for or against. Although an immediate answer was requested, your Committee on Economics felt that the matters dealt with in the correspondence were far too important for it to handle, and it is passing it along to the Executive with the hope that the latter will see fit to make it agenda at the next annual meeting. In order that members will know that the subject is coming up, and have some idea of what the discussion will be about your committee is requesting the editors of the BULLETIN to publish the correspondence. There seems no doubt that some form of medical health insurance is coming on this continent, the Canadian Medical Association wish to be prepared for that eventuality. It has in the past laid down certain very definite ideas as to the type of health insurance that it would be prepared to agree to, which we append at the end of this correspondence. If this matter comes before our Society at its next annual meeting, we will have to state whether we are ready to face the problem of medical health insurance. In view of the apparent advisability of some form of health insurance your Committee feels that the Society might well lay down its ideas as to the type of insurance it would be prepared to accept, if and when the necessity arose.

H. B. ATLEE,
Chairman, Committee on Economics.

CANADIAN MEDICAL ASSOCIATION

203 Medical Dental Bldg.,
Vancouver, B. C.,
December 23rd, 1938.

DR. H. B. ATLEE,
Chairman, Committee on Economics,
The Medical Society of Nova Scotia,
119 South Park Street,
Halifax, N. S.

Dear Doctor:—

(I)

At the meeting of the Executive of the Canadian Medical Association held in Ottawa, October 27th and 28th, the Committee on Economics was instructed as follows:—

1. "That the Committee on Economics undertake to secure from the several provinces a statement as to the position which each Provincial

Medical Association now takes in regard to the Canadian Medical Association defining a policy for or against Health Insurance."

2. "That the Committee on Economics endeavor to include in its report to this Executive Committee, in minutest detail, such information as will help the Committee to define the position which the Canadian Medical Association should take, or such advice as should be passed to General Council for consideration at its next meeting."

Enclosed please find a questionnaire, the answers to which, I hope, will define definitely the policy of the various provinces.

May I ask for your full co-operation in obtaining for me the answers as they apply to your province?

Questionnaire Re Compulsory Health Insurance

1. Does the Medical Society of Nova Scotia—Canadian Medical Association, Nova Scotia Division, agree that the time has arrived when the Canadian Medical Association should define a policy either for or against a Compulsory Health Insurance that is based on the principles adopted by General Council at the Annual Meeting of the Canadian Medical Association at Ottawa in 1937, and printed in the Journal of the C. M. A. in September of that year?
If so please give full reasons for this decision.
2. If the Medical Society of Nova Scotia does not agree that the time has yet come, will you please give me in as full detail as possible the various reasons put forward in defence of the argument that the Canadian Medical Association should take no action at the present time?
3. If the Medical Society of Nova Scotia agrees that the time has come for the Canadian Medical Association to make a declaration, is it in favour of:—
 1. A declaration for Compulsory Health Insurance?
 2. A declaration against Compulsory Health Insurance?
4. If your Provincial Association is in favour of a declaration for Compulsory Health Insurance, please give me in as full detail as possible the various reasons and arguments put forward in support of this stand being taken.
5. If your Provincial Association is in favour of a declaration against Compulsory Health Insurance, again, please give me in full detail the various reasons and arguments advanced in support of this stand being taken.

(II)

Our Committee on Economics has been asked by the Executive of the Canadian Medical Association if it is in possession of all relevant details in connection with medical service plans now in effect in Canada.

The term "medical service plans" does not include Contract Practice in the accepted sense but refers to such schemes as the Voluntary Health Insurance Scheme in Toronto, known as the Associated Medical Services, the Medical Relief Scheme in Ontario or any scheme where a group of individuals or employees have formed a medical benefits association and made ar-

rangements with the local medical profession—these arrangements including such things as:—

1. Scope of medical benefit;
2. Rate of remuneration to medical profession;
3. Free choice of doctor, etc.

If any such schemes are in effect in your province will you please let me have all the relevant details in connection with them so that your Committee on Economics may be in a position to produce them when called on.

In addition to the above your Committee would be grateful if you could give it all information concerning any such schemes that are at present contemplated, under discussion or down on paper, although not as yet in operation in your province.

(III)

Re Contract Practice

Arising out of the report of the Committee on Economics to General Council at the Halifax Meeting, the Executive has asked the Committee on Economics to ascertain to what extent the B. C. Division would desire the Committee on Economics to study further the question of contract practice.

The B. C. Division has been communicated with and has promised to submit a memorandum on the subject to our Committee.

In the meantime, it is felt by the Nucleus of the Committee that it would be extremely valuable and necessary, if the Committee is to make a report to the Executive, to have the views of the other provinces.

It is realized by the Nucleus that due to local conditions contracts must vary not only in the various provinces but even within the range of districts within a single province. Nevertheless, it is felt that there must be certain general principles governing all contracts that should be applicable throughout Canada.

May I ask that you take this matter up with the Executive of your Provincial Association and its Committee on Economics and endeavor to obtain from them for the Committee on Economics a memorandum on contract practice that will embody their views on:—

1. The general principles that should form the basis of all contracts.
2. The situation with regard to contract practice in your province and,
3. Any suggestions or comments relative to the improvement of contract practice in our province and in Canada in general.

(IV)

Re Lodge Practice

In Australia there has been for many years a very extensive system of lodge medical practice controlled by the Friendly Societies as was the case in England before the introduction of Compulsory Health Insurance.

As you know there is at present a national scheme of Compulsory Health Insurance on the statute books in Australia but, for the present, its active operation is held in abeyance while a Royal Commission is sitting in various centres of the Commonwealth hearing evidence for and against the case for higher remuneration as demanded by the medical profession.

Several interesting facts have been brought out in the evidence:—

1. Most of the Lodge practice was done for small financial returns considering the amount of work done.
2. Neither the Australian branch of the British Medical Association nor any of its branches had ever officially lodged a protest or a complaint with the Friendly Societies re the inadequacy of the remuneration for medical services.
3. The Chairman of the Royal Commission, after hearing much evidence re the inadequacy of this remuneration, stated that he was in no ways interested in the evidence that the doctors had been doing this work for low fees. What did interest him, and what was to him very important, was the fact that for many, many years the medical profession in Australia had been doing this extensive lodge work and not only had continued to sign the contracts and do the work but had never protested against the inadequacy of the fees paid.

It is the opinion of the Nucleus of the Committee on Economics that most of the Lodge work in Canada is done for inadequate remuneration and that the time has come when the medical profession should protest against this and ask for better terms for the medical men doing this class of work.

Is the medical profession in your province in agreement with this view?

If so, is your Association willing to undertake a survey of the Lodge work in your province in an attempt to get definite evidence as to:—

1. The amount of Lodge work done.
2. The types of contracts entered into between medical men and the various lodges.
e.g. Contracts for members only and contracts for members and dependents, etc.; also the extent and scope of the medical services rendered and the amount of remuneration received by the doctors doing this work.

I know it has always been considered extremely difficult to get at the facts of Lodge practice so as to present an accurate picture. Surely, if the men doing this work could be made to see that such a survey, kept entirely confidential, rather than jeopardizing, would go far towards strengthening and improving their positions, they would co-operate in giving, in confidence, the necessary information to a survey committee.

(V)

Re Voluntary Health Insurance, Etc.

The Nucleus of the Committee on Economics of the Canadian Medical Association is most anxious to obtain, through its corresponding members and for its future guidance, the attitude of the various Provincial Associations concerning certain questions related to Medical Economics and the provision of medical services to the people.

May I ask for your assistance in obtaining for your Committee on Economics answers or remarks and comments concerning the following questions:—

1. Voluntary Health Insurance.
 - (a) Is your Association in favour of the principle and if so under what conditions?

- (b) Compulsory Health Insurance not being in operation would the profession like to see a well organized and efficient Voluntary scheme in operation?
 - (c) Does it feel Voluntary Health Insurance would answer the need of supplying medical services to the lower income groups?
 - (d) In case Compulsory Health Insurance for the lower income groups was in force in your province, would the profession like to see a system of Voluntary Health Insurance instituted for the higher income groups?
2. What is the attitude of the profession in your province towards Voluntary Hospital Insurance?
- (a) In the absence of Compulsory Health Insurance would the profession like to see Voluntary Hospital Insurance in operation throughout your province?
 - (b) If Compulsory Health Insurance were in force, would the profession like to see Voluntary Hospital Insurance in operation either alone or in conjunction with a scheme of Voluntary Health Insurance for the higher income groups?
3. What is the attitude of the profession in your province towards the principle of the Municipal Doctor system as at present in force in parts of rural Saskatchewan?
- (a) Is a properly controlled Municipal Doctor system the answer for providing medical services in certain financially embarrassed rural communities?
 - (b) It is notoriously difficult to serve rural areas under a Compulsory Health Insurance scheme. If Compulsory Health Insurance were in force in your province, would the profession like to see the rural communities served by a properly controlled Municipal Doctor system? If not what alternative would the profession offer? Would Voluntary Health and Voluntary Hospital Insurance answer the problem for all the members of a rural community?
4. Diagnostic Aids.
- (a) What value does the profession in your province attach to diagnostic aids in helping to provide medical services to the people?
 - (b) In the absence of any province-wide scheme would the profession be in favour of the provision of diagnostic aids to all the lower income groups as a first step towards a completer medical service or would the profession prefer to see that diagnostic aids be always an important part of any scheme introduced?

In asking for answers to the above series of questions I know I am demanding a great deal, not only from any corresponding member but also from the profession in his province. The Nucleus of the Committee on Economics is convinced, however, that to-day these questions and their answers are extremely important as affecting the future of the practice of Medicine in every province in Canada and I earnestly bespeak your co-operation in obtaining as full and authoritative answers as possible.

(VI)

The following resolution was sent up to the Executive of the Canadian Medical Association by the Executive of the Manitoba Medical Association:

1. *That, whereas* the medical practitioners are often called on to give written reports on their patients to Accident and Life Insurance Companies and Pension Boards, etc.; and
2. *Whereas* such written reports are obtained from the Files of the medical man and embody his professional opinion, and impart information almost of equal value to an examination; and
3. *Whereas* some companies set an inadequate arbitrary fee of \$2.00 for such reports and others try to get it without any fee as a service to a patient; and
4. *Whereas* these reports are often asked for without the written consent of the patient;

Be it resolved that we humbly petition the Manitoba Medical Association to give a ruling that:

- (a) All such requests for reports on patients be accompanied by a written consent of the patient to give such information; and
- (b) There be a minimum fee of three dollars for such written opinion or report.

Yours sincerely,

(Sgd.) WALLACE WILSON, M.D., Chairman,
Committee on Economics, C.M.A.

ENUMERATION OF PRINCIPLES

Herewith follow the principles already laid down by the C.M.A. setting forth their views on the general problem of Health Insurance.

1. That, in the provinces where state health insurance is established, it be administered by the departments of public health (whether or not under a Commission) in order to co-ordinate the organized preventive and curative medical services.
2. That a Central Health Insurance Board and Local Insurance Boards be appointed, representative of all interested, to advise the responsible administrative authority.
3. That the professional side of health insurance medical service be the responsibility of the organized medical profession through the appointment, by the medical societies, of a Central Medical Services Committee and Local Medical Services Committees to consider and advise on all questions affecting the administration of the medical benefit.
4. That local areas for health insurance administration correspond to urban municipalities and rural health unit areas.
5. That the whole province be served by adequate departments of public health, organized on the basis of provision of individual health supervision by the health insurance general practitioner.
6. That there be a State Health Insurance Fund, provincially controlled, and that "Regional Officers", to act as supervisors and referees, be appointed, paid and controlled by the provincial department of Public Health.

7. That medical care for indigents be provided under the Plan, the State to pay the premiums of the indigent, who then receive medical care under exactly the same conditions as the insured person.
 8. That the Plan be compulsory for persons, with dependents, having an income of less than \$2,500 per annum; and for persons, without dependents, having an income of \$1,200 and less per annum.
 9. That the dependents of insured persons be eligible for the medical benefit.
 10. That there be offered, on a voluntary basis, to those with incomes above the health insurance level, Hospital Care Insurance, and that this be administered as part of the State Health Insurance Plan.
 11. That the only benefit under the Plan be the medical benefit.
 12. That the medical benefit be organized as follows:
 - (a) Every qualified licensed practitioner to be eligible to practise under the Plan;
 - (b) The insured person to have freedom of choice of general practitioner;
 - (c) The medical service to be based upon making available to all a general practitioner service for health supervision and the treatment of disease;
 - (d) Additional services to be secured normally through the general practitioner:
 - (1) Specialist and consultant medical service (only those so designated to be eligible to practise as specialist and consultant);
 - (2) Visiting-nurse service in the home;
 - (3) Hospital care;
 - (4) Auxiliary services—usually in hospital;
 - (5) Pharmaceutical service.
 - (e) Dental service, arranged direct with dentist or upon reference.
 13. That the Insurance Fund should receive contributions from the insured, the employers of the insured, and the State.
 14. That the medical practitioners of each local area be remunerated according to the method of payment which they select.
 15. That the Central Medical Services Committee decide the relationship between specialist and general practitioner fees, and between medical and surgical fees.
 16. That a contract-salary service be limited to areas with a population insufficient to maintain a general practitioner in the area without additional support from the Insurance Fund.
 17. That no economic barrier be imposed between doctor and patient, but that the insured be required to pay a part of the cost of medicines.
- (From the Report of the Committee on Economics of the Canadian Medical Association presented at the annual meeting in Calgary, June, 1934.)

Reminiscences

"AN ANCIENT MARINER" on the Medical Sea.

INSPIRED by the humorous contribution of the amiable septuagenarian, "Dr. I. M. Quimby", in the last issue of the BULLETIN I should like to put on record one or two instances of my own experience as a colliery doctor shortly after I had become an enthusiastic member of the Medical Profession in the Province of Nova Scotia.

At this particular colliery it was the custom to heap up large mounds of coal on the surface during the winter season when, owing to the impossibility of transportation to the markets up the St. Lawrence River, this was the only means of giving employment to the miners until the ice disappeared and steamers were able to carry their cargoes of the black diamonds to Quebec and Montreal. So in the Spring these huge black "banks" had to be removed as speedily as possible and, accordingly, there was always a considerable influx of "shovellers" on the scene, about the first of May, to perform this work. They usually came from beyond the River Euphrates, and being engaged only during the summer months they herded together near the "works", lived in rude shacks constructed by their own hands, and spent their few hours of leisure in eating, smoking, and sleeping. Their visits were limited to calls at the doctor's office and, on such occasions, they appeared in groups of three or four. On one certain occasion the usual coterie arrived and accompanied by a patient complaining of "something wrong inside". Having recently graduated with honors and being well saturated with medical lore so far, at least, as theory was concerned I conjured up the possibilities and, by a process of exclusion, arrived at a tentative diagnosis of chronic constipation. I encountered great difficulty, however, in coming to this conclusion because on directing my inquiries in that direction I was mortified to find that my questions were wholly unintelligible. So in despair I called one of his friends and asked him to ascertain from the patient when he had had an evacuation of the bowels. You can well assume these were not the terms I used, but the results were negative all the same. No better success was achieved with the second man called in. Then the third was appealed to who soon struck his thigh vigorously and exclaimed with marked facial contortions "I know Sir, I know". Then turning to his friend he hissed at him "Boy, when did you have a road through you?" and the immediate reply was "I don't know; two weeks anyway."

I made up three powders of calomel, each containing five grains, and told him to take one that night and, if necessary, another in the morning. On arriving at his abode he was soon surrounded by the occupants of the other shacks who wanted to know what the young doctor had said. He told his story, showed them his medicine, and recited correctly the instruction received. They looked at the powders, guffawed a considerable, and persuaded him to take the three powders at once as they, certainly, were nothing but flour.

The following morning, on awakening at an early hour, my first thoughts were focussed on the patient (very frequently the doctor's experience) to whom I had given calomel the previous night; and getting out of bed I hurriedly dressed and quickly made my way to the shack "compound". I soon located his particular transient home, and making inquiries about him learned with much consternation that he had disappeared about 3 o'clock a.m. and had not yet returned. Mustering the forces we set out on a reconnoitring tour and

soon found him, to my immense delight, sitting on a little hummock and greeting us with a complacent smile. The explanation he gave for his alarming behaviour was that the calls of Nature were so frequent and so urgent that he had decided to remain where he then was until the ordeal was all over. I have had many crunching professional trials since, but none that possibly gave me a greater shock than the indescribable fear that the man had perished in that no-man's land from the effects of an over-dose of calomel.

An incontrovertible account of an obstetric case shall close my reminiscences for the present. It was an awful night in mid-winter. A terrific blizzard was lashing that part of this mundane sphere in which I then resided. The intensity of the storm and the blocking of the roads by snow drifts made impossible a horse-and-sleigh conveyance in obedience to an urgent call to attend a case of labor at 2 o'clock a.m. in the month of January 1900. While listening to the imploring words of the messenger my regrets at not having entered the Ministry as a profession instead of the practice of Medicine were surging through my mind. After a little reflection, however, a mollifying feeling came over me to the effect that I belonged to an even nobler vocation—one calling for much moral courage, great sacrifices, and fully as much humanitarianism. In this soothing state of mind we set out, the good man preceding me and carrying my armamentarium, while I plodded along in his footsteps for two long and never-to-be-forgotten miles. The house was a miserable hovel that actually rocked in the fury of the gale; the only light available winked from an old kerosene lamp with a broken chimney, and from the embers in the fire place; the only assistance at hand, or even procurable, was an ancient midwife afflicted with paralysis agitans; while the poor patient exceeded, with her screams, the howling of the tempest outside. After the husband had built up the fire, prepared hot water and procured, under his wife's direction, some other necessary things he desired to leave her in our hands and under the protection of God, and quietly retired to a small barn adjoining the house. I was glad to be assured that he was even there; but he failed to respond when badly needed later.

Finally a stage was reached when I found it advisable to apply forceps. To guide me in my manoeuvres I placed the smoking lamp on a chair near the bed; and after administering chloroform to a sufficient degree I proceeded to carefully effect delivery. Imagine my horror, at a crucial moment, when the old midwife in her excitement (which condition aggravated her affliction) upset the chair, throwing the lamp on the floor which fortunately went out but not before setting fire to some cloths lying around. To prevent a possible serious blaze, the father having left the barn, I was obliged to relinquish the job in hand and take the leading part in subduing the flames. When I succeeded in doing so I found that the woman had got up and was moving about the house. I need scarcely say that I lost no time in getting her back and, with the light from the fireplace, completing the delivery in good order.

In conclusion let me mention, in connection with the case, another strange phenomenon. After I had completed the patient's toilet (all of which I had to do myself) the old midwife had successfully dressed the baby and had then placed in its mouth a small bag attached by a string to its dress. On asking her what the child had in its little mouth she replied with great composure: "A sweet teat, doctor—a sweet teat" and what did it contain: "A little oatmeal, a little butter, and a little sugar." Oh well: both made an uninterrupted recovery; and the baby of that stormy night—in more ways than one—has had many babies of her own since.

The Nova Scotia Medical Bulletin

Official Organ of The Medical Society of Nova Scotia.

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

Editorial Board, Medical Society of Nova Scotia.

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

Editor-in-Chief

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

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

and the Secretaries of Local Societies.

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

VOL. XVIII.

APRIL, 1939

No. 4

HALIFAX was honoured recently by the visit of a distinguished scientist from Scotland, Sir John Boyd Orr. Under the auspices of the Canadian Medical Association, Sir John, who is director of the Rowett Institute in Aberdeen, gave a public lecture at the Dalhousie Gymnasium on a subject of universal interest, "Food and Health". This was the first in a series of lectures which Sir John has been invited to give on nutrition in various cities throughout Canada. On the occasion of his visit here, over a thousand people were privileged to hear this noted authority.

In the hour allotted to the exposition of his subject, much valuable information was imparted in a manner both clear and concise. He discussed first the vast amount of information which has accumulated with respect to food requirements, and how gradually the list of so-called "Deficiency Diseases" grew as knowledge of these vitamin, mineral, and other food deficiencies was revealed. He described experimental work that is going on in order that other deficiency diseases may be found. He is strongly of the opinion that if our knowledge of food requirements were applied generally, that is, on a world-wide scale, the incidence of disease would be markedly lessened and the general health and well-being correspondingly enhanced. Sir John has given much time to this aspect of nutrition, and told us of the very important work which the League of Nations has done to study this world-wide problem. Of all countries of the world, the Scandinavian countries, we were told, have done the best work in coping with the national food problems. As a result, those people living in Northern Europe are the best fed people in the world. This has been accomplished through education—and through education there has been an increase in both supply and demand for proper food.

Sir John will attempt to show the people of Canada the importance of adequate food requirements—and how a knowledge of these would stimulate the production of agricultural products. This in turn would greatly stimulate many phases of national economic activity; and so not only the health of the nation, but also the wealth of the nation would be in greater abundance.

Thus did Sir John convey to his audience the important considerations which must be confronted by us as citizens, and by leaders in our national

public life. He has submitted one solution to our bodily and economic ills. Let us therefore take heed.

Canada is a large and wealthy nation; and yet, amongst its population of only a little over ten million people, there is a superabundance of poverty, illness, and misery. Can these evils be overcome? Every man, in order that he may find life worth living, must have faith that the answer is in the affirmative. We must have faith that in Education, by learning the art of living, these evils can be dispelled.

Sir John Boyd Orr has come to us with a message. May all Canadian people carefully consider its value to us, and realize that in this, we have a means whereby our standard of living can be raised and thus greater happiness be enabled to prevail.

H. D. H.

CASE REPORTS

A Case of Early Renal Tuberculosis

IN spite of all that has been said and written about renal tuberculosis, some physicians still persist in treating pyuria as non-specific in origin, by the administration of one or other urinary antiseptic. It is perhaps unfortunate that in most cases of renal tuberculosis there is an added nonspecific infection, usually caused by the colon bacillus. Administration of an efficient urinary antiseptic will eliminate this infection, with some relief in symptoms and consequent delay in seeking expert advice. That accounts in large measure for the fact that most cases of renal tuberculosis are well advanced when they come into the hands of the Urologist, and practically all give a history of treatment of some type, over varying periods of time, for what the doctor was pleased to call "cystitis." A careful search of the urine for tubercle bacilli would have made the diagnosis early. Such a search should be made repeatedly in every case of pyuria that does not clear up completely after a fair trial on treatment.

I wish to present a case in which the diagnosis was made early. The history extends back some six months. Five of these were lost by such treatment as I have mentioned above. During the last month the patient sought further medical advice and was promptly advised to have the matter thoroughly investigated. The case is unique in my experience in that X-ray evidence of renal tuberculosis was lacking, and the diagnosis was made solely on the finding of the tubercle bacillus in the urine, a point which is still open to some controversy.

Tuberculosis is never primary in the urinary tract, though in many cases the focus may not be demonstrable. It is now generally conceded that in the vast majority of cases the disease reaches the kidney by way of the blood stream. We know that the condition is never primary in the bladder, always originating in one or other kidney. Unfortunately symptoms rarely occur before the bladder has become secondarily infected, and the disease well established in the kidney. The symptoms are well known and it is unnecessary to mention them here. Sufficient to say that the three cardinal findings are pyuria, X-ray evidence, and the finding of the tubercle bacillus in the urine. And the greatest of these is the finding of the bacillus, for on this alone the diagnosis may be made with confidence. In nearly every case all three are present and the indications for surgery are clear.

It is my opinion that wherever tubercle bacilli are found in the urine there exists a tuberculous lesion somewhere in the urinary tract, regardless of the absence of other positive findings. While this opinion may be generally accepted, nevertheless such reliable investigators as Peter and Calmette are of the opinion that the normal kidney may act as a filter in the presence of the infection in other organs, permitting the passage of the bacillus in the urine. They have shown that where miliary tuberculosis exists tubercle bacilli are excreted in the urine. It is stated that in 50% of cases of pulmonary tuberculosis the bacillus appears in the urine. Brown of Saranac Lake and Cunningham of Boston report tubercle bacilli in the urine of 10% of patients suffering

from pulmonary tuberculosis. None of these men however, has shown that the kidneys of these patients are free from tuberculous lesions. 10% of all patients dying of pulmonary tuberculosis show renal involvement.

On the other hand, Kretschmer in a series of 221 cases reports 12% diagnosed as renal tuberculosis without the finding of the bacillus in the urine. Dyke, Leppert and Helmholtz have demonstrated that for a healthy kidney to filter tubercle bacilli is exceedingly unlikely. They found a renal lesion present in every case wherein tubercle bacilli were found in the urine. This work was confirmed by Medlar in a large series of cases. And finally, there is no report to be found in the literature of a kidney removed after the finding of tubercle bacilli in the urine from that kidney, that did not show conclusive evidence of a tuberculous lesion.

The case I wish to present is that of a young lady 23 years of age. Her family history is irrelevant. Her personal history is entirely negative, and her menstrual history is normal. She is single. Six months ago she began to notice that she had to get up at night to urinate. This nocturia increased until she found it necessary to rise three to four times a night. There was an accompanying day frequency, every two to three hours, and the patient stated that she was passing less urine at a time than normally. She consulted a doctor, who gave her a course of treatment without noticeable improvement. Her symptoms gradually became worse, and added to her troubles was a dysuria, most marked during and after urination. On one occasion she noted blood in the urine, evidently small in amount. She became conscious of some pain in the right loin, and considerable tenderness over her bladder. There was a gradual loss of strength, but no loss of weight noted. She consulted another doctor, who advised complete investigation of her genito-urinary system.

She was admitted to the Victoria General Hospital on November 16th, 1938 for Urological investigation. Upon examination she appeared a well nourished, well developed young woman, not acutely ill. Her weight was 122 pounds, and her blood pressure 110/80. The general physical examination including careful clinical examination of the chest, was essentially normal. Examination of the genito-urinary system revealed moderate tenderness over the right kidney, and quite marked tenderness over the bladder. The kidneys were not palpable.

Urinalysis revealed an alkaline urine specific gravity of 1019 containing 3 plus albumin, numerous pus and a few red blood cells.

She was put on small doses of sulfanilamide, and on November 17th cystoscopy was done. The bladder capacity was greatly reduced and the mucosa revealed a generalised acute inflammation, most marked on the right side, and suggestive in some areas of ulceration. The left ureteral orifice was located with difficulty, and the ureter easily catheterised. The right orifice could not be found because of the intense inflammatory reaction. Indigo-carmin appeared from the left side in six minutes in good concentration. No dye appeared from the right side in twenty minutes. Specimens of the common and left urine were taken for examination, and a left pyeloureterogram was done.

The common urine was alkaline, contained three plus albumin numerous pus and some red blood cells. The left contained a few red blood cells and no pus. A few tubercle bacilli were found in the common urine, and none in the left. Both specimens were reported sterile. The plain X-ray film

showed no evidence of calculi. The left renal pelvis and calyces were normal. The kidneys were normal in size, shape and position. An X-ray of the chest revealed infiltration of the left apex suggesting early tuberculosis. There was no evidence of activity. This was regarded as the original focus.

She was returned to bed, the sulfanilamide continued, and daily 24 hour specimens of urine examined for tubercle bacilli. These were reported positive on the 19th and 21st and negative on the 20th. Tubercle bacilli were never found in large numbers.

On November 21st, cystoscopy was repeated. The bladder showed definite improvement, and the right ureteral orifice was easily located and a catheter passed to the renal pelvis. Again specimens of urine were taken, and a right pyeloureterogram was done. The common urine contained fairly numerous pus and a few red cells. The left contained an occasional pus cell. The right contained numerous pus cells. The common and right were positive for tubercle bacilli. The left was negative. The pyeloureterogram showed the pelvis and calyces to be normal, with the kidney normal in size, shape and position.

In spite of this negative finding we felt certain that there was a tuberculous lesion in the right kidney. Accordingly right nephrectomy was advised, and was done on November 24th under avertin nitrous oxide anaesthesia. The kidney was exposed through a right loin incision and appeared perfectly normal in all respects. The ureter was dissected free as far down as possible, clamped, ligated and divided. The renal pedicle was treated in a similar manner, and the kidney removed. The incision was closed in layers, with a small cigarette drain inserted to the renal bed. The patient stood the operative procedure exceedingly well. She made an uneventful recovery, the wound healing by first intention. Her temperature never rose above 100.6. At her own request she was discharged from hospital by ambulance on the 11th postoperative day, at which time the incision was closed.

The pathological report follows: "The kidney shows a rounded cherry sized abscess with caseous walls situated in the substance of the kidney at the junction of the upper and middle thirds. There is a small sinus extending in an upward direction and communicating with the pelvis, which in its upper portion has a granular, tuberculous appearance. The microscopic findings confirm the gross appearances, revealing an early caseous tuberculous pyelonephritis." (R. P. S.)

Summary: A case of early renal tuberculosis is reported in which the X-ray findings were entirely negative. The diagnosis was made on the presence of the tubercle bacillus in the urine, and confirmed by the pathologist after operation.

I am indebted to Dr. J. Arnold Noble for the opportunity of seeing this case, and for permission to report it.

G. A. WINFIELD, M.D.
Halifax.

An Unusual Case of Carcinoma of the Colon

The following case report is rather long and is presented in considerable detail, which has been necessary to bring out the true picture of the problem presented. I trust that it will prove of some interest to the readers as it has proven to be of real value to me.

Mr. C. C. Age 54. Yarmouth Hospital No. 22714. Admitted November 19, 1938.

Complaint: Pain in right upper abdomen.

Family History: Unimportant, except that the mother died of a growth (cancer).

Personal History: Entirely negative.

Present Illness: Patient was always well and worked on his farm until May 1937, when he became ill with pain in right lower chest and under right costal border associated with some difficulty in breathing. This illness lasted about two months one of which was spent in bed with fever from 99° to 102°, weakness and soreness throughout the right side. At this time the physical examination showed naught except some dullness over the right lung at the base and some soreness just under the costal border. The urine examination was negative on three occasions including the microscopic. W.B.C. 14,000. The blood was negative for the typhoid group and undulant fever. X-ray of the chest showed no evidence of fluid or pulmonary pathology. In consultation, the only diagnosis arrived at was pleurisy, non tuberculous, which we felt did not entirely explain the illness.

Patient returned to his work gradually and reported in August 1937 that he was better, had gained 17 lbs. in weight, but still had an evening temperature of 99° to 100°, which was somewhat less if he rested. He still complained of ill defined soreness in the region of the liver.

In October 1937 he was checked at the Nova Scotia Sanatorium and the report showed no pulmonary pathology, and blood counts at that time were normal.

The patient was not seen again until July 1938, when he reported stating that he had been fairly well since the last visit except for the afternoon temperature which persisted, and the old soreness in the right side, and rheumatism of hands and right shoulder. He had seen a throat specialist and been advised to have his tonsils and adenoids removed. A routine check up of general physical condition and urine before anaesthesia yielded no important findings. Operation was performed July 27, 1938; the patient going home apparently with good convalescence on July 29, 1938. At 5 a.m. the next day the patient suddenly was seized with severe agonizing pain in the abdomen associated with vomiting and feeling of inability to pass urine.

On seeing him at his home the patient was in agony, doubled up with pain, colicky in type. He was pale, sweating and shocked. He was given morphia, and catheterized. Only a small amount of normal looking urine was in the bladder. He was removed to hospital where further examination revealed blood count normal, but red blood cells in both specimens, the one taken at home, and another catheter specimen taken at the hospital. After consultation with two local physicians a diagnosis of renal colic was made.

The patient remained in hospital three days, temperature ranging from 99° to 101°, and developed a definite pyelitis, but no changes were noted in abdominal examination. During the next two months the patient remained at home practically confined to bed, running a temperature of from 99° to 102°; pulse 80-100. He continued to complain of pain in the right loin and side, had constantly pus in urine in moderate amounts, but varying some from week to week. The usual urinary antiseptics, and later sulfanilamide and Mandelic acid, were tried without relief. During this period he had no

symptoms except anorexia and belching gas. As the case seemed obscure, and not improving he was referred to Boston, September 24th, 1938, and was studied at the Massachusetts General Hospital. The report of the findings is as follows:

"We found his blood pressure to be 120/80. His physical examination was negative except for slight tenderness over the kidney region in the right upper quadrant. There was no costo-vertebral tenderness, and no organs or masses could be felt. Rectal examination showed a small, smooth prostate of normal consistency. The external genitals were negative.

"On admission his urine was alkaline; specific gravity 1.010; no albumin or sugar. The sediment showed an occasional epithelial cell. A stool showed no blood on microscopic examination.

"Blood smear showed a white count of 10,800; reds 4.32; haemoglobin 80%; differential count normal. Blood sugar 112 mgm. N.P.N. 31 mgm. Uric acid 5.7 mgm. (a little high). Blood chlorides 101 c.c. $\frac{NCL}{10}$. Blood calcium 9.82 (a little low). Blood phosphorus 3.84. Sedimentation rate quite rapid, this indicating some infectious process which has not yet been determined but which may declare itself later as I have already indicated. BMR +3%, this test being very satisfactory. Blood Wasserman negative.

"An intravenous pyelogram was done on September 29th.

"The kidney pelves were small and were not well enough outlined for accurate study. It looked as if the left kidney was rather smaller than normal, and the right kidney somewhat larger than normal. The bladder shadow looked normal. There was no evidence of stone. The spine showed unusually marked hypertrophic changes with evidences of considerable new bone formation at the margins of the fifth lumbar and the sacrum. The sacrum shows a spina bifida, which I believe is of only academic interest. A plate of the chest showed normal lungs, heart and mediastinum.

"Cystoscopy was done on September 30th. At this time abdominal examination was negative. A No. 21 cystoscope passed easily to the bladder. The bladder mucosa was somewhat reddened. The ureters were normal. No. 5 catheters passed easily to each kidney with a slow, normal flow of clear urine from each. Indigo carmine intravenously appeared on each side in about five minutes. A retrograde pyelogram on the right side showed normal calices, pelvis and ureter, although there was a question of slight clubbing of the lower minor calices. Subsequently, namely on October 4th, because of the fact that the patient said some of his pain had been on the left side, I did another cystoscopic examination, this time doing a retrograde pyelogram on the left side. Again the abdominal examination was negative. The bladder mucosa was rather reddened, suggesting injection of the mucosal capillaries, this injection being uniform throughout the bladder. It did not suggest tuberculosis. The left retrograde pyelogram showed no variation from the normal in the pelvis, calices or ureter, but here again as on the right side the calices were peculiarly and unusually long.

"A culture of the urine at the time of these cystoscopies showed *B. Coli* from the bladder and from both kidneys, although it seemed to be a very mild infection.

"You will therefore see that this examination has been quite complete, although it did not include plates of the G. I. tract, of the colon or of the gall bladder. There was no indication that the patient had any trouble anywhere in his G. I. tract; and I thought it was not fair to put him through the

expense and discomfort of these examinations, as if and when indicated they could probably be done under your auspices in Yarmouth.

In summary all I can say is that nothing definite has been found except an unusual degree of hypertrophic arthritis of the spine with new bone formation of the fifth lumbar and sacrum, these items being unusual in a man of his age. The somewhat elevated uric acid finding might indicate the presence of a uric acid stone in one or the other kidney, and this might not show in the X-ray. On the other hand one would suppose that a stone of any kind in either kidney would be likely to produce pain.

"As a matter of fact I find that I have omitted to tell you that at each cystoscopy the bladder urine contained from 2 to 5 white cells per field; the left kidney 12 whites on one occasion and one white on another; and the right kidney 3 whites. The presence of these white cells is probably of no particular significance, but in the presence of *B. Coli* it indicates the possibility of a bilateral although mild pyelitis."

Following the patient's return home he continued to run slight fever, had marked weakness, poor appetite, and a bad taste in the mouth, but no vomiting or difficulty with bowels. He still complained of pain in region of the right kidney but there were no abnormal findings on examination. The urine again showed pus on microscopic examination (which was checked by others than myself), showing that there was an intermittent pyuria. The patient seemed to gain a little but about November 10th, pain in the right abdomen grew worse, fever higher and he developed a spasm of the upper right abdominal muscles. The patient was removed again to the Yarmouth Hospital.

At this time examination showed the patient pale and anaemic—in considerable distress and pain. The tongue was coated thickly and rather dry. The abdomen was mildly distended, acutely tender in the right upper quadrant with spasm of muscles and a suggestion of a palpable mass in this area. Tender right costovertebral area.

Laboratory Examinations: Urine, chemically negative; two or more white blood cells on repeated examinations. Hb. 48%; R.B.C. 3,920,000; W.B.C. 5,800. Polymorphs, 77; Lymphocytes, 21; Endothelial cells, 2. Stools strongly positive for occult blood on five examinations.

X-ray Studies: A lesion was seen of the right hepatic flexure, irregular in outline and not completely obstructive to barium both from above and below. There was 40% delay in the emptying time of the stomach but no irregularity in outline.

From November 19th to November 28th the patient had only two spells of vomiting, seemed to improve slightly in some ways but the pain in right upper quadrant grew worse and on November 27th the temperature was higher and the W.B.C. jumped to 16,000. The anaemia was somewhat better Hb. 55%; R.B.C. 3,930,000. After consultation, November 29th, exploratory laparotomy was considered advisable, although pre-operative diagnosis was malignant lesion of the colon.

November 30th—Operation. At operation there was found an infiltrating mass involving hepatic flexure and part of ascending and transverse colon, densely adherent to the liver and lateral abdominal wall, completely shutting out view of gall bladder and pyloric region of the stomach. There were enlarged palpable mesenteric lymph nodes which appeared cancerous. On

freeing adhesions at the lateral border of the right colon a retroperitoneal abscess was opened into containing fecal matter. This was drained through the side, the abdomen drained and the wounds closed. The patient died two days later of general peritonitis.

At autopsy we found the posterior wall of the right colon and hepatic flexure completely destroyed by cancer tissue. A large abscess cavity extended up to the diaphragm and surrounded the renal area. The right kidney was large, soft and tore easily, but no metastases were seen in it or in the liver. The right adrenal, gall bladder and mesenteric glands were all infiltrated by cancer tissue and the pyloric region of the stomach involved in a mass causing obstruction from outside. The microscopic pathology Entry No. 28-8489 is as follows:

"The histological sections here reveal a colloid or mucoid carcinoma evidently originating at the hepatic flexure of the colon and showing much simple suppurative inflammatory change and necrosis.

"The liver shows some suppurative peri-hepatitis and fatty degeneration but no metastases in the portion sent for examination.

"The mesenteric glands and the adrenal are infiltrated with mucoid carcinomatous metastases."

In presenting this case report I do so because it brings out strikingly many points of interest which I feel cannot too often be recalled to those of us who are carrying on daily in general practice. I will attempt to mention briefly some of these.

(1) That cases of cancer in various regions of the body may be very obscure and very difficult to diagnose. Further, that although often disappointing to us from the point of view of treatment they are most stimulating from the angle of study and diagnosis.

(2) That the above case although unusually obscure again shows that we should early suggest and insist on complete examination of our patients in the presence of any persistent symptoms. In this case a complete examination was advised in October 1937, but the patient was so relieved as the result of the negative findings at the Nova Scotia Sanatorium, and his regained weight, that he did not seek further medical attention for nine months.

(3) That there is danger in concentrating too closely on any system of the body. In this case even though all symptoms pointed to a genito-urinary lesion from the attack in July 1938 to perhaps three weeks before death, such a simple test as that of occult blood in stools would have earlier thrown light on the correct diagnosis.

(4) That this type of case is exceptional, as to my mind it presented none of the usual symptoms of cancer of the large bowel, and only symptoms due to toxemia and pressure and infection in its last stages. I feel that the original illness in May 1937 was in some way the result of a subdiaphragmatic infection, and that this also accounted for the persistent temperature. The acute attack of pain on July 30th was not renal colic, but a rupture of the colon into the renal area. The intermittent pyuria was due to a pyelonephritis from surrounding infection which also explained the negative X-ray studies of kidneys in October 1938, though I cannot explain the slight evidence of genito-urinary infection during the examination in Boston. The final acute symptoms of the last three weeks were apparently due to a further rupture of the colon and the development of a retroperitoneal and subdiaphragmatic

abscess and this was the cause of the rapid change in the general picture in the month of November.

(5) That it is almost unbelievable having seen the picture at autopsy that we repeatedly examined this man during the last four months of his illness and found nothing until the last three weeks to give a suggestion of such a picture and further, that until two weeks before death this patient had normal bowel function with the aid only of mineral oil. This is explained by the fact that the cancer was not of the annular type but involved the posterior wall of the colon and spread posteriorly into the more or less silent retroperitoneal area.

(6) That the justification of the operation was due to the extreme obscurity of the condition which in face of the evidence of a lesion of the colon might possibly have been due to some inflammatory cause arising outside the bowel, such as, for instance, actinomycosis, and that temporary relief might be obtained by the drainage of the abscess which was expected somewhere in the subdiaphragmatic area.

G. V. BURTON, M.D., F.A.C.S.,
Yarmouth,

Anorexia Nervosa

"Sylphosis"

Miss X. Age 15. Height 5'1". This patient was brought to the office by her mother who had observed that the child was gradually losing weight and appetite and appeared tired and listless. The child, on the other hand, insisted that she was perfectly well.

Family History: Good. The youngest of a family of five (four married) —"spoiled".

Personal History: Has had measles and whooping cough. Has always been a healthy girl. Tonsils removed several years ago. Menses; amenorrhoea past three months, previously normal.

Present Illness: Two years ago she weighed 127 pounds. With the advent of adolescence there was a gradual decrease over a period of months until the weight reached 116 pounds. From the girl's own story this change had taken place spontaneously and without dieting. Then, however, following a visit from a sister who was attempting to reduce, she decided that the maximum weight should be 112 pounds. This she attempted to reach by strict dieting. From this point on, the "*dieting idea*" became an obsession. Result—rapid loss, until a weight of 82 pounds was reached (in clothes).

Examination: The patient was a young girl, appearing somewhat older than the stated age, had obviously lost considerable weight, her features were pointed, and she had lost her high colour and usual "good looks", was listless and of a worried expression.

Circulatory System: B/P 110/74. Temperature normal (several readings). Pulse 80. Haemoglobin 90%. RBC 4,553,000. Blood smears normal. Heart normal in size, no murmurs.

Mouth and Throat: Two decayed teeth—one abscessed a few weeks ago—was removed by a dentist. Tonsils removed—small remnants.

Thyroid: Normal.

Respiratory System: No pathological findings, which included fluoroscopic examination and X-ray.

Alimentary System: Tongue clear. Abdomen, normal, except that with loss of weight, was approaching scaphoid type.

Urinary System: Normal.

Nervous System: Normal, except that she worried.

Diagnosis: Anorexia nervosa.

Treatment: When the weight reached eighty pounds she was taken from school and advised to remain in bed at home. She was encouraged to take a balanced diet. This proved unsatisfactory. After several days trial there was still a marked aversion to staple foods, as milk, eggs, butter, meat, cereal and vegetables. She was then removed to a private dwelling under strict supervision. In conversation, the results of improper eating, namely ill-health and confinement to bed, were contrasted to that of a summer of play and a visit to Montreal. In five days there was an increase of five pounds. Then suddenly the weight remained stationary for several days. On careful watching we discovered that she was inducing vomiting after meals, by jumping and straining in the bathroom. She was reprimanded for this and again advised to eat properly. For several days we found it necessary to lock the bathroom door for three hours following a meal. There was again an increase in weight for a few days, then the aversion to food returned—refusing milk shakes, milk soups, occasionally taking ice cream rather reluctantly. She made the statement to a maid in the house that she did not intend to weigh 100 pounds. She was again advised, and again she started to eat and gain. Yesterday she told a friend that she wanted to weigh 112 pounds, so she could “get out of here”. In three weeks, under this regime, she has gained twelve pounds.

A psychiatrist assures me that I am employing the correct method. There are two approaches to the problem—(1) Firmness; (2) Complete psychoanalysis, which might take weeks and months to complete. The latter is probably unnecessary, as the prognosis is good with the former and simpler method of treatment.

JOHN C. WICKWIRE, M.D.,
Liverpool.

Gastro-Enteritis and Appendicitis

October 17, 1938. L. M. Female, aet. 11. I was called to see this child about 4 p.m. Twenty-eight hours before she had started to vomit and have frequent loose bowel motions. After a few hours, abdominal pain had set in and had become generalized.

Physical Examination: Temperature 103.6°, pulse 140, respiration 32.

Head and Neck: The pupils were equal and reacted to light and accommodation. There was no discharge from the nose or ears. The tongue was very coated.

Respiratory System: The percussion note was normal. There were no rales or adventitious sounds.

Circulatory System: The pulse was rapid and of fair quality. A.C.D. not increased. No murmurs.

Abdomen: There was extreme tenderness and marked rigidity over all the abdomen. The test for rebound pain was positive; the breathing thoracic in type; no masses or organs palpable; all sounds absent on auscultation.

Rectal examination: Very tender in right lower quadrant; appendix not palpated.

Reflexes were all tested and were normal.

Diagnosis: Acute appendicitis with probable rupture.

So far, everything was straightforward. I informed the father of the diagnosis. He inquired "If it was catching". When I asked why, he informed me that he had another little girl sick "Just like she is".

The history in this case was similar. The negative physical findings coincided. However, the abdominal pain and tenderness were much less marked, no rigidity present, no tenderness on rectal examination. The temperature was 100.8°, pulse 100. Closer questioning elicited the fact that in this case the diarrhoea was more severe, and the vomiting less.

Diagnosis: Infectious gastro-enteritis.

Treatment: *Ol. ricini* IV, followed by bismuth hydrate *co. drachms ss* every hour until diarrhoea is checked. Result, prompt recovery.

The other case I had moved to hospital and operated on immediately. The appendix had ruptured, and general peritonitis had set in. The appendix was removed and a drain inserted.

Post-operative convalescence was stormy. A pelvic abscess formed and burst into the rectum. The abdominal wound healed slowly. After six weeks she was able to return home; in another six weeks she showed a gain of ten pounds, with apparently perfect recovery.

The interesting features of these cases was the occurrence of the two in the same family at the same time with acute gastro-intestinal symptoms, one of which turned out to be a simple gastro-enteritis and the other a ruptured appendix with general peritonitis.

R. W. MACLELLAN, M.D.,
Mill Village.

Acute Poliomyelitis

The number of hopelessly paralyzed children and adults coming under my notice during the past fifty years resulting from acute poliomyelitis and the occurrence of frequent epidemics in my practice leads me to report several cases at this time to which I should like to add a brief review of the advances made up to the present day in coping with the disease.

Cases coming under my care recently. Three boys ranging in ages from four to six years. Two cases occurred in houses on opposite sides of the street. The other was about a mile distant. I was first called to them on the same day, September 2nd, although one of the cases had developed three days earlier than the others. The onset in all cases was very sudden; the boys were healthy, robust children. No previous illness. Family history good with exception that mother of one died with tubercular meningitis two years previous.

The usual symptoms—Temperature high, rapid pulse, vomiting, irritability, pains in limbs with rigid spine and in two of the cases slight retraction

of the head. Retention of urine in two cases. Acute symptoms kept on for about four days, with paralysis of arms and legs in all cases. At end of week patients gradually gained power in arms, but legs continued paralyzed for months. At the present time two of the cases have made good recoveries in so far as that they require the use of braces for one leg each. The third case did not regain any power whatsoever in either of the lower limbs.

Treatment—In all cases a lumbar puncture was done. Convalescent serum was given intramuscularly.

Although poliomyelitis is no longer classed as a rare disease and scientific investigation has been most persistent, I am inclined to think we have not advanced far in the war against it. Thirty years ago I found myself writing an article for the Maritime Medical News on this self same subject in which I described the symptoms, etiology and location, pathology and treatment at great length. Today most investigators are convinced that poliomyelitis is caused by one of the filtrable viruses. But we still point back to the discovery of Flexner and Lewis in 1910 (the same year in which I wrote of the disease in the Medical News) of the benefits derived by using the convalescent serum!

Not least among the attempts to reveal the path by which the virus enters man's body is that of Dr. Howard A. Howe, of John Hopkins University, who has been working on the problem for three years. He says his study is "to test the theory that man acquires his immunity to infantile paralysis by slight attacks which progress no further than the old factory bulb". His experimentation with monkeys leads him to believe that should the bulb be severed from the nerves connecting it with the brain the paralysis would be impossible.

HERBERT H. BANKS, M.D.,
Barrington Passage.

Influenzal Encephalitis

It is generally regarded, says Cecil, that some degree of encephalitis probably exists during any disturbed cerebral activity complicating exogenous or endogenous intoxication. The disturbance may occur in the realm of consciousness as a whole, or in sleep, in movement or in any of the physiologic processes of the brain.

During the recent and severe epidemic of influenza I have had occasion to observe two such cases consequent upon influenza. They might be of passing interest.

Case (1).

Patient:—Single, female, forty-two years of age.

Family and Personal History:—Negative.

Present History:—On the fourth day of an otherwise uncomplicated attack of influenza, the patient was observed to become drowsy and shortly complained of the initiation of what soon became an intolerable headache. This headache was not localized to any part of the cranium. A moderate degree of myosis gave way to a marked condition within a few hours. Shortly a vigorous chill sent the temperature, which had been 99 degrees to 100 degrees for two days, soaring to 105.2 degrees. The pulse was of good quality at 140/min.

All systems were investigated. Apart from the headache, restlessness, oculo-motor signs, hyperpyrexia and moderate drowsiness with a questionable but not diagnostic neck rigidity, congestion of oculorum fundi, the various systems were normal.

The treatment instituted was largely symptomatic, avoiding the use of morphine for headache on account of its congestive effect upon the brain. Acetyl salicylic acid, chloral hydrate with bromide, ice packs to head, mag. sulph. per os were all employed.

The temperature remained at 105.2 degrees for forty-eight hours at which period the patient passed into a state of profound shock, with complete loss of consciousness, thready almost imperceptible pulse, shallow respirations. The usual treatment of shock was instituted, supplemented by doses of "Coramine" subcutaneously.

Some three hours later when the temperature could be easily taken, it registered 100.2 degrees and over the next twenty hours as the patient regained normality in all respects, it returned to the level regarded as average—98.6 degrees.

Although she remembers naught of her critical illness, and is still convalescing, the patient has apparently suffered no unhappy after-effects either mentally or physically.

Case (2).

Patient:—Female, married, 39 years old.

Personal and Family History:—Negative.

Present Complaint:—Had apparently experienced the prevailing type of influenza some ten days previously and after having been up for 1½ days, experienced a "relapse" as manifested by fainting twice in succession.

When seen by me she presented the following features:—

General Appearance:—Toxic, drowsy state with heavy odour of acetone. Skin very dry.

Head and Neck:—Moderate degree myosis; dry, furred, cracked tongue, head and neck otherwise normal.

Abdomen:—Normal.

Respiratory:—Normal except excursions of 30/min.

G. U.:—Pruritus vulvae present. Urine—Roberts 2 plus, Benedicts 4 plus, acetone 3 plus.

C. N. S.:—Early and definite neck rigidity. Kernigs sign absent. Skin and tender reflexes unaltered; moderate myosis.

Extremities:—Normal.

Temperature:—102 degrees.

Heroic doses of insulin (20 u. to c.c.) were administered with nothing better than Benedicts 2 plus to reward our efforts. The patient, although drowsy, protested she "felt fine" except for a headache, but passed into a profound coma at the end of 18 hours, developing a rock-like rigidity of her neck which even resisted rotation. She became markedly restless, the temperature soared to 105 degrees, the rapid respirations were replaced by Cheyne-Stokes breathing and despite all efforts death intervened about fifteen hours after she became comatose.

D. K. MURRAY, M.D.,
Liverpool.

Case 1.

Adult—female. Right side herpes zoster oticus with facial paralysis. Paralysis developed about three days before the oedema and herpes outlined the distribution of the sensory division of the seventh nerve: posterior segment of M.T., posterior wall of canal, concha and slightly on anti-tragus and anti-helix. All available literature gives me the impression that paralysis develops after herpes, as a rule.

Treatment:—Large doses brewer's yeast, general tonic, and short wave therapy. Recovery was made in about three months.

Case 2.

Male—age 51. Gave a history of influenzal cold for two or three weeks previous to admission. He had headache, marked mental symptoms, foolish disconnected talk and made threats of violence, insomnia, anorexia, the mouth and tongue were very dry and heavily coated and the skin very dry and rough, and he could not walk alone. His hands and feet were somewhat numb and prickly. Two drachms of thick pus removed from right nostril showed pure culture pneumococcus. Differential white cell count:—total 2000, 9 eos, 1 juv, 12 stab, 41 lympho, 4 monos. The spinal fluid and urine were negative. He gave a history of free use of aspirin at home.

Showed rapid improvement under Vitamin B, liver, and small doses of insulin. Twelve days' hospitalization.

Two weeks later the red cells show probability of pernicious anemia.

Therapeutic suggestions

Treatment for ingrowing toe nail—Balsam peru with Ag no₃ 1% inserted daily under edge of nail on absorbent cotton.

A simple effective treatment for bursitis, knee or elbow. Tap, drain and flush with 1-10000 bichloride. This I used many times, with excellent results during the war.

C. B. TRITES, M.D.,
Bridgewater.

Blood Pressure Changes in Coronary Occlusion

The fall of blood pressure, in the case of the patient outlined below, I think is of both physiologic interest and diagnostic significance. Besides the characteristic pain and pericardial friction rub, the rapid fall in arterial tension, I believe to be of importance in differentiating thrombosis from angina pectoris. In accepting this point of view, the division of hypotension into two groups, one an essential type and the other function, due to transient factors, we find for the latter there are few causes.

In the absence of haemorrhage, shock, toxic condition, coma and severe cardiac pain, the fall of blood pressure I believe to be due to acute myocardial insufficiency on the basis of coronary occlusion. I cite this point in the case that follows and show the blood pressure readings when coronary thrombosis is in question.

History. A man aged fifty-six, a fisherman, seen January 9, 1939, complained of pain beneath the upper sternum which ran down both arms.

Since influenza in 1928 the patient had been breathless on exertion, and with lessened exercise had gained weight steadily. In the last two months he has felt a sense of oppression in chest, relieved by rest. The present attack came on at home while at rest.

Physical Examination. Patient weighed about 175 lbs., and was 5' 6'' tall, lying without dyspnea or cyanosis. There was slight pallor, cardiac dulness extended to right and left. Heart rate was 72, rhythm regular, blood pressure 156 systolic and 92 diastolic. Heart sounds somewhat muffled, lungs moderately emphysematous. The urine caused heavy reduction of Benedict's solution, and initial blood sugar was 0.328%.

Treatment. Restricted diet and temporary use of Insulin promptly banished glycosuria. With rest, nitro-glycerin and codeine the pain was controlled on January 9th, 1939, and angina pectoris, on the basis of coronary sclerosis, seemed the probable diagnosis.

Contrary to advice, patient resumed an active life and there followed a second attack of substernal pain which lasted for hours and was not relieved by nitroglycerin.

The blood pressure on January 10th was systolic 170, diastolic 110, pulse 88. On January 12th there was no further pain, the tension was 160 systolic, and 100 diastolic, pulse 100, patient now in bed. On January 13th found the patient sitting up, rather weak but comfortable, and not dyspneic, the blood pressure was 98 systolic and 80 diastolic, pulse rate 78, rhythm regular, no cardiac friction rub at any time and lungs clear. The temperature, previously normal, on this day rose to 100°F.

The general condition of the patient was very good, but he was kept at absolute rest. No digitalis was given.

On January 16th the arterial tension had risen to 120 systolic and 90 diastolic, pulse rate 110.

On January 17th the arterial tension had risen to 135 systolic, 88 diastolic, pulse rate 88.

The patient is now comfortable and wants to return to work, weighs 170 lbs. and is sugar free.

Comment. The recognition of a sudden fall in blood pressure, following an attack of severe cardiac pain, derives its importance from the fact that coronary occlusion brings about this state of hypotension by striking directly at the cardiac output. Following the thrombus formation, or the lodgment of an embolus, in a coronary artery, there occur first, infarction of the heart muscle to a degree corresponding with the site of obstruction, and secondly, impairment or loss of ventricular function according to the area and extent of the infarction. Since the left coronary artery, or its branches, is commonly involved, it is usually the greater circulation that offers the evidence of cardiac failure.

In the milder instances of occlusion or in cases in which the left ventricle escapes, little or no variation in peripheral arterial tension may occur. Again, as has been observed by some, single blood pressure readings cannot safely be considered, nor those taken without thought of other factors, such as the time elapsed since the attack of pain, or the presence of arrhythmia. Therefore, blood pressure readings, taken daily or even oftener, form an important

detail in establishing the diagnosis of coronary occlusion, and is a method of observation at the command of every practitioner.

Summary. Blood pressure readings are an aid to the diagnosis of coronary thrombosis, particularly when angina pectoris is to be differentiated as illustrated by above case.

A sudden fall in arterial tension, following severe cardiac pain, rests on the physiologic basis of infarction and myocardial insufficiency following an occlusion.

J. D. DINSMORE, M.D.

Port Clyde.

More Important Now Than Ever Before

When Dextri-Maltose was marketed in 1911 "without dosage directions on the package," Mead Johnson and Company pioneered the principle that infant feeding was a therapeutic problem. Up to that time far more babies were fed by grandmothers, neighbors, grocers, and commercial houses than by physicians. This Mead Policy was not readily accepted in the beginning, and it took many years of unceasing effort before the weight of the majority medical opinion finally led to mandatory action on the part of the Committee on Foods in 1932, whereby all makers of baby foods are now *obliged* to omit dosage directions. The Mead Policy, however, does not stop here. It embraces other principles with which all physicians interested in the private practice of medicine are in agreement, such as (2) No descriptive circulars in packages, or in shipping cartons (for druggists to hand to patients). (3) We supply no display of Mead products for druggists' windows and counters. (4) We do not advertise Mead products to patients. (5) We give no handbills and send no letters concerning Mead products to patients. (6) We do not broadcast to the public. (7) We refer patients to physicians at every opportunity. (8) We devote a great deal of effort and resources to research and to activities that assist the private practice of medicine. Is the Mead Policy worthwhile? MEAD JOHNSON & COMPANY, Evansville, Indiana, U. S. A.

The American Congress on Obstetrics and Gynaecology

I WOULD like to call attention to those of the profession who may be interested in the above Congress to be held in Cleveland, Ohio, in September, 1939, 11th to 15th incl.

This Congress is going to be an exceptionally fine meeting from every standpoint and the address is given by men who stand high in their specialty.

Our American friends are most anxious to have a good representation from Canada—and especially from this province. The purpose of the organization is to present a programme of our present day medical, nursing and health problems from a scientific, practical, educational and economic viewpoint, in so far as they relate to human reproduction and maternal and neo natal care.

The new programme and exhibits will be presented in such a manner that they will be of value not only to the medical profession but to nurses and all persons and agencies concerned with such problems.

The professional group will be placed under four headings—Medical, Nursing, Public Health and Institutional Administrative—and each of the five days will be full from 9 a.m. till 11 p.m., and will take up such questions as—

Monday—Thyroid: Heart Disease: Diabetes: Tuberculosis: Nutritional factors: Surgical abdominal, as associated with pregnancy, and abortion.

Tuesday—New conception of ovarian neoplasms: Carcinoma of uterus: Endometriosis: Ectopic pregnancy and Sterility.

Wednesday—Reduction of the operative incidence in obstetrics: Labor complicated by contracted pelvis: Dystocia due to soft parts: Pathology and treatment of third stage of labor.

Thursday—Present day fundamental knowledge of hormones and endocrine glands: Problems of adolescence and menopause: Disease of the mammary gland.

Friday—Sulfanilamide in obstetrics and gynaecology: Pyelitis: Chronic pelvic inflammation: Immediate and remote complications following labor.

This programme of itself is sufficient to warrant an excellent Congress, but there will also be round table conferences, discussing such subjects as—

Toxaemias of pregnancy: Genital infections: Obstetric and gynaecological haemorrhages: The foetus and the new born: Forceps, occiput posterior and breech presentation: Anaesthesia, analgesia and amnesia in labor.

And if that were not enough, there will also be joint afternoon sessions on—Neo natal care: Plans for prevention and control of uterine cancer: Extension education in maternal and neo natal care: Economic aspects of maternal care: Correlation of and attempt to digest all proceedings, along with joint evening sessions on The Legal, Humanitarian, Sociological and Ethical aspects of maternity.

Altogether it is a full and complete and comprehensive programme, and should commend itself to any and all who are interested in this branch of medicine.

Remember the place—Cleveland, Ohio, and the dates—September 11th to 15th inclusive, 1939.

C. S. MORTON.

Abstracts from Current Journals

SURGERY

Hertzler.—*American Journal of Surgery*, Nov., 1938, page 450.

Technique of Thyroidectomy

In this very illuminating article, the author by fine illustrations, explains his technique from start to finish. Total thyroidectomy is the choice for adults stating that myxoedema only occurs from total ablation in adolescents. In total ablation, there is no fear of injuring or removing the parathyroids if you respect their territorial limits and keep inside the thyroid capsule.

One lobe is entirely enucleated from the lower pole upwards, taking meticulous care to ligate the inferior thyroid artery and middle thyroid veins. This lobe is then turned across the trachea and the second lobe enucleated. Sharp dissection is employed, the author being much opposed to blunt dissection. Only the minimum draperies are used and local anaesthesia is the choice. Under no conditions is it supplemented with inhalation anaesthesia. This he considers disastrous in its results. No drainage is used except in the case of large substernal goitres, where he uses a small gauze drain, never using rubber, which, in his opinion, encourages oozing and favors post-operative haemorrhage. The muscles should be sewn together with sutures drawn just tightly enough for gentle apposition, otherwise myositis is apt to follow with disturbance in deglutition.

Vorhous.—*American Journal of Surgery*, Nov., 1938, page 320.

Hyper-Vitamin Therapy in Surgical Practice

The author stresses the value of vitamins in general surgery, pre- and post-operative treatment. Vitamin therapy should be used 5 to 10 days before operation. Vitamin B.1 and C. are particularly useful in infectious states where operations are required. He claims that patients requiring gastro-intestinal surgery or biliary tract surgery present special indications for hyper-vitamin therapy and it should be used as a routine for post-operative and convalescent patients.

White.—*Surgery*, Nov., 1938, page 797.

Recent Advances in Surgery of the Autonomic Nervous System

This interesting and comprehensive article deals with sympathectomy for visceral pain, Renaud's disease, thromboangiitis, obliteran's and Hirschsprung's disease. The author points out that during the course of the past eight years, there has been a marked restriction in its application. Its use in epilepsy for which the first sympathectomy was done, has been discarded. It is of little value in bronchial asthma, atypical forms of facial neuralgia and in rheumatoid arthritis. Interest is now focussed on the surgical treatment of "essential hypertension" where the value of sympathectomy must still be regarded under judgment. Generally speaking, with the exception of

this condition. clinical experience has now led to a fairly exact appreciation of what sympathetic neuro-surgery has to offer towards the correction of abnormal visceral function and the relief of visceral pain.

Veal.—*Surgery, Gyn. and Obstetrics*, Dec., 1938.

Pathologic Basis for Swollen Arm after Mastectomy

In this article the author differentiates between lymphatic and venous obstruction by vasography or the direct visualization of the vessels in the living subject; the opaque injection fluid is visualized in either the arterial or venous system by the X-ray, and the presence or absence of venous obstruction can be determined. In the purely lymphatic oedema, which is the least common form of oedema of the arm, following radical removal of the breast, the skin is firm, pits slightly on pressure but does not wrinkle in the pit; in the venous oedema, we have the soft pitting type. The lymphatic type is frequently produced by infection of the "operative field"; whereas, the venous obstruction has as its most frequent cause the recurrence of malignancy along the course of the veins.

Noffziger & Grant.—*Surgery, Gyn. and Obstetrics*, Dec., 1938.

Neuritis of Brachial Plexus, Mechanical Origin

This article presents a study of what the authors term "The Scalenus Syndrome". In this condition, the patient has practically all the symptoms of a cervical rib but the roentgenograms show no such rib. This syndrome is brought about largely by anatomical and developmental factors resulting in an abnormal position of the shoulder girdle in relation to the chest cavity, whereby the scalenus anticus muscle compresses the brachial plexus and subclavian artery against the cervical rib giving rise to pain in the upper half of the body and a peripheral neuritis of the brachial plexus. When postural exercises fail to relieve the condition, myotomy of the scalenus anticus is necessary and gives excellent results. It may be said in passing that Adson of the Mayo Clinic claims excellent results from tenotomy of the scalenus anticus when the cervical rib is present without removing same.

Frazier & Ravdin.—*Surgery*, Nov., 1938, page 680.

The Use of Vitamin B. in the Pre-Operative Preparation of the Hyperthyroid Patient

The writers show that diets deficient in Vitamin B1 are liable to produce tachycardia, palpitation, dyspnoea, fatigue and a lessened exercise tolerance; and that many of the gastro-intestinal disturbances such as anorexia and delayed gastric emptying time seen in hyperthyroidism are due to lack of B1 in the diet. It is the opinion of the writers that the severely thyrotonic patients have been benefited by the administration of Vitamin B1. Not only is the nutritional state improved as evidenced by increased appetite and weight gain but new patients with severe hyperthyroidism can be adequately prepared for operation in a shorter time. The Vitamin treated cases also show a greater fall in heart rate. B1 also has a unique place in thyrotoxicosis where large doses of carbohydrates are necessary in that it aids in the deposition of glycogen in the liver.

Priestley.—*Surgery, Gyn. and Obstetrics*, 1938, page 798.

Surgical Considerations in Removal of Stones from Kidneys

In this article, the author appreciates the definite advantages accruing from roentgenological localization of renal calculi. Free motilization of the kidney through a well planned incision in order to obtain the best view of the renal pelvis is strongly advised, facilitating as it does, in the removal of all stones and fragments from the calices and pelvis.

Fluoroscopic examination at the time of operation is also advised as a sure means of determining that all stones and fragments are removed. Post-operative treatment implies complete eradication of all bacteria from the urinary tract before the patient is dismissed.

Scholl.—*Archives of Surgery*, Nov., 1938, page 835.

Review of Urologic Surgery

The authors have given in this review a very comprehensive and scientific survey of urologic surgery. To review the article would take too much space as it includes the medical and surgical treatment of diseases of the entire urogenital tract, trans-vesical electro-coagulation of bladder tumors and implantation of radon. Such are clearly dealt with as is also the safety of trans-vesical diathermy although caution is advised in the too zealous application of currents of high frequency. The uses of sulfanilamide and mendelic acid are stressed in urogenital infections and the fact that sulfanilamide is more effective in alkaline than acid urines has a definite significance in the treatment of infections with proteus. It should not be used in infections due to *S. faecalis*.

Bottin.—*Archives of Surgery*, Nov., 1938, page 735.

Treatment of Intestinal Obstruction

This interesting article deals largely with the etiology and treatment of intestinal obstruction. The author is greatly opposed to the use of intravenous injections of hypertonic solutions of sodium chloride unless the condition is an inflammatory one due to peritonitis.

Here, he strongly advises re-hydration and re-mineralization by blood transfusion. The author clearly differentiates *functional obstructions* from the true ones, including in the former, obstruction caused by lead poisoning, coronary thrombosis, intestinal worms, acute alcoholism, tabes and hysteria but also advises caution in the use of spinal anaesthesia admitting, however, that it is good in some cases.

Department of the Public Health

PROVINCE OF NOVA SCOTIA

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

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

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

OFFICERS OF THE PROVINCIAL HEALTH OFFICERS' ASSOCIATION

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

COUNCIL

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

MEDICAL HEALTH OFFICERS FOR CITIES, TOWNS AND COUNTIES

ANNAPOLIS COUNTY

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

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

ANTIGONISH COUNTY

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

COLCHESTER COUNTY

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

CAPE BRETON COUNTY

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

CUMBERLAND COUNTY

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

DIGBY COUNTY

Belliveau, P. E., Meteghan, (Clare Mepy).
 DuVernet, Edward, Digby.
 Rice, F. E., Sandy Cove, (Mepy).

GUYSBORO COUNTY

Chisholm, D. N., Port Hawkesbury,
 (Mulgrave).
 Sodero, T. C. C., Guysboro (Mepy).
 Moore, E. F., Canso.
 Monaghan, T. T., Sherbrooke (St. Mary's
 Mepy).

HALIFAX COUNTY

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

HANTS COUNTY

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

INVERNESS COUNTY

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

KINGS COUNTY

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

LUNENBURG COUNTY

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

PICTOU COUNTY

Blackett, A. E., New Glasgow
 Chisholm, H. D., Springville, (Mepy).
 Bagnall, P. O., Westville.
 Crummey, C. B., Trenton.
 Dunn, G. A., Pictou.
 Parker, V. H. T., Stellarton.

QUEENS COUNTY

Ford, T. R., Liverpool.
 Smith, J. W., Liverpool, (Mepy).

RICHMOND COUNTY

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

SHELburne COUNTY

Corbett, J. R., Clark's Harbour.
 Fuller, L. O., Shelburne, (Mepy).
 Dinsmore, J. D., Port Clyde, (Barrington
 Mepy).
 Lockwood, T. C., Lockeport.
 Churchill, L. P., Shelburne, (Mepy).

VICTORIA COUNTY

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

YARMOUTH COUNTY

Hawkins, Z., South Ohio, (Yarmouth
 Mepy).
 Caldwell, R. M., Yarmouth.
 Lebbetter, T. A., Yarmouth, (Wedgeport).
 LeBlanc, J. E., West Pubnico, (Argyle
 Mepy).

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

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

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

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

During the month, 245 tissues were sectioned and examined, which with 32 tissues from 7 autopsies, makes a total of 277 tissues for the month.

Tumours, simple.....	32
Tumours, malignant.....	35
Tumours, suspicious of malignancy.....	3
Other conditions.....	175
Tissues from 7 autopsies.....	32

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

	February, 1939				Jan., 1939
	Total	Male	Female	Rate	Rate
No. of live births.....	822	406	416	19.6	21.7
No. of stillbirths.....	29	18	11	34.1**	28.8**
No. of deaths.....	565	289	276	13.4	12.3
No. of deaths under 1 year of age.....	67	33	34	81.5*	98.9*
No. of deaths from puerperal causes.....	4	...	4	4.9*	2.0*

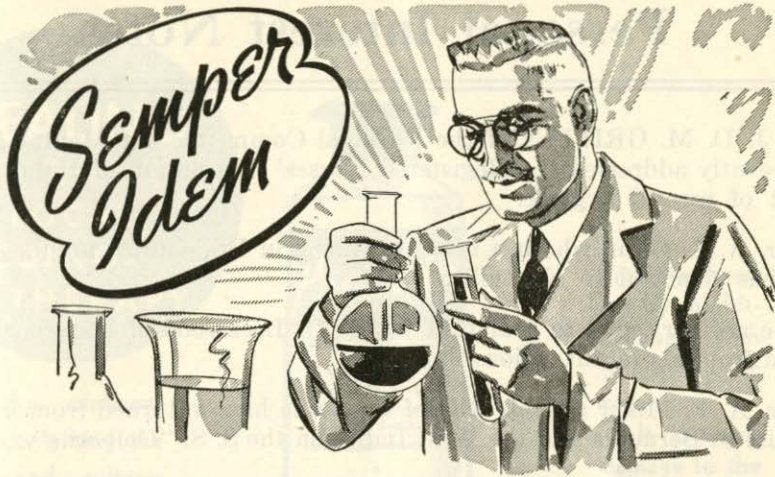
Causes of Death	February, 1939				Jan., 1939
	Total	Male	Female	Rate	Rate
Measles.....	...	...	...	...	...
Scarlet Fever.....	2	...	2	4.8	...
Whooping Cough.....	1	1	...	2.4	6.4
Diphtheria.....	1	...	1	2.4	8.6
Influenza.....	36	17	19	85.6	45.1
Pulmonary Tuberculosis.....	25	12	13	59.5	55.9
Other forms of Tuberculosis.....	5	2	3	11.9	15.0
Cancer and other Malignant tumors.....	61	35	26	145.1	92.4
Diseases of the Heart.....	96	56	40	228.4	202.0
Diseases of the Arteries.....	88	45	43	209.3	191.2
Pneumonia (all forms).....	56	24	32	133.2	156.8
Diarrhea and Enteritis under 2 yrs. of age.....	2	1	1	...	...
Nephritis.....	27	15	12	64.2	73.1
Diseases of Early Infancy.....	33	17	16	40.1*	31.7*
Accident.....	13	9	4	30.9	45.1

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

Provisional Monthly Report of Births and Deaths February, 1939.

	BIRTHS								DEATHS																				
	Total Births	Live Births						Still Births		Total	All Causes		Maternal Deaths	Under 1 year of Age	Influenza	Pulmonary Tbc.	Other forms of Tbc.	Cancer	Heart Disease	Disease of the Arteries	Pneumonia All Forms	Diarrhea under 2 years	Nephritis	Diseases of Infancy	Accident				
		Total	Legit-imate		Illegit-imate		Total	M.	F.		M.	F.														M.	F.	M.	F.
			M.	F.	M.	F.																							
Nova Scotia	851	822	390	384	16	32	29	18	11	565	289	276	4	67	36	25	5	61	96	88	56	2	27	33	13				
Annapolis...	33	31	17	14	...	...	2	1	1	28	16	12	...	4	1	1	...	3	10	4	1	...	1	1	...		
Antigonish..	4	4	2	1	1	3	...	3			
Cape Breton	187	184	82	93	2	7	3	2	1	64	36	28	...	11	3	1	...	8	6	7	5	1	6	5	3				
Colchester..	41	40	16	22	1	1	1	1	1	32	12	20	1	2	2	2	...	4	7	8	4	1	1	1	...				
Cumberland	62	62	30	30	1	1	...	...	...	34	20	14	1	3	2	1	...	2	4	3	...	...	2	1	...
Digby.....	21	21	8	8	5	...	...	...	...	14	5	9	...	...	...	...	...	4	2	2	...	...	...	...	...
Guysboro....	21	20	12	6	2	...	1	...	1	24	12	12	...	3	1	...	2	4	2	4	...	...	...	...	...
Halifax.....	138	126	58	60	...	8	12	6	6	139	74	65	...	12	7	7	...	16	17	26	22	1	6	4	3				
Hants.....	31	30	11	17	...	...	2	1	1	24	13	11	2	2	1	1	...	1	6	3	3	...	...	...	...
Inverness..	26	26	18	7	...	1	...	...	...	19	11	8	...	1	1	1	...	2	5	4	1	...	...	...	...
Kings.....	89	87	44	40	...	3	2	2	...	36	20	16	...	3	1	...	6	3	7	...	...	...	...	...	...
Lunenburg..	44	43	23	18	...	2	1	1	...	47	25	22	...	7	6	...	2	4	11	6	6	...	...	...	...
Pictou.....	53	50	24	21	3	2	3	3	...	33	20	13	...	4	4	...	...	6	4	6	2	...	...	...	...
Queens.....	15	14	6	8	...	...	1	1	...	8	5	3	...	4	...	...	...	2	2	...	1	...	...	...	...
Richmond..	14	14	8	4	1	1	...	...	...	12	5	7	...	1	1	...	...	1	1	...	...	...	...	...	...
Shelburne..	25	24	10	12	...	2	1	1	...	13	6	7	...	2	1	...	1	3	3	...	1	...	...	...	...
Victoria...	17	16	10	6	...	...	1	1	...	5	1	4	...	1	1	...	...	2	2	...	...	...	...	...	...
Yarmouth..	30	30	11	17	...	2	...	...	...	30	8	22	...	2	2	...	3	3	4	5	2	...	...	...	...

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



A FEW WELL KNOWN E.B.S. PRODUCTS

AQUAPHEDRIN E.B.S.
 BROMATOL E.B.S.
 CALGLUCOL E.B.S.
 CODOPHEN E.B.S.
 DIGESTOPHOS E.B.S.
 DILAXOL E.B.S.
 DILAXOL POWDER E.B.S.
 FERROCHLOR E.B.S.
 FLUID EXTRACT ERGOT B.P.
 HEMROYDINE OINTMENT E.B.S.
 HYPOBYN E.B.S.
 RHEUMATOL E.B.S.
 RHEUMATOL OINTMENT E.B.S.
 SCILEXOL E.B.S.
 THEOBARB E.B.S.
 TINCTURE DIGITALIS B.P.

Samples on Request

Established 1879

The Final Check

After manufacture, all E.B.S. products are tested in our Control Laboratory for identity of all potent ingredients and accuracy of dosage.

Semper Idem



THE E. B. SHUTTLEWORTH CHEMICAL CO. LIMITED

TORONTO

MANUFACTURING CHEMISTS

CANADA

WINNIPEG, MAN.—CAMPBELL HYMAN LTD.

STOCKS CARRIED AT
VANCOUVER, B. C.—J. P. SOUTHCOTT & CO. LTD.

Personal Interest Notes

DR. J. D. M. GRIFFIN of the National Committee for Mental Hygiene, recently addressed the Registered Nurses' Association of Halifax on the subject of mental hygiene.

Dr. A. A. Giffin who has been practising in Bridgetown for the past few years has removed to Kentville.

We are very glad to hear that Dr. T. C. Lockwood of Lockeport has recovered from his recent serious illness.

Dr. A. F. Miller and his wife of Kentville have returned from a delightful cruise to Bermuda and the West Indies on the S. S. "Colborne".

Dr. H. J. Martin of North Sydney is spending a month in New York at post-graduate work. In his absence his work will be conducted by Dr. Arthur Young.

We are all delighted that Dr. G. W. T. Farish of Yarmouth has made an excellent recovery from his recent operation in Montreal. Dr. Farish is back at Yarmouth and has resumed practice.

Dr. R. M. Benvie of Stellarton who had been in the Victoria General Hospital for some time and had a rather serious time of it, is now at home and we understand is rapidly returning to health.

Dr. H. B. Atlee of Halifax addressed the Registered Nurses' Association on the subject of the neuroses recently.

Dr. Ralph P. Smith, Provincial Pathologist, addressed the Kiwanis Club of Halifax on the subject of recent advances in medicine at a recent weekly meeting.

Dr. and Mrs. J. G. MacDougall of Halifax have returned from a two month's trip to Florida.

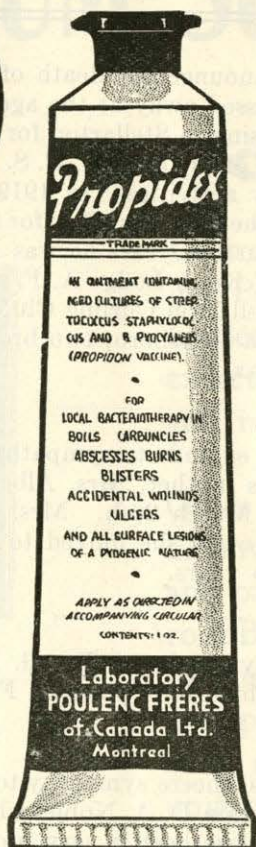
Dr. Mina MacKenzie, Dalhousie '04, who has been serving as a medical missionary in India for the past number of years, will spend the summer at her home in Pictou. Dr. MacKenzie is expected to arrive sometime the last of July.

Dr. C. A. S. McQueen of Amherst has returned home after a pleasant month spent in the West Indies.

Dr. W. C. O'Brien of Wedgeport recently escaped death, Thursday afternoon, March 30th, when the doctor's car, on account of the slippery pavement, crashed through the guard rail at Lent's Corner in Tusket and fell some twenty feet into the Tusket River. The doctor had with him at the time his brother-in-law, Mr. Walter Murphy. Mr. Murphy suffered a severe gash in the forehead from the broken glass, but the doctor escaped, so we are informed, with nothing more than a severe shaking up.

HEALING
by
LOCAL
VACCINO-
THERAPY

An ointment containing the aged cultures and filtrates of those bacteria which occur most frequently in skin infections.



Promotes healing by inhibiting the growth of pathogenic organisms.

It prevents damage to the tissues, because it does not contain any chemical antiseptic or germicide.

MINOR BURNS
SKIN INJURIES
ASEPTIC WOUNDS
SKIN INFECTIONS

Supplied in handy
1 oz. tubes

POULENC FRÈRES

204 Youville Square, Montreal

Please send me at once a sample tube of PROPIDEX Ointment

NAME

ADDRESS

This offer is good only in the Dominion of Canada

NSMB

OBITUARY

THE BULLETIN regrets to announce the death of Dr. George Watson Whitman of Stellarton who passed away at the age of sixty-two on April 5th. Dr. Whitman has been practising in Stellarton for the past twenty-five years having taken over the practice of the late Dr. C. S. Elliot. Dr. Whitman took a great interest in community activities. In 1919 he was elected Mayor of Stellarton by acclamation and he held this office for five years. He was medical officer of the 85th, and for fourteen years he was Major in the Pictou Highlanders. He was a member of Keith Lodge A. F. and A. M., and was a very enthusiastic member of the Stellarton Curling Club. There remain to survive him his mother, who resides in Guysboro; two brothers, Charles A. of Guysboro, and Alfred H. of Halifax.

The BULLETIN wishes to extend its sympathy to Dr. L. M. Morton of Yarmouth in the death of his mother, Mrs. Albert G. Morton, which took place at Yarmouth, Sunday, March 26th. Mrs. Morton resided in Lowell, Mass., until a few years ago when she moved to Yarmouth. She had been in ill health for the past two years.

We wish to extend our sympathy to Dr. G. V. Burton of Yarmouth in the tragic death of his wife which took place on Friday, March 17th.

The BULLETIN extends its sincere sympathy to Dr. J. A. Noble of Halifax in the death of his father, Captain D. A. Noble, which took place at Montreal on April 8th. Captain Noble has been a very prominent figure in the Maritime Provinces for the past twenty years in which he served as Chief Investigator for the Fire Underwriters Investigation Bureau.

The BULLETIN wishes to extend its sympathy to Dr. H. B. Havey of Stewiacke in the death of his father, Mr. Bernard Havey, which occurred on Tuesday, April 11th, at Digby. Mr. Havey was born at Gaspereaux, Kings County, but as his family moved to Boston he received his early education there; they returned to Gaspereaux when he was seventeen. Mr. Havey was known best as an excellent school teacher. He first taught at Scott's Bay, and later after having attended Truro Normal College, took over the school at Little River, Digby County. After this he taught at Long Island, Digby County, but in the latter part of his life he gave up teaching and went into business. In Digby he served as a member of the Town Council, and also as Deputy Stipendiary Magistrate. He was a member of the Baptist Church.



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

Chemotherapy in Combination With Immunotherapy

At a meeting of the Section of Obstetrics and Gynaecology of the Royal Society of Medicine on March 17 Professor Alexander Fleming of the inoculation department, St. Mary's Hospital, made a communication on the synergic action of vaccine and serum therapy and treatment with sulphanilamide and M & B 693.

Professor Fleming said that it had been already shown that these new chemotherapeutic agents had rather a bacteriostatic than a bactericidal action. The chief result of the drugs was some interference with the growth of organisms, and the actual destruction of the invaders was completed by the natural defensive mechanism of the body. The more effective that mechanism—or, in other words, the higher the degree of immunity—the better would be the result of the treatment. Even with the organism most sensitive to the drugs—namely, the haemolytic streptococcus—the drug alone did not suffice to destroy the organism. Immunity could be increased passively by serum therapy or actively by vaccine therapy. The results of combined serum therapy and 693 were not yet available, but he had carried out some experiments *in vitro* which showed the benefit of the combined administration. The anti-pneumococcal serum was found greatly to enhance the anti-bacterial effect of a blood—693 mixture on pneumococci. Indeed, it was quite a convincing demonstration of the benefit of combining these two anti-bacterial substances. Several workers had shown that antisera used in conjunction with sulphanilamide had a very striking action. With regard to active immunity or vaccine therapy, the administration of vaccines in association with the new chemotherapeutic agents had been proved to give results far superior to either method of treatment alone. Professor Fleming described experiments in the mouse and the rabbit whereby the animals were injected with pneumococcal vaccine and after six days injected with pneumococci. The vaccine therapy alone, like the chemotherapeutic agent alone, resulted in a diminution in the number of colonies, but only the two combined resulted in a total destruction.

From various quarters, and most recently from South Africa, there had come confirmation clinically of these results in pneumococcal and other infections. The clinical evidence was not conclusive, but it all pointed in the same direction—that by active immunity with vaccines the result with 693 or sulphanilamide was reinforced. His conclusion to the whole matter was that the new drugs acted on certain sensitive bacteria in such a way that the reproduction of the bacteria was retarded or abolished, and when this happened the natural defensive mechanism of the body completed the task of destruction. The result in any particular case thus depended on the natural sensitiveness of the infecting organisms to the drug and also on the immunity of the patient. The immunity could be increased by serums or vaccines, but, of course, serums were available only for certain infections, while vaccines could now be obtained for practically all acute bacterial infections.—From the *British Medical Journal*, April 1, 1939.

PHYSICIAN WANTED

Preferably with surgical experience, for a mining community in Cape Breton. Cash returns not less than \$4,000.00 yearly. Further particulars may be had from the secretary.

FOR SALE

MEDICAL OFFICE FIXTURES--EXCELLENT CONDITION

(Dressing Table, Surgical Table, Instrument Cabinet)

ALSO

1 Cameron Diagnostic Set (Otoscope, Broctoscope, Urethroscope, Variety of Magnifying Lenses, Tongue Depressors, Cameron Antra Lamp and Cameron Denta Lamp, etc.)

Apply--MRS. W. H. PENTZ, 227 Quinpool Rd.,
Phone B-5075

FOR SALE

House and Practice in Desirable Location. For Further Information Apply to the Secretary.

LOCUMS WANTED

Dr. A. F. Weir of Freeport, Nova Scotia, requires a locums for a month either starting from the end of May or the first week in September.

Day or night
24 hour SERVICE

M'CURDY PRINTING
54 ARGYLE STREET **B-7606** CO. LIMITED HALIFAX

Not the Occasion for Compromise

WHEN THE new mother has passed through the first two stages of labor—her strength expended and her physical resources at an ebb—the outcome of her pregnancy must not be compromised. Observing every precaution, the experienced physician chooses his pituitary extract with care.

PITUITRIN, the Parke-Davis solution of posterior pituitary, is the *original* commercial pituitary extract. The greater portion of the clinical data reported in the literature has been based on this preparation.

BECAUSE Pituitrin served to introduce pituitary extract to the medical profession, and because of its subsequent wide-spread use, the name is occasionally misapplied to other pituitary products. Be certain that Pituitrin (which is prepared only by Parke, Davis & Company) is supplied on all requisitions. Specify "Pituitrin, P. D. & Co."



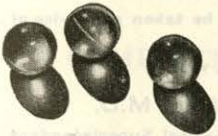
PARKE, DAVIS & COMPANY

OLEUM PERCOMORPHUM (Liquid)

10 and 50 cc. brown bottles in light-proof cartons. Not less than 60,000 vitamin A units, 8,500 vitamin D units (International) per gram. 100 times cod liver oil* in vitamins A and D.

OLEUM PERCOMORPHUM (Capsules)

Especially convenient when prescribing vitamins A and D for older children and adults. As pregnancy and lactation increase the need for vitamin D but may be accompanied by aversion to large amounts of fats, Mead's Capsules of Oleum Percomorphum offer maximum vitamin content without overtaxing the digestive system. 25 and 100 10-drop soluble gelatin capsules in cardboard box. Not less than 13,300 vitamin A units, 1,850 vitamin D units (International) per capsule. Capsules have a vitamin content greater than minimum requirements for prophylactic use, in order to allow a margin of safety for exceptional cases.

**FOR GREATER ECONOMY,**

the 50 cc. size of Oleum Percomorphum is now supplied with Mead's patented Vacap-Dropper. It keeps out dust and light, is spill-proof, unbreakable, and delivers a uniform drop. The 10 cc. size of Oleum Percomorphum is still offered with the regulation type dropper.

Uses: For the prevention and treatment of rickets, tetany, and selected cases of osteomalacia; to prevent poor dentition due to vitamin D deficiency; for pregnant and lactating women; to aid in the control of calcium-phosphorus metabolism; to promote growth in infants and children; to aid in building general resistance lowered by vitamin A deficiency; for invalids, convalescents, and persons on restricted diets; for the prevention and treatment of vitamin A deficiency states including xerophthalmia; and wherever cod liver oil is indicated.

*U.S.P. Minimum Standard

MEAD JOHNSON & CO. OF CANADA, LTD.
Belleville, Ont.

ETHICALLY MARKETED

We purposefully selected for these products classic names which are unfamiliar to the laity, or at least not easy to popularize. No effort is made by us to "merchandise" them by means of public displays, or over the counter. They are advertised only to the medical profession and are supplied without dosage directions on labels or package inserts. Samples are furnished only upon request of physicians.

If You Approve This Policy
Specify MEAD'S

OLEUM PERCOMORPHUM

Ethically Marketed — Not Advertised to the Public

D^R COLLECTEM

We'll collect your past-due accounts — quickly and courteously, Doctor — and send you our cheque Each Tuesday on the Imperial Bank, Adelaide and Victoria Streets Branch, Toronto.

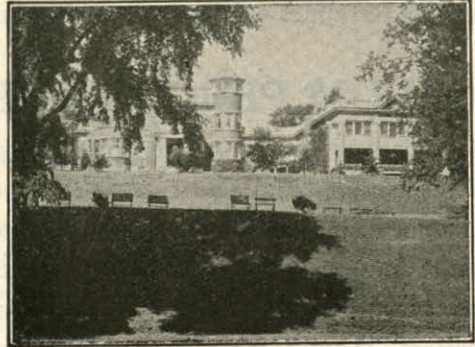


*So start the good work Now.
Mail us your list — To-Day!*

THE MEDICAL AUDIT ASSOCIATION
44 Victoria Street, Toronto

Homewood Sanitarium

GUELPH, ONTARIO



Nervous cases including Hysteria, Neurasthenia and Psychasthenia.

Mild and incipient mental cases.

Selected habit cases will be taken on advice of physician.

For rate and information, write

HARVEY CLARE, M.D.

Medical Superintendent

**Everything in
Glass, Paints and Wallpaper**

For Building Purposes

PAINTING AND DECORATING

Call B-6782

FRANK REARDON, LIMITED

HALIFAX - - CANADA

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.