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Vol. XXII No. 6

The

Nova Scotia Medical Bulletin

OFFICIAL ORGAN OF THE MEDICAL SOCIETY OF NOVA SCOTIA CANADIAN MEDICAL ASSOCIATION NOVA SCOTIA DIVISION.

JUNE 1943

Editorial Board, Medical Society of Nova Scotia.

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It is to be distinctly understood that the Editors of this Journal do not necessarily subscribe to the views of its contributors.

- Manuscripts should be typewritten, on one side only
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- 2. Should proof be sent to a contributor corrections must be clearly marked and no additional matter added.
- 3. Orders for reprints should accompany the proofs.
- 4. Communications should be sent to the Secretary, Dr. H. G. Grant, Dalhousie Public Health Clinic, Morris Street, Halifax, N. S.
- 5. Please mention the Bulletin when replying to advertisements.

Venereal Disease Control

J. S. Robertson, M.D., D.P.H.

Divisional Medical Health Officer Western Division

Yarmouth, Nova Scotia

IT is becoming more and more apparent that no single agency can control venereal disease, there should and must be cooperation between the general practitioner, the local health officer and the Department of Public Health, in addition, education must be emphasized using the home, school, church, press and radio as the source of this. All of the agencies mentioned must play their part, under emphasis on any one may weaken the chain needed to control this menace.

Education in venereal disease control should start in the home, in order that this may be of value parents should be well informed and thus able to give the necessary information to their growing children. This information should be of course non-technical and tied in with moral training for it is realized that curiosity over sex in adolescents often overcomes warnings concerning the dissemination of disease. Thus we should have more lectures for parents and other adults by popular medical speakers, more movies on the subject, more emphasis by the churches on this subject; illicit sex adventures must be condemned both from a moral and medical point of view. War-time laxity on this subject has exposed a large part of our population to the dangers of venereal diseases—now is the time for our religious leaders to emphasize the inculcation of sound moral training in our young people. High school groups should be told of the dangers by competent lecturers, they should be urged to take their problems to their family practitioner who should consider such discussions as part of his war-time contribution to the health and safety of the nation.

There is no doubt but that superstition and faulty information about sex have done much to spread venereal disease—for example, in several cases female patients who knew they had gonorrhoea thought this could be cured by sexual intercourse—the idea being apparently that they would lose the disease by transmitting it to another—education is the only cure for such faulty rumors. Again we are told by patients-"clap is about the same as a bad cold" the best cure for the bearers of such ideas would be to take them through the venereal disease wards of a large hospital or to the School for the Blindthere they would see the results of "a bad cold." There is also an impression among the laity that due to new drugs gonorrhoea can be cured in all cases within a few days at little or no inconvenience to the patient. Unfortunately such is not the case, although a great improvement has been made many cases are still not cleaned up by such drugs except after long periods of treatment, even though the patient is hospitalized. In the case of syphilis the treatment must of necessity extend over a long period of time and the patient is often left with a mental alienation that is often as difficult to clear up as the disease; every ache, every pain signifies to them a return of the disease, their entire

future is often spoiled by one evening with a prostitute on her counterpart in crime "the enthusiastic amateur." Infected untreated females in addition to being a menace to other adults also bring into the world infected babies, the congenital cases, the blind children, which we see crowding the clinics and mental institutions.

The education of parents should start before marriage, classes should be available for young people about to be married, the importance of premarital examinations should be emphasized—in this way many tragedies among married people could be avoided. The places where such examinations are compulsory are enthusiastic over the results achieved—the incidence of congenital syphilis has been reduced as one example. Such premarital examinations are an important factor in educating the public to the importance of so-called "Social Diseases," though why such a name should be given to diseases which are a menace to society I fail to see.

As can be seen from the foregoing the practitioner has an important place in the educational control of venereal diseases. He also has an important place in the administrative control of these diseases. In Nova Scotia under the Public Health Act the practitioner is required to report by name or number on a franked form all cases of venereal disease coming to his attention. If he reports by number he must keep a file showing the name and corresponding number of all cases of venereal disease if this information should be required by the Department of Health. The physician then has two lines of duty to perform—to his patient and to the general public. His duty to the patient is carried out by prompt and efficient treatment—if the patient is unable to pay and the practitioner feels he cannot carry on, then the patient should be sent to the nearest Venereal Disease Clinic at present located at Halifax. Sydney, Truro, New Glasgow, Shelburne and Yarmouth. If the cost of the drugs is the reason for the practitioner not continuing to treat the case, these can be obtained free of charge from the Department of Health. To sum up the last few sentences it can be said that there is no reason for any case of venereal disease being inadequately treated.

When a new case of venereal disease is diagnosed it is the duty of the practitioner to inform the patient of his or her condition, to warn them concerning exposing others to infection, to inform them of the need of continued and conscientious treatment and to hand them a booklet on venereal diseases as prepared by the Department of Health repeating these warnings and including a section of the Public Health Act giving the penalties for failure to carry out instructions. Failure of the practitioner to carry out this procedure may cause him embarrassment if the case later should be brought into the courts for failure to take treatment or for exposing others to infection while still under treatment.

With regard to the practitioner's duty to the public this is not adequately carried out until he ascertains the source of each case of venereal disease from the patient and transmits this information to the local health officer. It would appear to me to be a hopeless business to go on treating new cases of venereal disease without doing anything to find out the sources of such cases—in any one community the number of sources is usually not large, elimination of these results in a remarkable improvement in new cases developing.

Unfortunately many practitioners take the attitude that the source of the disease is not their business and feel that patients resent inquiries about such. Ifeel that this attitude is wrong and that a few words of explanation will make the patient realize the importance of preventing others from falling into the same pit, particularly if it is made clear that the name of the informant need only appear in the physician's private records. The naming of a source in married people often requires a little diplomacy, however when the importance is realized in people still in the child bearing age the physician should have no hesitation in having the man and wife examined if one or the other is found infected.

The next link in the chain is forged by the local health officer when the suspected source of venereal disease is named to him-forms are provided by the Department of Health for this purpose. He fills out Form 1 V.D. which orders the suspected source to report for examination within 24 (twenty-four) hours after receiving the notice to either their family physician, or the local venereal disease clinic. This form 1 V.D. is to be delivered personally, by a police officer or sent by registered mail—this is in order that it may be on record that the notice has been received by the person concerned. The name of the person or persons giving the information is not on the form, which is signed by the Medical Health Officer within whose jurisdiction the suspect resides. In some cases the telephone is used to good advantage to bring suspects in for discussion and examination. If the above procedure is followed, in a few cases only will it be necessary to use further legal action—this taking the form of an information or occasionally a warrant calling for the arrest and examination of the suspect. Persons in detention can be examined for evidence of venereal disease under the provisions of the Public Health Act, and if found infected kept under detention until non-infectious; physicians acting as Jail Physicians should keep this provision in mind.

The private physician also has a further duty in regard to patients who fail to complete their treatments—the names of these should be sent to the Medical Health Officer on the form provided "The Notification of Delinquent Patients"—it is then up to the Medical Health Officer to see that these are brought in for treatment until non-infectious—if necessary they can be put in detention and treated there. Failure of physicians to follow up delinquent patients is one reason for so many cases of chronic venereal disease coming to our attention in general hospital wards and in mental institutions. Particularly should females in the child-bearing period be adequately treated—failure to do this adds to the burden of our School for the Blind and to the number of congenital syphilities in our midst.

The part to be played by the local Health Officer is most important—failure on his part to act promptly will invalidate the whole set-up. It is up to him to see that suspect sources are examined, to see that delinquent patients are brought in for treatment and that necessary cases are prosecuted. The control of venereal disease is an important part of his duties, failure to carry out this function means that the Health Officer is not only derelict in his duties, but he is taking a salary under false pretences. Every Health Officer should have the forms required at hand for the proper carrying out of his duties, further supplies are available from the Department of Health. It must be emphasized, however, that the Health Officer cannot act until he has been given information regarding cases and contacts by the practitioners who must obtain the primary information.

The Department of Public Health has an important function in correlating

and directing the control program, in providing adequate diagnostic facilities in providing free drugs for treatment of indigent cases, in providing free venereal disease clinics at strategic points throughout the province and in providing assistance in all problems connected with venereal disease control, through the Divisional Officers.

The importance of a central control has been shown following the influx of military personnel into the province. All cases of venereal disease in the Armed Forces are questioned as to the source of their disease, information of value is obtained in nearly all cases and transmitted to the Department of Health, in turn the Medical Health Officer of the area in which the suspect resides is notified and in the majority of cases the suspect is located and usually

found to be infected, treatment follows as a routine.

This successful co-operation between the Armed Forces, Department of Public Health and local Health Officer has shown that the system of control it adequate, provided that each part of the system carries out its function—she whole setup fails, however, if the initial information as to source is not obtained by the practitioner and transmitted to the Health Officer. If the information can and is obtained in the Armed Forces by their medical officers, surely our practitioners can and should do the same among the general public. One source located and put under treatment may prevent a dozen other cases developing and will make your community a better place for you and your children to live in.

In conclusion let me again repeat that the control of venereal disease cannot be achieved by any single agency, many factors are involved requiring the united efforts of religious, educational, legal and medical personnel to achieve our goal—let us all do our share and venereal disease will surely diminish, that it will ever disappear is too much to hope for.

Dr. Charles H. Best, Professor of Physiology, University of Toronto, will give an address at the luncheon on Wednesday, July 7th.

Dr. Kenneth G. McKenzie, Assistant Professor of Surgery and Clinical Surgery, University of Toronto, will lecture on "Cranial Cerebral Injury" on Wednesday, and on "Extruded Intervertebral Disc," Thursday.

Acute Non-Specific Empyema

V. D. Schaffner, M.D. Kentville, N.S.

THE subject of acute non-specific empyema complicating pneumonia has so frquently been discussed and written about that one hesitates to even mention it at a Medical Society meeting such as this. However, considering the number of chronic cases that we are called upon to treat, a short discussion and review of a few of the principles involved seem to be justified. It has been said, and with much justification, that a patient seldom dies of an acute empyema. Many however die of poorly selected operative procedures and many more are left with chronic empyemata requiring extensive and mutilating operations for the same reasons.

Following the last war, the U.S.A. Army set up an Empyema Commission to study the cases occurring in the various army centres and large army hospitals. The astounding figure of as high a mortality figure as 70 per cent was found in some instances, and in most not lower than 40 per cent. This extremely high mortality rate, as later proven, was not due to the particular seriousness of the disease (or should I say complication of pneumonic disease) but rather to the poorly selected operative procedure. As a student, I did not attend Dalhousie University, but I am told that one of the teachers there always starts one of his lectures with the statement "Where there is pus, let it out! Small incisions are more placebos!" I am very much afraid that if you follow that dictum to the letter when dealing with all cases of pus in the pleural space, that you will do much to maintain the old mortality figure of 70 per cent.

To properly appreciate and understand the primary principles of treatment of acute empyema (and I have reference here only to those complicating pneumonia) one must first have a knowledge of the pathological physiology of open pneumothorax. Unfortunately time does not permit for any discussion of this most important subject. (I have been told on several occasions that I talk too long and warned not to do so on this one.) To those of you who are interested, I would refer you to the work of Everts Graham and his associate Bell, and can assure you, having read concerning the pathological physiology of open pneumothorax, that you will be able to treat empyema with more understanding and satisfaction both from a personal point of view and most assuredly from the point of view of the patient. A patient restored to health is appreciative of his healer. A patient reduced to chronic ill-health, by improperly selected measures, often naturally, blames the hands and mind that produced his misfortune. A dead one neither appreciates nor blames but his relatives might. Which one of the three your patient will be, largely depends upon your careful consideration and selection of procedure.

The symptoms of empyema and diagnostic procedures employed need not be discussed. Suffice it to say that a sustained temperature during the course of a streptococcal pneumonia or an elevation of temperature following the subsidence of a pneumococcal one usually means empyema. Unfortunately under such circumstances slow resolution is often diagnosed. Let it not be forgotten that delayed resolution is ever so much more uncommon a compli-

ville, N. S., June 2, 1943.

cation of pneumonia than is empyema. The latter therefore should in all instances be considered first.

In selecting treatment for a proven case of empyema, a few points should be carefully considered. These may be tabulated briefly as follows:

- 1. Age of the patient.
- 2. Type of pneumonia.
- 3. Stage of the pneumonic disease.
- 4. The intensity of previous sulpha drug treatment.

In regard to the first point, namely, the age of the patient, it is a well recognized fact that youngsters and babies tolerate open pneumothorax poorly. This is quite understandable when the pathological physiology, referred to above, but not discussed, is understood. By creating openings in the chest wall before thick pus or firm adhesions are formed, the most probable result will be asphyxiation of the youngster. Let it not be forgotten that air is drawn into the chest by the expansion of the wall and contraction of the diaphragm. The amount of such air going in and out is limited by the vital capacity of the patient. Where it goes in depends upon the size and number of the openings into the chest. If the trachea is the only opening all the air, of course, will go into the lungs themselves. If open thorocotomy exists a portion of inspired air will go through the thorocotomy wound. This, of course, is of no value in so far as respiration is concerned, and cuts down the vital capacity in proportion to the amount of air drawn through the thorocotomy. It is merely a matter of mathematics that if vital capacity is seriously reduced by disease to or nearly to the actual need of the patient that further reduction by thorocotomy can result only in asphyxia. Therefore one should select very carefully the time that open drainage is performed in children. Remember an earlier statement that extremely few people die of empyema per se. In children, aspirate, and for long periods of time if necessary, and if not cured by this procedure alone so called "closed drains" may later be inserted and still later an open drain if necessary, but keep away from open drains until you are sure it is safe. This latter point is judged by the general condition of the patient, the thickness of the pus and the presence of adhesions. The presence of adhesions can be pretty well determined by serial X-rays. It does not take long for inflamed pleural surfces to adhere if they are in contact.

The second point, namely the type of pneumonia is extremely important. In ordinary lobar pneumonia of the pneumococcus, the empyema usually occurs after the lung disease is fairly well subsided. It is really a post-pneumonic condition. Besides only one lobe is affected and vital capacity is not, as a rule, seriously reduced. The pus is thick almost from the start and adhesions are firm. Such cases are best treated by early open thorocotomy. We have found such conditions somewhat altered by the use of sulpha drugs which will be mentioned briefly in a moment. With the streptococcal empyemata which occur with other types of pneumonia such as the broncho-and influenzal pneumonias, an entirely different set of circumstances exist. These empyemata develop concurrently with the disease and not after it. The lung involvement is extensive and diffuse with resulting decrease in vital capacity and pulmonary function. Pus is thin and adhesions flimsy or non-existant. Open thorocotomy can only cause serious respiratory embarrassment or death from

asphyxia. These are the so called "blue dyspnoeics". They are both cyanosed and dyspnoeic on account of reduced vital capacity and pulmonary function and further reduction by open thorocotomy can result only in death. The so called "white dyspnoeic" is seen most often with pneumococcal empyemata. They are mildly dyspnoeic and pale on account of toxaemia with little or no reduction in vital capacity. The "white dypnoeics" are usually best opened at once.

The "blue dyspnoeics", as in children, should be treated with caution, first by aspirations and later by closed or open drain as seem best.

Sulphathiazole and related drugs probably have a slowing up effect in the formation of an empyema. It is my belief that the pus is not as thick and adhesions less firm. This tends to prolong the period of aspiration. A prolonged low grade irritant may so thicken the visceral pleura that the lung becomes unexpandable. For such reason, I believe, without exact knowledge as yet, that the percentage of empyemata going on to chronicity will become greater.

Just a final word in regard to technique of open drainage. Mistakes in the use of open drains are the most frequent causes of chronicity. Two conditions must be insisted upon. First, the drain must be placed at the most dependent part of the cavity. Second, the drain must not be removed until the cavity is completely obliterated. This must not be guessed at, but the cavity actually measured with solution. When it is not larger than 5 cc. the drain may be removed. Failing to adhere to these two simple rules will produce many cases of chronic empyema which otherwise would have terminated without incident.

In regard to type of drain, we prefer the large internal flange tube (such as the Lahey), to tubes that project far into the chest. A Pezzer catheter may be used with the nipple on the end removed. If the nipple is not removed, it may act as a valve and prevent drainage.

Finally in treating empyema, consider carefully:

- 1. The type of pneumonia it complicates.
- 2. The stage of the disease in which it is discovered.
- 3. The respiratory physiological responses of the patient at the time treatment is initiated.

In executing treatment, select your method of pus removal with thought, and in particular the site of drain insertion and finally before drains are removed be sure that the need of treatment has terminated.

Dr. Roscoe Graham, Assistant Professor of Surgery and Clinical Surgery, University of Toronto, will give two papers: the first, "Gall Bladder Disease" on Wednesday, July 7th, and the second, "Carcinoma of the Caecum and Left Colon," on Thursday, July 8th.

"A Week with the Cardiologist"

J. E. LEBLANC, M.D.

West Pubnico, N.S.

A FTER twenty-five years of practice, one often feels as if he should study more, some of the many problems he has confronted during that period of time. The problem of heart disease is one of them, one which has perplexed him perhaps more than any other condition he has had to treat, one for which he has prescribed somewhat reluctantly, because of a lack of a thorough knowledge of the diseases of the heart.

There is a philosophy in Medicine as in the other human arts, and that philosophy consists simply in the study of pathological problems from their ultimate causes. Heart disease is one of them, one of paramount importance,

because it involves the vital organ of the human body.

In going into the study of heart disease, we have familiarized ourself, as a matter of course, with the anatomy of the heart. We had the good fortune of obtaining a normal heart, from our friend, Dr. P.S. Smith, which we dissected, as in the dissecting room in 1910, in all its minor details, following our same anatomy book, written by Dr. Cunningham. What a lot of information we gathered again by this study! The two auricles and the two ventricles came to view again. The coronary sinus was well exposed; also the right and left coronary arteries so often involved in angina pectoris, thrombosis, atheroma, etc. We could well visualize the roots of the pulmonary artery, of the aorta, of the right and left pulmonary veins, of the inferior and superior venae cavae. In short, the whole anatomy of the human heart.

We perused, at the same time, Dr. Paul Dudley White's magnificent book on "Heart Disease". The book is well written, in a clear lucid style, with special references to the meaning of every pathological condition. Dr. White is a great believer in the old literatures of Greece and Rome (in other words, in the classics), as he goes to them, in many instances, for the derivation of terms so often employed in his book. He never fails to give us the exact meaning of a medical term, and with that explanation he goes on to write in so simple a style that every graduate can readily understand. Advances have been made in heart disease. Along with inspection, percussion, palpation, and auscultation, the X-Ray is getting to be an important factor in the diagnosis of cardiac conditions; yet, the clinical history still remains the main key to the whole problem.

The cardio-electrogram is, in many conditions, essential in the diagnosis of heart disease. Its study is a hard one, but well worth the time and endurance, because this method of examination not only acquaints the physician with heart conditions which were known to exist before its advent, but it also confirms many clinical diagnoses which he has been accustomed to make. For example, it tells which chamber of the heart preponderates in cardiac enlargement. It frequently substantiates the clinical diagnosis of mitral stenosis, it furnishes corroborative written testimony of aortic valvular disease. It guides in the selection of cardiac drugs; it warns of their beginning toxic effects. In short, it clinches the diagnosis and renders to medicine a great service in the treatment of heart disease.

Our association with Dr. P.D. White in Boston, was most cordial. His special clinics, ward visits and conferences were opened to us every day, and we followed them in his laboratory and wards at the Massachussetts General Hospital during a whole week. His many observations on preventive and curative medicine with reference to heart disease were most opportune and well to the point.

His views might be summarized very briefly. The practice of preventive medicine through the prevention or early detection of disease, is the family physician's most vital service to the community. His thorough knowledge of the family, past and present and careful routine examinations should not be left wholly to school doctors, industrial physicians and insurance companies. Heart diseases and sources of heart strain may easily be detected in most

cases years before symptoms develop therefrom.

When disease is found at its onset in heart or elsewhere, it may be possible to treat the cause in order to retard the course of the disease, and to prevent recurrence. For instance, this can be done in at least some cases of rheumatic infection, syphillis and the nervous strain that aggravates hypertension and angina pectoris. Hence, when there is in a family a history of rheumatic infection, or rheumatic heart disease, of hypertension or of angina pectoris, strong advice should be given to all the members of the family about regulation of their own diet and weight, taking adequate physical exercise and avoidance of nervous strain and infection. In other words, they should so live that there is less likelihood of these serious diseases recurring in their own generation.

There are just a few of the many suggestions made to us while taking a few days of study with Dr. White at the Massachusetts General Hospital. These

courses of longer duration will be repeated in due course, after the war.

Squadron Leader C. B. Stewart, Medical Officer in Charge of No. 1 "Y" Depot, Halifax, will talk on "Decompression Sickness."

Dr. D. Sclater Lewis, President-elect of the Canadian Medical Association, will give a paper on "Drugs as they affect the Circulatory System."

THE ANNUAL MEETING OF THE MEDICAL SOCIETY OF NOVA SCOTIA

WILL BE HELD AT "THE CORNWALLIS INN," KENTVILLE, N. S.

JULY 7th and 8th

A very strong scientific programme has been arranged. Dr. Roscoe Graham, Assistant Professor of Surgery at the Toronto Medical School, will speak on Wednesday on "Gall Bladder Disease" and on the day following on "Carcinoma of the Caecum and Left Colon." Dr. Kenneth G. McKenzie, Assistant Professor of Surgery at Toronto will also give two papers. On Wednesday he will talk on "Cranial Cerebral Injury" and on Thursday will speak on "Extruded Intervertebral Disc." Dr. Sclater Lewis, the President-Elect of the Canadian Medical Association, will give a paper on Wednesday "Drugs as they affect the Circulatory System." Dr. H. B. Atlee, Professor of Obstetrics and Gynaecology, Dalhousie Medical School, will give a paper on Wednesday "Some Life Saving Procedures in Obstetrics." Dr. G. B. Wiswell, Professor of Paediatrics, Dalhousie Medical School, will speak on Wednesday on "Neo-natal Haemorrhages, and the Role of Vitamin K." Lieut.-Col. T. A. Lebbetter, R.C.A.M.C. will give a paper on Thursday on "The Heart in Middle Age." Lieutenant Commander J. W. Graham, R.C.N.H., will give a paper on Thursday "The Use of Sulfonamide Drugs in General Medicine." Dr. J. S. Robertson, D.M.H.O., Yarmouth, N. S., will speak on Wednesday on "Quarantine Regulations for Communicable Diseases-Terminal Disinfection." Wing Commander C. B. Stewart will give a paper on Wednesday on "Decompression Sickness." At the luncheon on Wednesday there will be an address by Dr. Charles H. Best, Professor of Physiology, University of Toronto.

There have been no social activities planned except the annual dinner which will be held on Wednesday evening at seven o'clock. It will be a mixed affair and informal. The hotel-is holding fifty rooms for those attending the meeting, but you are advised to book early, either directly with the hotel or through the secretary.

NINTIETH ANNUAL MEETING OF THE

MEDICAL SOCIETY OF NOVA SCOTIA "CORNWALLIS INN," KENTVILLE, JULY 7th AND 8th, 1943

PROGRAMME

	TUESDAI, JULI OII			
2.30 p.m.	Executive	Meeting,	"Cornwallis Inn."	
vok di		WEDNE	ESDAY, JULY 7th	

ann	- San Street	T)	A Comment
Other	a.m.	Registra	tion

9.30 a.m. Official Welcome by the Mayor of Kentville.

9.45 a.m. First Business Session.

Addresses by Dr. Sclater Lewis and Dr. T. C. Routley.

11.15 a.m. "Gall Bladder Disease," by Dr. Roscoe Graham, Assistant Professor of Surgery and Clinical Surgery, University of Toronto.

Discussion to be opened by Dr. L. M. Morton, Yarmouth, N. S.

11.55 a.m. "Quarantine Regulations for Communicable Diseases—Terminal Disinfection," by Dr. J. S. Robertson, D.M.H.O., Yarmouth, N. S.

Discussion to be opened by Dr. D. Bruce Wilson, Toronto, Ontario.

12.30 p.m. Adjournment.

1.30 p.m. Luncheon with Address by Dr. Charles H. Best, Professor of Physiology, University of Toronto.

2.30 p.m. "Neo-natal Haemorrhages, and the Role of Vitamin K," by Dr. G. B. Wiswell, Halifax, N. S.

Discussion to be opened by Dr. A. B. Campbell, Bear River, N. S. m. "Cranial Cerebral Injury," by Dr. Kenneth G. McKenzie, As-

3.00 p.m. "Cranial Cerebral Injury," by Dr. Kenneth G. McKenzie, Assistant Professor of Surgery and Clinical Surgery, University of Toronto.

Discussion to be opened by Dr. O. B. Keddy, Windsor, N. S.

3.40 p.m. "Decompression Sickness," by Wing Commander C. B. Stewart, R.C.A.F.

4.10 p.m. "Some Life Saving Procedures in Obstetrics," by Dr. H. B. Atlee, Halifax, N. S.

Discussion to be opened by Dr. J. H. L. Simpson, Springhill, N. S. 4.40 p.m. "Drugs as they affect the Circulatory System," by Dr. D. Sclater Lewis, President-Elect, Canadian Medical Association.

Discussion to be opened by Dr. A. E. Blackett, New Glasgow, N.S.

5.10 p.m. Adjournment.

7.00 p.m. Annual Dinner (Informal).
Presidential Address.

THURSDAY, JULY 8th

9.00 a.m. Second Business Session.

10.00 a.m. "Extruded Intervertebral Disc," by Dr. Kenneth G. McKenzie, Assistant Professor of Surgery and Clinical Surgery, University of Toronto.

Discussion to be opened by Dr. W. A. Hewat, Lunenburg, N. S. "Carcinoma of the Caecum and Left Colon," by Dr. Roscoe Graham, Assistant Professor of Surgery and Clinical Surgery, University of Toronto.

Discussion to be opened by Dr. C. J. Kinley, Halifax, N. S. "The Heart in Middle Age", by Lt.-Col. T. A. Lebbetter, R.C.A.M.C.

Discussion to be opened by Dr. Kenneth A. MacKenzie, Halifax.
The Use of Sulfonamide Drugs in General Medicine," by Surgeon
Lieutenant Commander J. W. Graham, R.C.N.H.

12.40 p.m. Discussion to be opened by Dr. J. R. Corston, Halifax, N. S. Adjournment.

Address by Dr. R. C. Zinck, President, Nova Scotia Provincial Association of Health Officers

At Sydney, July 17, 1942

PRECEDENT has established a custom that the President of the Nova Scotia Association of Health Officers shall at its annual meeting deliver a Presidential Address (so called). Fortunately, the president can select his own subject and after writing many of you here today to deliver a paper at this meeting on a public health question I then had to select some topic for the subject of my remarks.

I propose speaking today and for a short time only from the public health angle on the subject of the manufacture, etc., of Carbonated Beverages in the Province of Nova Scotia. And to go on from there to make some recommendations to the Provincial Department of Public Health that these products may come from the producer to the consumer as clean, safe, and sanitary beverages.

Searching around for some material for this talk I found I was practically breaking virgin soil. Those to whom I wrote or talked knew a little and presuming many of you knew as little or as much as I then did let me first say something of the industry.

To set up a bottling works one has no particular restrictions other than would apply to persons starting any other line of business; all that is necessary is incorporation or registration.

Once the company is incorporated what are the products used to product a bottled beverage, of the carbonated type; chiefly the following ingredients; Water, carbon dioxide as carbonic acid gas, flavors, sweeteners, acidifying materials, foam producing material, etc.

Of these water is the most important ingredient and should be unexceptionable as regards purity from the chemical and bacteriological standpoint.

The sweetener is sugar.

The main acidifying materials used are citric, tartric, malic and phosphoric acids all of which should be free from arsenical and metallic contamination.

What check is there of the finished product? Under the Pure Food Act the Halifax office of the Department of National Health undertakes at regular intervals to check for the following:

Saccharin, which is not allowed as a sweetener.

Color, only permitted to be added if stated on the label.

Preservative. This usually is benzoate of soda or sulphurous acid and allowed to be added if stated on the label.

Volume Content. In ounces.

This department does not make any inspection concerning sanitation in the bottling works. Where bad conditions are suspected either from the examinations made or by reason of complaints, the Department of National Health notifies the M. H. O. of the area in which the plant operates.

So we have operating within the borders of our province a number of bottling works all of which in a general manner follow the above procedure and

subject to the listed limitations. Some of these producers are of National and Inter-provincial repute. A visit to one of them is a pleasure and will worth doing and these companies are to be congratulated on the almost voluntary means and measures taken to ensure a clean, safe, and sanitary product as must be named on the cap of the bottle. However, in all fields of competition there develops the unscrupulous and the chiseler. These are found in the beverage industry. These individuals are preparing and bottling a food product under conditions far from sanitary probably because of lack of capital, lack of knowledge or not desirous of producing a high quality product. In practically all cases these individuals buy pure ingredients for their product but the method and conditions under which they prepare these ingredients, instead of tending to assure a pure, finished product would tend to result in a contaminated one.

The points and places where these beverages usually become contaminated are:

- 1. Lack of proper premises
- 2. Improper personnel in the plants for handling of food products.
- 3. Unsanitary room and equipment for mixing materials.
- 4. Inadequate facilities for properly cleaning bottles.
- 5. Improper care of utensils used in mixing room and insufficient care taken to keep same clean and sanitary.

It is interesting to note that many of the producing companies do not in any manner protect themselves from damage suits. Where this protection is made the premium is based on the number of bottles filled during the course of the year.

Of these the greatest source of contamination lies in the inadequate washing of the bottles. Minimum requirements are unclean bottles shall be exposed to a 3% alkali solution of which not less than 60% is caustic (sodium hydroxide) for a period not less than five minutes at a temperature of not less than 130 degrees F. or an equivalent cleansing and sterilizing process. (American Bottlers Carbonate Beverage Laboratories).

The point of the above is that it is impossible for any plant to wash their bottles by hand in a tub, and turn out a sanitary bottle, because if the solution they use is strong enough to do a thorough job of work they would not be able to keep their hands in it.

Bottled beverages are brought to our very door by modern methods of business as witness the trucks upon trucks which make regular visits to our towns and villages to place their products in innumerable drug stores, restaurrants, grocery stores, etc. No figures are available as to the quantity of beverages consumed within our province but it does run into an enormous figure. Because of the large quantity consumed and the tender age at which most of us begin to consume these soft drinks I feel there should be more protection for the consumer and as the source of that protection comes within the sphere of the Provincial Department of Public Health, I would suggest that this industry operate under some regulations to ensure the general public the privilege of purchasing a sanitary bottled carbonated beverage. Generally speaking I cannot see how there will be any improvement in this situation until such time as the Department of Public Health insists on rigid regulations regarding

the conditions under which soft drinks are bottled, and in this respect I suggest the following:

- A. That the operator of a bottling plant obtain a permit from the Department of Public Health, which shall have the power to cancel the permit for non-compliance or violation of such public health regulations as would be incorporated in the permit.
- B. That the premises of the bottling plant be suitable and satisfactory for the purpose intended.
- C. Every plant to have proper bottle washing facilities to include a constant supply of hot and cold water all arranged on a properly drained floor.
- D. All ingredients and equipment used in the plant to be kept under sanitary conditions and handled so as to avoid contaminating same.
- E. That the equipment, etc. be made of metallic substances which cannot be affected by the ingredients used.
- F. Nothing but pure water to be used in the manufacture of these beverages and that samples of it be very frequently furnished for chemical and bacteriological examination.

The distributions been appropriately being distributed by the representation of the contract o

PHYSICIAN WANTED

The Town of Louisbourg has been without a physician for over a year, and have put in a request to this office to see if we could secure a doctor. I have been informed that they have a checkoff system in vogue and that there is a very good living for anyone wishing to practise there. Further information may be secured through Mr. J. A. S. LeBlanc, office manager of L. H. Cann, Louisbourg, N.S.

- Dr. H. B. Atlee will speak on "Some Life Saving Procedures in Obstetrics."
- Dr. G. B. Wiswell will give a paper on "Neo-natal Haemorrhages and the Role of Vitamin K."

Surgeon Lieutenant Commander Graham will speak on "The Use of Sulfonamide Drugs in General Medicine."

Doctors and Druggists

THROUGHOUT its efforts to maintain the economic well-being of the Canadian Consumer, the Wartime Prices and Trade Board has not been unmindful of the physical welfare of that same Consumer.

Two ancient and dignified professions are charged with the responsibility of guarding the health of those who fight and serve and work and wait for the Four Freedoms—the doctor and the druggist. Both professions are now faced with problems of "short-supply"—not only of manpower but also of many of the essential materials which constitute the arms and ammunition for the battle against disease.

The fact that many pharmacists hid their diplomas behind a pile of miscellaneous merchandise and relegated their dispensary to an obscure corner of the store tended to undermine the confidence of the doctors in the allied skill of the pharmacist and some doctors prefer to do their own dispensing.

In the present critical times we must uncover and bring into effective use every hidden talent and every forgotten asset that can be employed against our common enemy. This is the need which induced the Wartime Prices and Trade Board to create a Management Service Division to study the wartime problems of our retail distribution system and to devise and apply corrective measures which would help necessary retail outlets to survive the perils of war and continue to supply essential service to the people.

Among the first of the retail trades to be examined was that of the druggist. The considerations that gave this trade precedence were not that the drugstore had become a neighborhood gathering-place because the doors were always open, nor because of the wide variety of merchandise the druggists had gradually acquired to meet the demands of careless forgetful or lazy shoppers but because it was considered vitally important to maintain an adequate distribution system throughout the nation to provide drugs and medical supplies for the medical profession and the public at large.

Studies soon proved that the retail druggist was approaching a position that was at least precarious. A nice short 48 hour week with assured income, no capital investment and comparatively few responsibilities was tempting the druggist's help and even the druggist himself to flirt with a job in defence inindustries, even though it meant forsaking his chosen profession and a business connection built up through many painful years.

Due to scarcity of many items which the druggist had stocked and featured in the front of his shop, his sales volume, (which tells the story of profit and loss in modern times) was falling off very rapidly and an already narrow margin of net profit was being still further reduced. (About 14% in 1942).

But analysis showed that however variegated the stock in the front of the drug-store, the back-bone of the business was in the dispensary, though some druggists had almost lost sight of that elementary fact.

Obviously the first step for Management Service to take, in order to achieve the broad objectives of the W.P.T.B. was to persuade the druggist to place the accent on the part of his business where it belonged—in the dispensary. Then followed the more tedious course of finding and applying means to reduce

operating costs, conserve manpower and vital stocks, and to curtail unnecessary services.

The druggists have responded well by adopting many economical practices to safeguard their position. After examining the problem of long hours, druggists across Canada have been unanimous in establishing early closing to help cut down operating costs, as well as to counteract the help problem. In many communities, the Sunday closing plan has been adopted whereby one druggist remains open and the rest close. By rotating each Sunday, many druggists have been able to take Sundays off for the first time in years. In spite of reduced hours, however, every druggist has felt his responsibility to the medical profession very keenly, and has continued to offer the services of his dispensary at any time for emergency prescriptions.

Many druggists are already making plans to reorganize and increase the capacity of their dispensaries. The development of this side of the retail druggist's business is stressed in every Management Service trade clinic. The average druggist is prepared to maintain an adequate stock of prescription drugs and many of them are today winning back the confidence of the medical profession with much improved dispensing departments. Stocks are being labelled attractively and ready reference files are being compiled of all the new developments in the pharmaceutical field. This effort to be of greater service to the doctor is assuming a trend of major proportions. In addition to the reorganization of the dispensary, the druggist today is placing more emphasis on the essential drug merchandise available to him. Vitamin preparations, special baby departments and other practical innovations are taking the place of less desirable merchandise from the point of view of the medical profession. Many of these druggists are ready and willing today to work with the doctor and they have already impressed upon the public their willingness to be of service.

This Division's attitude on the question of druggist-doctor co-operation has been conditional upon the druggist's determination to set his "house in order". He has been advised to prove his desire to work with the medical profession before approaching his local doctors. The proof, he has been told, lies in the manner in which he organizes his dispensary so that it will symbolize his efficiency as a dispensing chemist and create for him a professional character which is not only apparent to the doctor, but to the public as well.

Now, what can the doctor do?

Have a talk with your local druggist and consult him about stocks of scarce supplies and those in large demand. By better understanding and cooperation between the druggist and doctor, it will be possible to distribute drugs in "short-supply" to much better advantage and will increase the health facilities available to the public. There is an ample opportunity for collaboration, and a confidential chat with the druggists of your community will open the way to an improved approach to the many ways in which the doctor and the druggist can work together to promote essential service.

Surely it is not too much to hope that a close cooperation between two vital professions may continue to benefit the general public long after the national emergency which inspired it has become history.