THE NOVA SCOTIA

MEDICAL BULLETIN

Editor-in-Chief

Dr. J. F. FILBEE

Managing Editor

Dr. C. J. W. BECKWITH

Editorial Board

DR. W. A. CONDY

DR. G. H. HATCHER

DR. G. R. LANGLEY

Dr. R. B. NICHOLS

Dr. I. E. Purkis

DR. M. G. TOMPKINS, JR.

Departments

Personal Interest Notes

DR. R. B. NICHOLS

Thousand Word Series

Dr. G. R. Langley

Corresponding Members
Secretaries of Branch Societies

INSTRUCTIONS TO AUTHORS

Members and others wishing to contribute to *The Bulletin* are invited to submit their material to the Offices of The Medical Society, Public Health Clinic, Halifax, N. S. In general the rules laid down for the Canadian Medical Association Journal and published therein under the heading "Instructions to Contributors".

Material should preferably be typed on one side of paper 8½ x 11 inches, with wide margins. Carbon copies are not satisfactory. Any table, illustration etc. quoted from another published source must have the permission of both author and publisher.

Opinions expressed in articles appearing in *The Bulletin* do not represent the policy of The Medical Society of Nova Scotia unless specifically stated to do so.

Imagery

Commercial Institutions, Politicians, Civil Servants, Societies, among many others seem to have become increasingly concerned in recent years with the image that they project to the public. As students of physics, most of us have been exercised in the manner in which true and false images may be obtained when refracting light through different media, so that it is not difficult for us to follow the simile of the two images of the institution as it sees itself, and of the institution as the public sees it. Which of these two images is the true, and which the false image seems to depend on who is doing the looking. What gives rise to concern and anxiety is that the two images, instead of being identical, may be distorted, completely inverted, or so out of focus as to be unrecognisable.

The modern remedy for the disease of the distorted public image is to employ a public relations officer to project a better image. On the principle that if a little is good, then more is better, whole departments of public relations officers have grown up, and with further specialisation, separate firms of public relations advisers have developed. One might think that specialisation could go no furthere, but it was recently reported that a Californian firm of public relations advisers had become concerned about adverse comment on their functions. Their remedy? To employ a public relations consultant!

AUTHORIZED AS SECOND CLASS MAIL BY THE POST OFFICE DEPARTMENT, OTTAWA, AND FOR PAYMENT OF POSTAGE IN CASH.

THE MEDICAL SOCIETY OF NOVA SCOTIA

NOVA SCOTIA DIVISION

THE CANADIAN MEDICAL ASSOCIATION

MEMBERS OF EXECUTIVE COMMITTEE

BRANCH SOCIETY REPRESENTATIVES

OFFICERS	BRANCH SOCIETT REPRESENTATIVES
PRESIDENT T. W. Gorman	Antigonish-Guysborough J. E. MacDonell
	Cape Breton H. J. Martin, A. L. Sutherland
PRESIDENT-ELECT A. J. M. Griffiths	Colchester-East Hants B. D. Karrell
IMMEDIATE PAST-PRESIDENT C. L. Gosse	Cumberland G. M. Saunders
	EASTERN SHORE P. B. Jardine
CHAIRMAN EXECUTIVE COMMITTEE S. C. Robinson	HALIFAX H. I. MacGregor, J. A. Charman, R. O. Jones Inverness-Victoria N. J. MacLean
VICE-CHAIRMAN EXECUTIVE - C. E. Kinley, Jr.	LUNENBURG-QUEENS D. C. Cantelope
H M CDH:	Pictou County C. B. Smith
Honorary Treasurer C. D. Vair	Valley J. A. Smith
EXECUTIVE SECRETARY C. J. W. Beckwith	Western Counties R. P. Belliveau
	OBSERVERS
Representatives to C.M.A. Execu	TIVE COMMITTEE H. J. Devereux
CHAIRMAN PUBLIC RELATIONS COMM	
CHAIRMAN MEDICAL ECONOMICS COM	
CHAIRMEN OF STANDING COMMITTEES	BRANCH SOCIETIES
	PRESIDENT SECRETARY
COMMITTEE CHAIRMAN	
Aging A. A. Macdonald	Antigonish-Guysborough - Rolf Sers - J. R. Greening
Aging A. A. Maedonald Archives D. R. MacInnis	CAPE BRETON Harvey Sutherland - H. R. Corbet
By-Laws J. E. Hiltz	Colchester-East Hants - T. C. C. Sodero - K. B. Shephard Cumberland R. A. Burden - J. A. Y. McCully
CANCER Ian MacKenzie	EASTERN SHORE R. A. Burden - J. A. 1. McCully
CHILD HEALTH B. S. Morton	Halifax H. I. MacGregor - E. B. Grantmyre
CIVIL DISASTER S. H. Kryszek	INVERNESS VICTORIA C. L. MacMillan - W. MacIsaac
DISCIPLINE R. F. Ross	Lunenburg-Queens D. B. Keddy - W. I. Bent
Editorial Board (Editor) J. F. Filbee	Pictou County John Grieves - W. D. MacLean
FEES H. C. Still	Valley Medical Earl Reid - D. L. Davison
FINANCE (Hon. Treas.) C. D. Vair	Western Nova Scotia - P. H. LeBlanc - V. K. Rideout
HEALTH INSURANCE D. K. MacKenzie	
Insurance P. B. Jardine Legislation & Ethics H. K. Hall	SECTIONS
LEGISLATION & ETHICS H. K. Hall MATERNAL & PERINATAL	CHAIRMAN SECRETARY
HEALTH D. F. Smith	Section for Anaesthesia: - C. C. Stoddard - A. A. Drysdale
Medical Economics G. M. Saunders	Section for General
MEDICAL EDUCATION J. A. McDonald	Practice: J. R. Meneil - W. A. Hewat
Membership J. A. Myrden	Section for Internal
NUTRITION K. P. Smith	Medicine S. T. Laufer - S. F. Bedwell
Pharmacy J. E. MacDonell	Section for Ophthalmology &
Physical Education &	Otolarynogology: D. M. MacRae - J. H. Quigley
RECREATION J. M. Williston	Section for Paediatrics: - N. B. Coward - R. S. Grant
PUBLIC HEALTH W. I. Bent	Section for Pathology: - A. W. Gyorfi - Ian Maxwell
PUBLIC RELATIONS I. E. Purkis REHABILITATION L. S. Allen	Section for Psychiatry: - Kenneth Hall - L. Kovaes Section for Salaried
REHABILITATION L. S. Allen RESOLUTIONS C. E. Kinley, Jr.	Physicians J. S. Robertson - S. H. Kryszek
Special Research - F. A. Dunsworth	Section for Residents in
Specialist Register F. J. Barton	Training: Peter MacGregor
TRAFFIC ACCIDENTS H. H. Tucker	Section for Surgery: E. F. Ross - J. A. Myrden
W. C. B. Liaison J. T. Balmanno	Section for Urology: F. G. Mack - W. A. Ernst

OFFICERS

Eventually someone must ask the question: What is the cause of all this distortion that requires such drastic remedies? Why is it that this disease affects mainly corporate bodies rather than individuals?

These questions strike home to the medical profession, which has recently become increasingly concerned with its public image, to the extent that the Canadian Medical Association now has a Public Relations Committee, whose members are chairmen of Public Relations Committees organised in each division. Some divisional committees employ the services of professional Public Relations Consultants, or full time Public Relations Officers. The need for these committees stems from the general acceptance among the medical profession that the public image of doctors as a group is bad, while physicians as individuals enjoy as high a reputation as ever.

However, the corporate body has no existence without the individuals that are its members. The Public Image of doctors as a group is the sum of the acts and impressions, good or bad, positive or negative, given by each individual doctor to each individual patient. If the image is distorted, it must be because the errors or omissions, or the negative attitudes of many doctors outweigh the good impressions, the positive actions and attitudes of the few.

The remedy lies not in the appointment of committees, but in the hands of each individual physician. Everyone must take time out from the rat race of his particular practice to preach the gospel of good medicine to his patients. Each physician must make a point of telling each patient that not only he, but his colleagues also, have spearheaded the movement to repay the costs of medical care through insurance, and that he favours the subsidisation of premiums of those who cannot afford them. He must convince each patient that the only way the patient can be sure of high quality care is by retaining the right to choose his own physician. A few minutes off the record with every patient by every doctor would do more to change the Public Image of doctors than could be achieved by dozens of committees. Moreover, it would be a true image as far as each patient was concerned, not the false image which is apparently perceived by the medical profession when they wonder what the public thinks of doctors.

Dr. Giffin of Kentville has expressed the clear opinion that the approach of organised medicine should not be negative, but positive.* How much more is it the duty of every doctor to state loudly and clearly what he believes in, wherever and whenever possible.

I.E.P.

*GIFFIN, A. A., Correspondence N. S. Medical Bulletin, XLIV: 20, January, 1965.

FORTY YEARS AGO

From The Nova Scotia Medical Bulletin February 1925 NOT IN FLANDERS FIELDS

Dear Sir:—In response to your letter of the 8th instant addressed to the nearest of kin of "The late Dr. William J. Egan," I may advise you at the very outset that in a legal sense, since I still happen to be classed among the lively denizens of this planet, I presume I am the nearest of kin myself.

Some months ago my attention was called by an observant confrere to the fact that my name, in your most recent official register, was decorated with a splendid memorial asterisk, doubtless indicating that I had already been gathered into my eternal reward.

However, as an asterisk usually suggests that information may be more fully obtained below, I take it that the compilers of your splendid register had very evidently agreed among themselves, that

if the Dr. Egan they knew had been like Hamlet's father, hurried into eternity unshriven and unabsolved, with all his imperfections still upon him, there was only one probable fate for him, only one probable post mortem residence,—and they sent me there with the very consoling address, below.

No, Sir; though I may oft times "seek the seclusion that the cabin grants," I am striving heroically not to correspond with your suggested address. Let me then assure you at once, that as in the case of the late lamented Samuel Clements, the reports of my death have been very grossly exaggerated.

Part of a letter from Dr. Egan to the Registrar written in January 1925.

Correspondence

Influenza

To The Editor The Nova Scotia Medical Bulletin Sir:

A new U.S. compound of potential therapeutic value in the treatment of Influenza A virus infection has been made available to the University Department of Bacteriology for experimental trial.

If and when an outbreak of Influenza A were to occur in the Province, I should be obliged if any interested practitioners would contact me to discuss the use of the drug.

Yours truly,

C. E. van Rooyen, M.D., Professor of Bacteriology, Dalhousie University.

PSYCHIATRIST

Opportunity for Psychiatrist in area serviced by new 200 bed regional hospital opened 1963. Inpatient and outpatient treatment facilities available. Private practice with remuneration for organizing and providing consultation services to governmental and other agencies. Applicants must be certified or certification eligible.

For further details write to-

Administrator, Central Newfoundland Hospital, Grand Falls, Newfoundland.

WANTED IMMEDIATELY

General Practitioner for well-established group of specialists and general practitioners in Antigonish, Nova Scotia.

Apply to P.O. Box 309, Antigonish, N. S.

Members are reminded that effective January 1965 the Workmen's Compensation Board has accepted the 1963 Schedule of Fees, pro-rated at 90%, as a basis for payment for physicians services.

BOOK REVIEW

Dermatology. R. M. B. MacKenna and E. Lipman Cohen. 279 pp. Baillière, Tindall and Cox, London; The Macmillan Company of Canada Limited, Toronto. 1954. \$3.15.

It would be inappropriate for a review of this compact volume (20.5 cms x 13.5 cms x 2 cms) to be anything but brief. It is one of a new series known as "Concise Medical Textbooks", and the authors have achieved admirably their objective of providing "a handy guide to the diagnosis and treatment of skin diseases".

This is a practical description of all the commoner dermatoses, and an appropriate number of the less common ones. Due attention has been paid to basic pathology and to the general principles of the art and science of therapy. It is up to date, and yet pays proper respect to tried-and-true traditional remedies. The index is adequate, and repetition is avoided by a system of cross-references. The print is small, but clear.

Unfortunately, as the authors state, "Dermatology is not a subject which can be adequately illustrated in the compass of an inexpensive textbook", and the only pictorial aids are one monochrome diagram in the frontispiece, and a few line drawings of common parasites. Despite the written description of the various dermatoses, provided with a clarity and authority worthy of authors of such eminence, the book is of complete value as a diagnostic aid only to the physician who is already familiar with the morphology and colour variations of the dermatoses described. This was not intended as, and cannot be, the complete textbook for the undergraduate student, but it provides a wealth of wisdom in a readily assimilable form.

D.R.S.H.

TRANSACTIONS - 111TH ANNUAL MEETING

INDEX

REPORTS FROM COMMITTEES, REPRESENTATIVES ETC.

	Page
Ageing, C.M.A.	32
Historyment	38
Annual Meeting Introduction	29
Aushityas	32
Branch Society Representatives to N.S. Executive	37
Ruilding	32
Business, Other.	38
RyLaws	31
C.M.R.S.P.	30
Cancer	
Cancer, C.C.A.	32
C.M.A. Executive, Representative to	32
Child Health	32
Civil Disaster	
Dalhousie Medical Library	32
Discipline	37
Eastern Shore Medical Society	29
Editorial Board	17.9
Executive, Chairman of	30
Federal Provincial Health Grants	34
Fees	33
Finance, Honorary Treasurer	31
Health Insurance	34
Insurance	33
Joint Study Committee	37
Joint Committee on Nursing	37
Legislation and Ethics	10.00
Maritime Medical Care Inc.	32
	36
Maternal and Perinatal Health	32
Medical Economies, N.S. Rep. to C.M.A. Com.	35
Medical Education.	32
Medical Legal Liaison Com.	34
Membership	30
Nominating Committee	37
N.S. Tuberculosis Assoc., Medical Advisory Board.	32
Nursing Assistants, Board of Registration	32
Nutrition	32
Panel Discussions.	38
Obituaries	29
Pharmacy	34
Physical Education and Recreation	34
Post Graduate Division Education	32
Provincial Medical Board, Appointments of Reps. to	38
Provincial Medical Board	33
Publie Health	34
Public Relations.	32
Rehabilitation	32
Resolutions	37
Special Research Committee	35
Specialist Register	32
Traffic Accidents.	33
Transaction 110th Annual Meeting	30
V.O.N. (Canada) Board of Governors.	32
W.C.B. Liaison Committee	34

Transactions*

THE MEDICAL SOCIETY OF NOVA SCOTIA

111th Annual Meeting September 13-17, 1964

Keltic Lodge, Ingonish, Nova Scotia

AM 1—The 111th Annual Meeting of the Society took place at Keltic Lodge, Ingonish September 14-17, 1964. The number of physicians registered for the meeting was 131. Together with wives, exhibitors and guests this made a total attendance of 287.

AM 2—Guests were Dr. F. A. Turnbull, President, Canadian Medical Association and Mrs. Turnbull; Honorable Judy LaMarsh, Minister of National Health and Welfare; Honorable R. A. Donahoe, Minister of Public Health, Nova Scotia and Mrs. Donahoe; Dr. A. F. W. Peart, Deputy General Secretary, Canadian Medical Association and Mrs. Peart; Dr. Hamish W. McIntosh, Associate Professor of Medicine, University of British Columbia as clinical speaker; Dr. D. C. Graham, Editor Canadian Medical Association publications; Mr. J. R. Wright of the Department of Economics, C.M.A. and Mr. C. K. Goodman, Advertising Manager, Ontario Medical Review.

AM 3—The Annual Meeting was preceded by the 6th Regular Executive Committee Meeting (Saturday September 12th) and the Annual Meeting of the Executive Committee (Sunday September 13th). On Sunday Evening, September 13th, a "CELIJDH" Keltic type was held in the form of a reception and a buffet supper.

AM 4—The Honorable R. A. Donahoe, Minister of Public Health for Nova Scotia spoke to a Luncheon Meeting on Monday, September 14th; the Honorable Judy La Marsh, Minister of Health and Welfare for Canada spoke at dinner Monday evening; Dr. F. A. Turnbull, President, Canadian Medical Association spoke at Tuesday's luncheon.

AM 5—Wednesday morning September 16th was devoted to a clinical programme which took the form of a Clinical Breakfast Meeting at which Dr. Hamish McIntosh spoke on "Medical Investigation and Management of Renal Calculi" which was followed by group clinical discussions on several subjects of topical clinical interest.

AM 6—The Golf Tournament took place on Wednesday afternoon. During this time a Fashion Show had been arranged for the ladies. The President's Reception took place on Wednesday evening, followed by the Annual Banquet.

AM 7—During the Annual Meeting, the Sections for Psychiatry, Internal Medicine, General Practice, Anaesthesia, Pathology, Surgery, Urology and Salaried Physicians held meetings.

AM 8—The Nominating Committee and the Committee on Committees met during the general sessions. The first Regular Meeting of the incoming Executive took place on Thursday morning September 17th.

First Business Session

9.30 a.m. Monday September 14, 1964

AM 9—The President Dr. C. L. Gosse as chairman of the Annual Meeting convened the First Business Session at 9.35 a.m. Dr. Gosse extended a warm welcome to the members and gave an outline of the plans for the Business Sessions.

AM 10—The Executive Secretary reported the deaths of the following members in the interval since the last Annual Meeting, July 2-5, 1963.

Ballem, John C., M.D.
Cochrane, Perry S., M.D.
Corston, James R., M.D.
Elliott, Henry C., M.D.
O'Neil, Freeman, M.D.
Park, John E., M.D.
Price, Ralph E., M.D.
Rice, Grace, M.D.
Ryan, Lewis R., M.D.
Smith, Harry S., M.D.

AM 11—The President requested one minute silence in tribute to the memory of these deceased members.

AM 12—The Executive Secretary read the names of 48 physicians who have applied for membership since the Annual Meeting 1963 (Annual Reports 1964 Page A.) It was regularly moved and seconded that these physicians be accepted as members of the Society. Carried.

AM 13—Election of Nominating Committee. The Executive Secretary read that section of the By-Laws pertaining to the election of this Committee and read the list of nominees from Branch Societies. A roll call was made to ascertain how many of the nominees were present at the meeting or registered. Nominations from the floor were made to fill the vacancies.

AM 14—The Nominating Committee was then declared elected by the Chairman.

Eastern Shore Medical Society

AM 15—The President announced that the members of the Society practising along the Eastern Shore (Musquodoboit Harbour to Sherbrooke) had made application to the Executive Committee to be recognized as a Branch of The Medical Society of Nova Scotia.

AM 16—The Executive Committee recommends to the Annual Meeting that this application be approved:

Moved by Dr. T. W. Gorman and Seconded by Dr. J. F. L. Woodbury "That the application for creation of a Branch Society to be known as The Eastern Shore Medical Society be approved." Carried.

AM 17—Transactions of the 110th Annual Meeting, 1963. It was regularly moved and seconded that these Transactions, as published in The Nova Scotia Medical Bulletin (September, 1963. Vol. XLII Number 9) be accepted. Carried.

REPORTS OF COMMITTEES

Report of the Executive Committee, Chairman, Dr. L. C. Steeves (A.R. Page 1).

AM 18-Dr. Steeves report included a review of the Executive Committee meetings during the year. There had been six regular meetings and one special meeting (of the Executive Committee). He referred to some of the activities of the Society which included; Presentation to Government in October 1963 of "A Plan for Medical Services Insurance" (Nova Scotia); The Committee on By-Laws had made a complete review and, following consultation with Branch Societies, the establishment of a "Council" for The Medical Society of Nova Scotia had been included as a new chapter in the amended By-Laws. The Annual Meeting will be asked to approve these By-Laws; The Joint Study Committee, made up of representatives from The Medical Society and from M.M.C., had been active during the year; the Society had undertaken a research project to study in depth the distribution of physicians in Nova Scotia and to attempt an evaluation of the unmet needs of the public in the area of medical services; The Cancer Registry had been established; A Meeting of the Officers of the Society with Presidents and Secretaries of Branch Societies had been arranged. This had been the first such meeting and had been considered a success by those attending. A recommendation that such a meeting be held each year was approved. He reported that the Society had been represented at the Second Mid-Winter Conference of Trans Canada Medical Plans; that a representative had attended the National Conference on "Medical Action for Mental Health" and that the full number of representatives from the Society had attended General Council of the Canadian Medical Association at the Annual Meeting in Vancouver.

AM 19-The long association between the Medical Profession and the Canadian Red Cross Society had been signalized on the Centenary of the International Red Cross by a Citation to The Medical Society of Nova Scotia. AM 20-During the year the Society had awarded Honorary Membership to Dr. D. I. Rice on the occasion of his leaving Nova Scotia to become Assistant Executive Director of the College of General Practice of Canada. At this Annual Meeting Honorary Membership is to be granted to Dr. C. W. Holland, Dr. A. R. Morton and Dr. C. L. Gass. Senior Membership in The Medical Society of Nova Scotia is to be awarded to Dr. J. P. McGrath and Dr. H. B. Atlee. Dr. N. H. Gosse had been nominated to Senior Membership in the Canadian Medical Association and had been awarded this honour at the Annual Meeting in Vancouver.

AM 21—Dr. Steeves report had two recommendations namely:

 That there be a full review of the Secretariat since the activities of the Society have increased to such a degree since the last review was made three years ago.

2. That there be a review of the Committees Structure of the Society to ensure the most efficient possible conduct of the Society's business.

AM 22—The report was received for discussion. In discussion it was noted that Dr. Steeves had completed his third year as Chairman of the Executive Committee. Dr. C. L. Gosse expressed the sincere appreciation of the membership for the manner which Dr. Steeves had discharged his obligations and expressed to him the thanks of the Society. On motion the report was adopted.

Editorial Board, Nova Scotia Medical Bulletin, Dr. J. F. Filbee, Editor (A.R. Page 37).

AM 23—Dr. Filbee reported on the activities of the Editorial Board during the year stating that discussions and plans for a new format for the Bulletin had reached completion. He expressed appreciation to Mr. C. K. Goodman, Advertising Manager on the Ontario Review for his assistance. It was noted that the new format for the Bulletin would appear with the January 1965 issue and in order to achieve this there will be a combined November-December issue for 1964.

AM 24—The report was received for discussion and on motion the report was adopted.

Representative to Trusteeship Committee, C.M.R.S.-P., Dr. C. H. Young (A.R. Page 33).

AM 25—Dr. Young presented his report which gave up to date information on the C.M.R.S.P. and C.M.E.F. He also stated that Mr. J. R. Wright of the C.M.A. staff was closely associated with the plan, was present at the meeting and would be pleased to discuss it with any member present. The report was received for discussion. Mr. Wright was asked to speak on the plans. On motion the report was adopted.

AM 26—Dr. C. L. Gosse, President, introduced Dr. Frank Turnbull, President of the Canadian Medical Association, Dr. A. F. W. Peart, Deputy General Secretary, C.M.A. and Dr. D. C. Graham, Editor, Canadian Medical Association publications.

Membership Committee, Chairman, Dr. J. A. Myrden (A.R. Page 55).

AM 27—In presenting his report Dr. Myrden recorded that membership in The Medical Society of Nova Scotia and the Canadian Medical Association is voluntary; at the close of the fiscal year, December 31st, 1963 there were 609 members in good standing and an additional 19 had paid 1963 dues in the early part of 1964, bringing the total membership for 1963 to 628, of which 25 were classified as Senior or Honorary Members. 48 new members had been accepted in the interval since the Annual Meeting 1963 and there had been twelve deaths.

AM 28—He appealed to the Branch Societies for their co-operation in having practising physicians make application for membership. The report was received for discussion, during which questions were answered concerning membership. On motion the report was adopted.

Committee on Finance, Chairman, Dr. J. F. Boudreau, Honorary Treasurer (A.R. Page 82).

AR 29—Dr. Boudreau presented his report with a detailed review of the fiscal year ending December 31st, 1963 and the current financial status for 1964. It included comparison of actual budget with income received to July 30th, 1964 and of the auditors statements for the year 1963.

AR 30—A net operating loss for 1963 of \$1,504.53 was reported; it was noted that the savings account, which in 1961 amounted to \$8,500.00 had been progressively depleted to adjust for operating losses to the point where, as of December 1963, the balance was \$2,500.00. Investments had not been increased or decreased during this

AR 31—A review of membership was presented including the members in arrears at the close of the fiscal year. Stating that membership is voluntary, an appeal was made to all members and Branch Societies to encourage licensed physicians to make application for membership.

AR 32—On motion the report was received for discussion. Many questions were answered with the focal point being the membership dues. This resulted in resolution AM (*64) No. 2:—

AR 33—Moved by Dr. C. H. Young, Seconded by Dr. H. B. Ross

"THAT the dues for the classification "ordinary membership" in The Medical Society of Nova Scotia be increased by an amount of fifteen dollars (\$15.00)."

AR 34—During the discussion of this motion an amendment was proposed namely:—

(AM No. 2a) Moved by Dr. G. W. Bethune, Seconded by Dr. J. F. Boudreau

> "That the increase in membership dues be ten dollars \$10.00)."

AR 35—Following discussion of the amendment the amendment was put to a vote and carried.

AR 36—It was the wish of the Annual Meeting that a letter be sent to each individual member of the Society including in some detail the reasons for the increase in membership dues. The increase will be proportionate for classifications other than "ordinary membership" except for the classification "post graduate training."

AR 37—The Special Meeting of the C.M.A. General Council January 29th - 30th, 1965 in Toronto was introduced. Dr. Boudreau explained that there is authority for an allowance toward expenses in the amount of \$100.00 to each Nova Scotia representative to regular meetings of C.M.A. General Council. Direction was requested as to whether this allowance was to apply to this Special Meeting. This resulted in resolution AM ('64) No. 3:—

AR 38—Moved by Dr. R. O. Jones, Seconded by Dr. J. F. Boudreau

> "THAT the Society provide funds to the amount of \$100.00 per representative for attendance at the Special Meeting of the C.M.A. General Council in January 1965." Carried.

AR 39—It was regularly moved and seconded that the report be adopted. In presenting this motion, the Chairman, Dr. C. L. Gosse, drew to the attention of the members that Dr. Boudreau had now completed three years as Honorary Treasurer and Chairman of the Finance Committee. Ap-

preciation for the attention he had given to his responsibilities was indicated by a hearty round of applause.

On motion the report was adopted.

(AR Page 67).

AR 40-The Session was adjourned at 11:00 a.m.

Second Business Session

The Session was convened by the President, Dr. C. L.

Gosse at 11:30 a.m. Committee on By-Laws, Chairman, Dr. J. E. Hiltz

AR 41-Dr. Hiltz was present to give his report. The first paragraph reads "During the past year, your Committee was charged with the responsibility of further developing our By-Laws with a view to including in them a special chapter dealing with the formation of a "Council" and also affecting any alterations or rearrangement of the previous By-Laws and necessitated thereby". His Committee had reported to the Executive in December 1963, February 12th, 1964, and April 6th, 1964, and had incorporated in the approved amendments such views as had been expressed by the Executive Committee. The proposed amendments to the By-Laws had been published in the July 1964 issue of The Nova Scotia Medical Bulletin (page 209). The document being presented to the Annual Meeting with recommendation for approval takes the form of "Pro-Forma By-Laws of The Medical Society of Nova Scotia" (1964) which are the end result of deliberations by the Executive Committee, consultation with our Legal Counsel and the Committee on By-Laws. Referring to Chapter IX-Council, it was noted that in article 2, section (v-1) had been omitted. Article 2 of Chapter IX refers to "the composition of Council" and section (v-1) reads "the members of the Nominating Committee".

AR 42—The report and the "Pro-Forma By-Laws (1964" were received for discussion.

AR 43—During discussion questions were answered on several points in the Pro-Forma By-Laws; however, particular attention was given to Chapter IX "Council". It was noted that full consultation and discussion on the subject of Council had taken place; that between the Annual Meeting 1962 and 1963 each of the eleven Branch Societies had discussed the concept of "Council" and ten of the eleven had passed resolution in favour of its development. That at the Annual Meeting 1963 the principle of Council had been adopted and the Committee on By-Laws instructed to develop a new chapter for the By-Laws entitled "Council". The debate at the current Annual Meeting resulted in resolution AM ('64) No. 4:—

Moved by Dr. A. A. Giffin, seconded by Dr. A. H. Shears

> "THAT a Council be established (for The Medical Society of Nova Scotia) and that the Annual Report of the Committee on By-Laws be adopted". CARRIED.

The Session was adjourned at 12:35 p.m. for luncheon.

Third Business Session

AM 44—The President, Dr. C. L. Gosse, called the Session to order at 3:00 p.m.

AM 45—Prior to continuing the review of Annual Reports Dr. A. A. Macdonald indicated that a number of the reports were for information and proposed the following resolution AM ('64) No. 5:—

Moved by Dr. A. A. Macdonald, Seconded by Dr. H. J. Devereux

"THAT Committee Reports numbers 9, 10, 11, 12, 14, 15, 16, and 18, being for information only, be adopted as printed and circulated." CARRIED.

AM 46—The reports referred to are:

Number 9 - Committee on Nutrition, Chairman, Dr. K. Smith - (AR Page 9).

Number 10 - Committee on Maternal and Perinatal Health, Chairman, Dr. D. F. Smith -(AR Page 11).

Number 11 - Committee on Child Health, Chairman, Dr. R. S. Grant - (AR Page 45).

Number 12 - Com. on Ageing, Chairman, Dr. A. A. MacDonald.

Number 14 - Canadian Cancer Society, Nova Scotia Division, representative Dr. Ian Mac-Kenzie — (AR Page 39).

Number 15 - Committee on Medical Education, Chairman, Dr. D. C. Cantelope - no report. Number 16 - Post Graduate Education, Director, Dr. L. C. Steeves - (AR (Page 109).

Number 18 - Medical Advisory Board, Nova Scotia Tuberculosis Assoc., Dr. R. L. Aikens, representative - (AR Page 19).

Committee on Cancer, Chairman, Dr. Ian MacKenzie (AR Page 40).

AM 47—Dr. MacKenzie presented this report which included the information that the Cancer Registry for the province of Nova Scotia had been established, being sponsored by The Medical Society of Nova Scotia. Regarding cigarette smoking and lung cancer, the questionnaire resmoking was presented. The progress made under the Uterine Cancer Detection Program was summarized. It was noted that no progress had been made toward a hostel for ambulant cancer patients and also that a limited study of cases of tumors of bone and connective tissues in Nova Scotia for the period of 1955-61 had been made.

There being no discussion a motion for adoption was

Committee on Specialist Register, Chairman, Dr. F. J. Barton (AR Page 71).

AM 48—This report indicated that, at the request of The Medical Society of Nova Scotia, the Provincial Medical Board was making progress toward the establishment of a Specialist Register. There being no discussion a motion for adoption was carried.

Building Committee, Chairman, Dr. C. L. Gosse.

AM 49—The report of this Committee, not having been incorporated in the volume of Annual Reports, was read by Dr. Gosse. The Committee reported that it was inadvisable at the present time for The Medical Society of Nova Scotia to consider building its own premises.

On the motion the report was adopted.

Report of Divisional Representative to C.M.A. Executive, Dr. H. J. Devereux, (AR Page 107).

AM 50—The Report was accepted for discussion. Dr. Devereux drew attention particularly to paragraph AM 478 suggesting that it be referred to the Committee on Health Insurance. On motion the report was adopted.

AM 51—The following resolution (AM '64 No. 6) was then presented:—

Moved by Dr. H. J. Devereux, Seconded by J. A. Smith "THAT Reports numbers 19, 20, 21, 28, and 29 be received for information." CARRIED.

AM 52—The Reports referred to in this resolution are:

Number 19 - Representative to Dalhousie

Medical Library Committee, Dr. H. C. Still
(AR Page 46).

Number 20 - Committee on Archives, Chairman, Dr. H. L. Scammel - (AR Page 7).

Number 21 - Committee on Civil Disaster, Chairman, Dr. S. B. Bird - no report.

Number 28 - Board of Registration, Certified Nursing Assistants; representative, Dr. C. J. W. Beckwith - (AR Page 72).

Number 29 - V.O.N. (Canada) Board of Governors, representative, Dr. J. J. Stanton - (AR Page 24).

Committee on Public Relations, Chairman, Dr. S. C. Robinson (AR Page 22).

AM 53—This report outlined the activities of the Committee for the year including the information that in cooperation with other Divisions of the C.M.A. a series of radio talks had been prepared and that five members of the Society would be participating. There being no discussion the report was adopted.

Committee on Legislation & Ethics, Chairman, Dr. H. K. Hall (AR Page 31).

AM 54—Dr. Hall presented his report and moved it be received for discussion. The report dealt with a resolution from the Annual Meeting 1963 which stated "That the Committee on Legislation & Ethics be asked to review the Medical Act with special reference to disciplinary, illegal and unethical behavior."

AM 55—Following detailed discussion resolution AM ('64) No. 7 was presented:—

Moved by Dr. R. O. Jones, Seconded by Dr. A. A. Macdonald

"THAT paragraph AM134 (of the report of the Committee on Legislation & Ethics) be deleted and referred to the Section for Psychiatry for further study." CARRIED.

AM 56—Paragraph AM134 referred to consideration of "the protection of the public against the inability of a doctor to practice owing to mental illness or from his attempt to practice under the influence of drugs or alcohol." On motion the report was adopted as amended.

Committee on Rehabilitation, Chairman, Dr. G. J. H. Colwell (AR Page 50).

AM 57—This report presented discussion on and recommendations pertaining to the following:—

 The necessity of a full time orthodontist in a clinic caring for patients with hare lip and eleft palate.

The importance of the apprenticeship and training program of the Rehabilitation Council in providing an adequate number of prosthethists and orthotists to staff the Brace Shop.

 That the Medical Society officially indicate its support of the proposed new Rehabilitation Centre (92 beds) indicating the extreme urgency

to facilitate by any necessary grants the next phase of planning as well as the construction.

AM 58—Following discussion, the report was adopted.

Committee on Traffic Accidents, Chairman, Dr. H. H.

Tucker (AR Page 73).

AM 59—In the absence of a member of this Committee the report was presented by Dr. Steeves. The report outlined the work of the Committee during the year and included four recommendations.

On motion the report was received for discussion.

AM 60—Discussion centered around the recommendation namely:—

 "The problem of bio-chemical analysis of alcohol level in a driver should be referred to the Medical Legal Committee of The Medical Society of Nova Scotia in association with the Nova Scotia Bar Society, with our recommendation that a breathalizer test be established as not only acceptable in our Courts but as a requirement in all cases suspected of having alcohol involved."

AM 61—Discussion resulted in resolution AM ('64) No. 8:—
Moved by R. O. Jones, Seconded by Dr. S. C. Robinson
"THAT this recommendation be referred back to
the Committee for further clarification with the
request that a member of the Committee be present
at the meeting at which their Report is made."

AM 62—Discussion of this motion indicated concern of the members about the possibility of further delay ensuing. An amendment was proposed (AM)'64 No. 8a:—

Moved by Dr. N. H. Gosse, Seconded by Dr. Ian MacKenzie

"THAT this recommendation (AM 342) be referred back to the Committee on Traffic Accidents with direction that the matter be discussed with the Nova Scotia Bar Society and be reported to the Medical Society again at a later date." CARRIED.

AM 63—Recommendation 2 "that the Traffic Accident Committee follow up the recommendations of the Medical Society that seat belts be worn and installed in all vehicles and that an improvement be made in the ambulance service in this province. In this regard, we should add that the air ambulance service should revert to the Air Search and Rescue Service."

AM 64—Recommendation 3 "that physical and mental standards be established in Nova Scotia along the lines established in British Columbia, to determine the fitness of a driver to operate a motor vehicle safely. We would recommend that the new Traffic Accident Committee modify the British Columbia standards to fit the requirements of Nova Scotia Drivers. We feel that these physical and mental standards adequately cover the entire field, however there are some sections which would only apply in British Columbia."

AM 65—Recommendation 4 "that the Department of Highways be approached with a recommendation that bumpers be provided on all vehicles on the highway, front and rear. This of course would apply to all vehicles except for motorcycles."

AM 66—There was discussion as to the merits of recommendation 4, but it was agreed that it should remain as a recommendation. AM 67—On motion, the report was approved as amended.
Committee on Insurance, Chairman, Dr. J. W. Merritt
(AR Page 8).

AM 68—This Report gave a summary of the current status of the Society Group Life Insurance, Group Disability Insurance, and Group Overhead Office Expense Insurance. AM 69—On motion it was received for information.

AM 70—The President read a telegram of good wishes from the President of the Nova Scotia Pharmaceutical Association.

AM 71—The Chairman of the Nominating Committee, (Dr. C. L. Gosse) requested the members to meet at 8:30 a.m. on Tuesday, September 15th.

AM 72—The Session was adjourned at 5:30 p.m.

Fourth Business Session Tuesday, September 15th, 1964

AM 73—The President, Dr. C. L. Gosse, called the Session to order at 9:55 a.m.

Committee on Fees, Chairman, Dr. H. C. Still (AR Page 53).

AM 74—Dr. Still presented his report which outlined the work of the 15 meetings of the Committee under the new terms of reference arising from the Annual Meeting 1963. Sections within the Society had been approached and some Sections had approached the Committee relative to pertinent matters. It was noted that the Chairman had sat as an observer at meetings of the Joint Study Committee; that items for negotiation from the Joint Study Committee had been considered by the Committee on Fees and that recommendations had been forwarded to the Joint Study Committee prior to their implementation of the 1963 Schedule by Maritime Medical Care. The report included a recommendation that an index to the 1963 Schedule be prepared and published as soon as practicable.

AM 75—The report was accepted for discussion. There being no discussion a motion for adoption was carried.

Representatives to the Provincial Medical Board of Nova Scotia (AR Page 79).

AM 76-Dr. D. R. Campbell presented this report. It included a report on the year's work, statistical information concerning registration of physicians on the Resident List and the Non-resident List stating that a total of 127 doctors had been registered in the past registration year and the total of physicians registered and residing in Nova Scotia is now 844. The Board had decided to proceed to set up a Registry of Specialists. It included a review of the items coming to the attention of the Board's Committee on Discipline. The subject of Temporary Registration was under study and the Society had been asked for an opinion on this matter. It was also noted that the Royal Commission on Health Services while approving of the principle of a "freeself governing profession" recommended that Provincial Colleges of Physicians and Surgeons be clearly separated from the Provincial Division of the Canadian Medical Association and that the disciplinary powers of the Provincial Colleges ought to be extended so that they have the authority to ensure that all medical and surgical practises be of high quality."

AM 77—The report was received for discussion during which there was discussion of the subject of Temporary Registration. On the motion the report was adopted.

Committee on Federal-Provincial Grants, Chairman, Dr. C. J. W. Beckwith (AR Page 69).

AM 78—This report which included a listing of the Federal-Provincial Health Grants with the money available and information as to whether there had been meetings of the Advisory Committees and also included a review of the five "service projects" and the one "research project" sponsored by The Medical Society of Nova Scotia was on motion received for information.

Committee on Pharmacy, Chairman, Dr. J. E. Mac-Donnell.

AM 79—This report had not been received in time to be included with the Annual Reports. Dr. MacDonell read his report. No meetings of the Committee had been held and the C.M.A. Committee of the same name had not been active. During the discussion it was suggested that the Committee might initiate a study as to the advisability of a Formulary.

On motion this report was adopted.

Committee on Medical-Legal Relations, Chairman, Dr. A. J. M. Griffiths (AR Page 76.)

AM 80—This report presented by Dr. Griffiths included a review of the meetings of representatives of the Society and the Bar Society during the year outlining the subjects discussed. It was noted that representatives of the Medical Society had been invited to participate in a panel discussion at the 11th Annual Refresher Course of the Nova Scotia Barristers Society on February 22nd, 1964. It was also stated that the feasibility of establishing a Medical, Legal Society was explored. The recommendations included that:—

AM 81—1. The Medical-Legal Liaison Committee be kept in being for at least another year.

That the Medical Society approve the establishment of a Medico-Legal Society open to all physicians residing in Nova Scotia.

 That contract between the medical and legal professions be encouraged as much as possible at individual, Branch Society and Provincial levels.

4. That consideration be given to holding a panel discussion on a suitable subject at either the Refresher Course or the next Annual Meeting of the Society with members of the panel drawn from the legal and medical professions.

 That the Editor of the Bulletin give consideration to publishing articles of medico-legal interest from time to time.

 That the possibility of a joint course in forensic medicine for legal and medical students be commended to the Deans of Medicine and Law at Dalhousie University.

AM 82—The report was received for discussion and several questions answered.

On motion the report was adopted.

Committee on Public Health, Chairman, Dr. W. I. Bent (AR Page 48).

AM 83—In the absence of the Chairman, Dr. D. A. Campbell presented the report. Recommendations in the report were:

AM 84—1. "That combined Tetanus Toxoid Polio Vaccine be routinely used for the protection of adults."

2. "That the Sabin Oral Vaccine programme be

emphasized in the pre-school programme."

"That all members of the Medical Society accept joint responsibility in the programme of venereal disease control."

AM 85—The report was received for discussion during which the position of the Sabin Oral Vaccine was reviewed as was the increased incidence of venereal disease.

On motion the report was adopted.

Committee on Physical Education & Recreation, Chairman, Dr. J. M. Williston (AR Page 21).

AM 86—Dr. Williston presented the report stating it was purely for information and thanked the programme committee for the opportunity of having a panel discussion during this Annual Meeting.

On motion the report was accepted for information, Committee on Health Insurance, Chairman, Dr. D. H. MacKenzie (AR Page 29).

AM 87—This report reviewed the work of the Committee which included a meeting with the Executive of the Section for Pathology, the attitude of the Nova Scotia Hospital Association toward pathologists' problems, a meeting with the Nova Scotia Hospital Insurance Commission in the interests of pathologists. A supplementary report distributed at the Annual Meeting indicated that the N.S.H.I.C. had informed the Committee that the Commission is prepared, if the individual hospitals so requested or indicated, to do away with the proration for overload and to accept 140,000 units as the optimum workload. It was also noted that the "formula" for remuneration of pathologists is flexible and has been substantially increased above the basic \$3,000 level when such is requested by a hospital. Reference was also made to a meeting with representatives from the other Medical Societies in the Atlantic Provinces in reference to a single prepaid medical plan for the Atlantic

AM 88—The report was received for discussion. During the discussion the subject of a single prepaid plan for the Atlantic Provinces was reviewed.

AM 89-On motion the report was adopted.

AM 90—Other Business, Dr. J. F. Filbee, Chairman, Editorial Board, introduced Mr. Clifford Goodman, Advertising Manager of the Ontario Medical Review, stating that he had been of great assistance to the Board in developing the new format for The Nova Scotian Medical Bulletin and providing advice relative to advertisements. Mr. Goodman was presented with a gift in appreciation of his co-operation.

AM 91—The President read a letter of greeting from Dr. H. W. Schwartz, a Senior member.

AM 92—The President announced that the Nominating Committee would again meet at 12:30 p.m. and that the Committee on Committees would meet at 7:30 p.m. this evening.

AM 93-The Session was adjourned at 11:00 a.m.

Fifth Business Session September 15th, 1964

AM 94—The President, Dr. C. L. Gosse, called the Session

to order at 11:25 a.m.

AM 95—Workmen's Compensation Board Liaison
Committee, Rep. Dr. A. W. Titus (AR Pages 44 and 108).

Dr. Titus summarized the report by noting that the

W.C.B. had now accepted the 1963 Schedule of Fees (at 90%) to be effective January 1st, 1965.

There being no discussion, a motion for adoption was

earried.

Committee on Medical Economics, Chairman, Dr. G.

M. Saunders (AR Page 25).

AM 96-Dr. Saunders presented his report which included a review and results of discussions with the Department of Public Welfare to update the agreement whereby certain groups identified under the Social Assistance Act receive physicians' services. The details of the new agreement were listed. The report included the following recommendations:-

AM 98-1. "That the Medical Economies Committee continue to encourage government to make a greater number of people in the Welfare Group eligible for paid physicians' services.

2. That the Medical Economic Committee, within a year, proceed with arrangements with Maritime Medical Care for the use of the current fee schedule as the basis of payment for services rendered to the welfare patient.

3. That negotiations be started with the Department of Public Welfare, Province of Nova Scotia, for the upgrading of the amount of money made available for the payment of physicians' services to the welfare patient."

AM 99-On motion the report was received for discussion. It was noted that the members of the Society had been informed by letter of these changes as approved by the Executive Committee and that the reimbursement for physicians' services to the welfare patient went into effect on june 1st, 1964, the basis being the 1958 Schedule of Fees. Paragraph Am116, being item (h) was discussed in detail. It reads "that referred consultations be a benefit for services rendered the welfare patient on the basis of one per specialty per month with repeat referred consultations by the same physician after four months." Resolution AM ('64) No. 9 resulted:-

Moved by Dr. S. J. Shane, Seconded by Dr. J. E. Mac-Donell

> "THAT The Medical Society of Nova Scotia direct Maritime Medical Care to pay specialists fees for welfare patients in accordance with the range of benefits in the Schedule of Fees of the Society pertaining to this specialty." CAR-

During the discussion of this resolution it was noted that this paragraph had been referred back to the Committee on Economics for further study by the Executive Committee.

AM 100-A motion for adoption of the report, as amended, was carried.

Report of Nova Scotia representative to the C.M.A. Committee on Medical Economics.

AM 100-Dr. G. M. Saunders. This report had resulted from a review by the Nova Scotia Committee on Economics of the reports of the Special C.M.A. Committee on Policy, the Special Committee on the Australian Plan and the Special Committee on Prepaid Medical Care in preparation for a meeting of the C.M.A. Committee on Economics on September 20th and 21st, 1964. It was noted that the C.M.A. Committee wished to have correla-

tion of Divisional opinions on these reports. Dr. Saunders' report was distributed to the 6th Regular Meeting of the Executive Committee and copies were available at the Annual Meeting. The Chairman of the Executive Committee, Dr. L. C. Steeves, stated that the Executive Committee had reviewed this in detail with Dr. Saunders. At that time the future handling of the report of the representative (Dr. G. M. Saunders) was discussed. The request by Dr. Saunders for guidance at the forthcoming meeting had been met. It had been recommended by the Executive that at the Annual Meeting Dr. Saunders should outline what this report includes so that the members will know what is going on. It was noted that these reports would be available to all members of the C.M.A. through a special supplement of the Canadian Medical Association Journal during September.

AM 102-In view of the current status of these discussions the Executive Committee had accepted this report for information. The Annual Meeting agreed with this action. Report of Special Research Committee, Chairman,

Dr. A. A. Giffin (AR Page 59). AM 103-Dr. Giffin presented this report which reviewed the results of the work of the S.R.C. since its appointment by the Executive Committee in 1960. These included:

1. Preparation of a Brief of the Royal Commission on Health Services, (October 1961).

2. Preparation of a Supplementary Brief to the Royal Commission on Health Services (September 1962).

3. Preparation of "A Plan for Medical Services Insurance (Nova Scotia) proposed by The Medical Society of Nova Scotia." (October 1963).

AM 104-It was noted that the Draft of the "Proposed Plan" had been approved at the Annual Meeting 1963; that it had been finalized by the Executive Committee on September 21st, 1963 and that the meeting with representatives of government took place on October 21st. 1963. The "Proposed Plan" had been published in the December '63 issue of The Nova Scotia Medical Bulletin. AM 105—The "Medical Insurance Advisory Committee" to the government of Nova Scotia had been created by an Order in Council, December 10th, 1963 and announced in the Press on January 28th, 1964. The members of this Committee are Mr. Frank Rowe, Q.C. (Chairman), Miss Electa MacLennan, Dr. J. C. Wickwire, Mr. Keough of Sydney, and Mr. D. N. MacLean of New Glasgow,

The application to Federal-Provincial Health Grants for financial support of a Research Project had been accepted. The objective of this Project (No. 602-7-59) is:-

AM 106-"To attempt to determine the medical needs of the population of Nova Scotia on the basis of distribution of physicians (General Practitioners and Specialists including physicians in Public Health) and facilities in relation to the practical requirements to satisfy the unmet needs in taking into consideration travel, local hospitals, and regional hospitals."

Dr. A. R. Morton of Halifax has undertaken to develop this research project under direction of the Research Team. AM 107-"Philosophy of Fee Schedule". It was noted that in June, 1961 the S.R.C. had been directed to examine "-the whole philosophy of the fee schedule"-and that further direction had been given by the Annual Meeting

1961. The report summarized what had been done and that no firm recommendations had been forthcoming. However, para AM271 includes the following: "with the advent of the report of the Royal Commission on Health Services it would appear justifiable to consider the basis of a Schedule of Fees to be for the insured population and if such a schedule were to be developed it could act as a 'guide' to charges for physicians services to those of the population who are not insured." The S.R.C intends to continue its studies of the subject.

AM 108—4. Report of the Royal Commission on Health Services. It was noted that Volume I had been tabled on June 19th, 1964, the day prior to the Nova Scotia representatives to General Council leaving for Vancouverthat the President, Dr. C. L. Gosse, on the basis of available information, had made a statement on the behalf of the Society on the afternoon of the 19th; that the S.R.C. had met on July 22nd to initiate a study of Volume I. Pertinent remarks on Volume I were included in this report. The recommendations from the S.R.C. dealt with the future study of Volume I.

AM 109—Seconding the motion that the report be received for discussion, Dr. R. O. Jones expressed the appreciation of the Society to Dr. Giffin's Committee and Dr. Saunders's Committee for the great amount of work done during the year. This was responded to by a round of applause.

AM 110—In response to a question the original motion setting up this Committee and the Terms of Reference were read and discussed. There being no further discussion a motion for adoption was carried.

Report of the President of Maritime Medical Care Incorporated. Dr. C. H. Young (AR Page 90).

AM 111—Dr. Young presented the report which included remarks under the following headings:—Enrollment, Financial Position, Utilization, Staffing, Professional Relations, Fee Schedule, and Sponsorship. There were six recommendations.

On motion the report was accepted for discussion.

AM 112—In opening the report for discussion, the President, Dr. C. L. Gosse, voiced the appreciation of the Society for the work done by Dr. Young. He also invited Mr. S. P. Brannan, General Manager of M.M.C., to participate in the discussion. Dr. A. W. Titus, Medical Director, was present as a member of the Society.

AM 113—A question was asked concerning an increase in administrative costs. Dr. Young stated that this was due to a high percentage of non-group subscribers and to the Seniors' Health Plan. Dr. Young was then asked to go into more detail regarding each of the six recommendations in his report. Following this and some discussion, Dr. Steeves (Chairman of the Executive Committee) introduced a resolution arising from the 6th Regular Meeting of the Executive (RE 6 No. 2);—

Moved by Dr. J. F. L. Woodbury, Seconded by Dr. T. W. Gorman

"THAT The Medical Society of Nova Scotia reaffirm its policy as outlined in its Brief (to government) of promoting Comprehensive Service Plan Coverage; that it continue its sponsorship of M.M.C. and that it advise the corporation that experimentation should be for the present directed only toward broadening of benefit coverage except that the Executive Committee shall have authority to approve or disapprove proposals involving other experiments."

Dr. Steeves explained that this resolution had developed from examination of the C.M.A. Special Committee on Policy; that at the Annual Meeting of the Executive Committee while discussing the report of the President of Maritime Medical Care it had appeared that this resolution covered recommendations 1, 2, 3 and 5 of Dr. Young's report. Dr. Steeves recommended discussion of resolution RE 6 No. 2 with the view of adoption by the Annual Meeting. Following discussion a motion for its adoption was carried. This resolution is now identified as AM ('64) No. 10.

AM 114—Discussion of "proration" led to a lengthy discussion in which all factors were examined. Arising from the discussion AM ('64) No. 11 was presented:—

Moved by Dr. H. C. Still, Seconded by Dr. J. A. Smith "THAT proration should never exceed 15% and be decreased to a more acceptable level as soon as possible." DEFEATED.

This resolution was presented for discussion. During discussion it was noted that the time was now 1:10 p.m. The President recessed the Session for luncheon.

AM 115—The 5th Business Session was reconvened by the President at 3:05 p.m. when resolution AM ('64) No. 11 was again read by Dr. Still. Following further discussion the resolution was put to a vote and defeated.

AM 116-Resolution AM ('64) No. 12:-

Moved by Dr. Devereux, Seconded by Dr. A. L. Sutherland

"THAT we adjourn debate on the topic of proration."

was presented and after discussion DEFEATED.

AM 117—Following further discussion of "proration" resolution AM ('64) No. 13 was presented:—

Moved by Dr. J. C. Wickwire, Seconded by Dr. R. P. Belliveau

"THAT we endeavour to obtain a more favourable rate of proration at the earliest date possible." CARRIED.

AM 118—A member noted that the 6th Business Session which included a panel discussion on Physical Education and Recreation under Dr. John Williston as moderator and a panel discussion on Medical Services Insurance and the Hall Commission Report under Dr. R. O. Jones had been scheduled to start at 2:00 p.m. and it was now 3:45 p.m. It was agreed by the members to proceed with discussion of recommendation No. 4, Page 95. This recommendation from Dr. Young's report reads "an expression of opinion regarding the desirability of negotiating closed agreements for specialists and general practitioners alike." AM 119—Dr. J. F. L. Woodbury referred to paragraph

AM 438 of his report for the Joint Study Committee. This was in the form of a resolution which had been approved by the Joint Study Committee:—

"THAT the Joint Study Committee recommend to the Board of Maritime Medical Care that the specialists' benefits requested by the internists

^{*}Copies of Annual Reports, 1964 are available to members on request.

in their submission (September 1, 1964) be incorporated in the M.M.C. contract as benefits for all specialties subject to the approval by The Medical Society of Nova Scotia at their Annual Meeting of a closed participating physician agreement for specialists."

Adding that paragraph AM 439 reads "The principle is that specialist services to Referred Patients be benefits to subscribers of M.M.C." Dr. Woodbury noted that the Society has already gone on record on two occasions as being in favour of a closed agreement for specialists. Resolution Am ('64) No. 14 was presented:—

Moved by Dr. J. F. L. Woodbury, Seconded by Dr.

S. J. Shane

"THAT the principle of a closed agreement between specialists and Maritime Medical Care be approved."

AM 120—After short discussion of this motion it was agreed that the 5th Business Session be recessed to 8:00 p.m.

AM 121—The President reconvened the Session at 8:35 p.m. and requested Dr. Woodbury to read his motion again. Following further discussion Resolution AM ('64) No. 14 was CARRIED.

AM 122—Recommendation No. 6 of Dr. Young's report was then considered. The recommendation reads "a committee or committees necessary to provide utilization of premium income on a basis equitable to the best interests of both subscribers and their attending physicians be established at once and a decision from this Society whether this be done under the auspices of Maritime Medical Care or The Medical Society of Nova Scotia."

AM 123—On motion this recommendation was referred to the incoming Executive for study.

AM 124—On motion the report of the President of M.M.C., as amended, was adopted.

Report of the Joint Study Committee. Dr. J. F. L. Woodbury, Vice Chairman, Executive Committee (AR Page 99).

AM 125—Dr. Woodbury, noting that this report had been referred to on several occasions, stated that it included two recommendations;

- "That the Joint Study Committee continue its studies of the prepayment for medical services.
- That liaison with Branch Societies of Nova Scotia and Sections within the Society be improved."

A motion that the report be received for information was carried.

Committee on Discipline, Chairman, Dr. R. F. Ross (AR Page 23).

AM 126—This report which stated that no problems had been brought to the attention of the Discipline Committee during the year was, on motion, accepted for information.

Report of Committee on Resolutions Chairman, Dr. J. F. L. Woodbury (AR Page 23).

AM 127—The report outlined the duties of the Resolutions Committee.

A motion for adoption was carried.

Joint Committee on Nursing, Report by Dr. C. J. W. Beckwith (AR Page 96).

AM 128—This Committee has representatives from the Registered Nurses Association of Nova Scotia, the Nova Scotia Hospital Association and The Medical Society of Nova Scotia. The Executive has named Dr. W. A. Coehrane, Dr. S. J. Burke Fullerton and Dr. Beckwith as representatives. The report included the Terms of Reference for the Committee which has liaison with the Canadian Nurses Association, the Canadian Medical Association and the Canadian Hospital Association.

On motion the report was received for information.

AM 129—Report of the Nominating Committee Dr. D.

F. Macdonald, Past President, took the Chair while Dr.

Gosse, as Chairman of the Nominating Committee made
his report as follows:—

President — Dr. T. W. Gorman
President Elect — Dr. A. J. M. Griffiths
Past President — Dr. C. L. Gosse

Executive Committee — Dr. S. C. Robinson

Vice Chairman,

Chairman

Executive Committee — Dr. C. E. Kinley Honorary Treasurer — Dr. C. D. Vair

It was regularly moved and seconded that nominations
It was regularly moved and seconded that nominations
cease. Carried. The slate of Officers was then declared
elected.

Branch Society Representatives to the Executive Committee

Antigonish-Guysborough — Dr. J. E. MacDonell,
Antigonish
— Alternate Dr. Gordon Silver,
Guysborough Co.

Cape Breton — Dr. H. J. Martin, Sydney
Dr. A. L. Sutherland.

Sydney

— Alternate

- Dr. N. K. MacLennan, Sydney

Colchester-East Hants — Dr. B. D. Karrel, Truro

 Alternate Dr. R. C. Stewart, Stewiacke

Cumberland — Dr. G. M. Saunders, Amherst

Alternate Dr. H. E Christie,
 Amherst

Halifax — Dr. R. O. Jones, Halifax

- Alternate

Dr. J. S. Robertson, Halifax
 Dr. J. H. Charman, Halifax

— Alternate Dr. R. S. Grant, Halifax

— Dr. H. I. MacGregor, Halifax

Alternate
Dr. E. B. Grantmyre,

Halifax

Inverness-Victoria — Dr. N. J. McLean, Inverness
— Alternate Dr. C. B. McLean,

Inverness

Lunenburg-Queens — Dr. D. C. Cantelope, Lunenburg

— Alternate Dr. D. A. Campbell

^{*}Copies of Annual Reports, 1964 are available to members on request.

Pietou

- Dr. C. B. Smith, Pietou

- Alternate

- Alternate

- Dr. J. B. McDonald,

Valley

Stellarton

— Dr. J. A. Smith, Windsor

Alternate, Dr. Paul Kinsman,
 Aylesford

Western Nova Scotia

— Dr. R. P. Belliveau, Meteghan

AM 130—The Chairman of the Nominating Committee noted that the application from the Eastern Shore Medical Society as a Branch Society had been approved by this Annual Meeting and recommended that Dr. McPhail be accepted as representative to the Executive Committee until the Branch Society forwards to the Executive Secretary their nominee as representative and his alternate. This recommendation was approved.

Appointment of Representatives of the Society to the Provincial Medical Board:

AM 131—The three year term of two of our six representatives had terminated. Nominations proposed for the term 1964-1967 were:

Dr. J. A. Myrden — Halifax

Dr. P. J. Gouthro — Sydney

There being no other nominations, these physicians were elected as representatives.

Nova Scotia Representative to C.M.A. Executive:

AM 132—The Annual Meeting approved the action of the Executive Committee in nominating Dr. H. J. Devereux, Sydney as representative; and Dr. N. K. MacLennan as alternate.

AM 133—Other Business. Dr. N. H. Gosse, stating that Dr. R. F. Ross had made some comments relative to a report from T.C.M.P. which should be further examined moved resolution AM ('64) No. 15:—

Moved by Dr. N. H. Gosse, Seconded by Dr. A. H. Shears

"THAT the matter introduced this morning by Dr. R. F. Ross respecting the report published by Mr. Shillington of T.C.M.P. to the effect that all reserves held by Medical Care Plans are held for and on behalf of the subscribers be referred to the Joint Study Committee for consideration as to implication." CARRIED.

AM 134—Dr. H. C. Still moved a vote of thanks to the outgoing President and Executive Committee for the work during the year. In seconding this motion Dr. Griffiths remarked that the success of the meeting had been due to a great extent to the services offered by and the activities of the staff of Keltie Lodge. A round of applause greated this motion which was carried.

AM 135—The Chairman noted that the 6th Businessession had, in fact, included only the two panel discussions to which he had previously referred, and consequently the completion of the recessed 5th Business Session completes the Business Sessions for the Annual Meeting 1964.

AM 136—Announcements: The 1st Meeting of the Executive Committee (1964-1965) was set for Thursday.

September 17th at 8:00 a.m.

AM 137—Noting that the Canadian Medical Association holds its Annual Meeting June 14th - 18th, 1965 in Halifax, it was announced that the 112th Annual Meeting of this Society would take place on Friday and Saturday following

the Dalhousie Refresher Course.

The dates of the Dalhousie Refresher Course having been changed to November 22nd to the 25th inclusive, the 112th Annual Meeting of this Society will take place in Halifax at the Lord Nelson Hotel, November 26th and 27th.

AM 138—On motion the 111th Annual Meeting was adjourned at 9:30 p.m.

AM 139—Panel Discussions: The panel discussion on "Physical Education and Recreation" was under Dr. John M. Williston as moderator with the panel members being Mr. Hugh A. Noble, Miss Mary Baker, and Dr. E. B. Skinner. The discussion was well attended and informative. At its conclusion a vote of thanks expressed the appreciation of the meeting to the participants.

AM 140—The panel on "Medical Services Insurance and the Hall Commission Report" had as moderator Dr. R. O. Jones, President Elect, Canadian Medical Association. The members of the panel were Dr. A. A. Giffin, Chairman, Special Research Committee, Dr. T. W. Gorman, President Elect, The Medical Society of Nova Scotia, Dr. Frank Turnbull, President, Canadian Medical Association, and Dr. J. S. Robertson, Deputy Minister of Public Health, Nova Scotia. The panel achieved the objective of placing before the membership and discussing, several of the essential points in the Hall Commission report. There was considerable audience participation. An expression of appreciation to the members of the panel was made at its conclusion.

F. GORDON ROBERTSON, C.L.U.

NORTH AMERICAN LIFE ASSURANCE COMPANY

ESTATE PLANNING — DEFERRED AND SINGLE ANNUITIES

Representative for Medical Society Group Life Plan

Bank of Canada Bldg.

123 Hollis St., Halifax

Phone: Office 423-7144

Residence 423-2198

The Hyperkinetic Circulatory States

Part Two - Conclusion

R. W. Young, M.D., C.M., F.R.C.P. (C)*
St. John's. Nfld.

As already stressed, increased cardiac output in the hyperkinetic circulatory states is produced by an increase in heart rate as well as an increase in stroke volume.

The fact that there is a relatively constant blood pressure in the face of large changes in cardiac output implies a regulation of cardiac output to match peripheral resistance or vice versa. It can be shown, according to Hamilton, that the cardiac output in the hyperkinetic circulatory states is governed primarily by the peripheral resistance and that it is secondarily regulated so as to maintain a relatively constant arterial pressure. In all of the hyperkinetic circulatory states there is a reduction in the peripheral vascular resistance. This is the result of either peripheral vasodilatation (beri beri) or the presence of an abnormal arteriovenous communication (arteriovenous fistula). tion of peripheral vascular resistance and hence of blood pressure sets in action the sympathetic reflexes originating in the baroreceptors of the aortic arch and the carotid sinus. These accelerate the heart and increase its stroke volume and so increase the cardiac output and maintain the blood pres-

The role of the venous pressure in the hyperkinetic circulatory states is not clear. The venous return may be increased and the heart of course pumps what it receives. The elevated venous pressure certainly facilitates ventricular filling.

The Hyperkinetic Circulation of Cor Pulmonale

This subject is controversial and has been the subject of much discussion in recent years. At the present time there is no universally accepted definition of cor pulmonale (pulmonary heart disease). In the minds of some, cor pulmonale does not exist until there is evidence of congestive heart failure. Cournand and his group however, are of the opinion that cor pulmonale means heart disease secondary to disease of the lung, pulmonary vessels or the chest wall. In Cournand's view, diagnosis requires only the demonstration of cardiac enlargement whether dilatation, hypertrophy, or both, in association with a pulmonary disease known to be

capable of compromising right ventricular function. Hemodynamic data from patients with cor pulmonale due to any cause other than emphysema is terribly scant. The remainder of this discussion will therefore be confined primarily to emphysema, the commonest cause of this disorder.

A high cardiac output in cor pulmonale was first demonstrated by McMichael, Sharpey-Schaefer and Howarth in 1945 and there have been conflicting reports ever since.

At an International symposium in 1958, sponsored by the Chicago Heart Association, two papers, with what at first appears to be conflicting opinions on this subject, were presented. The first of these was by Gilbert Blount, Jr. He reported on a series of 10 patients with emphysema of varying severity not complicated by heart disease and therefore without cor pulmonale. All 10 patients revealed a normal resting cardiac output. The second paper was by Irene Ferrer of Bellevue Hospital in New York. Her figures obtained at rest on 21 patients with emphysema sugfest a certain sequence of events. When the arterial oxygen at rest falls below 80 to 86% and the carbon dioxide tension rises, the cardiac output and pulmonary pressure both increase. The emphysematous group with only mild hypoxia did not show these changes.

Serial studies by Ferrer on patients with emphysema have also shown that the cardiac output rises in some cases of emphysema with the appearance of cor pulmonale. The cardiac output decreases in these patients with the onset of congestive failure, but remains at a level which is higher than normal, with a resulting high output failure. With therapy the cardiac output initially increases again, but with complete recovery it falls back towards more normal levels.

It would appear that patients with emphysema not complicated by cor pulmonale have normal or low cardiac outputs. Some patients, however, with emphysema complicated by cor pulmonale have outputs which are higher than normal and present with hyperkinetic circulatory states.

^{*}Fellow in Cardiology, Department of Medicine, Victoria General Hospital, Halifax, N. S.

	N O R M A L	ANO M I L D	M O D E R A T E	R E C O V E R E	In Congestive Heart Failure
OXYGEN SATURATION	96	93	86	D 82	58
pCO ₂	39	40	51	51	65
CARDIAC OUTPUT	3.12	3.19	3.57	3.60	4.65

Cardiac output in 21 patients with pulmonary emphysema (From Ferrer)

Paul Wood states that the cardiac output was high in 10% of his cases with cor pulmonale. This was not seen unless the arterial oxygen was below 90% saturation and the arterial pCO₂ was above 50 mm of mercury. When the pulmonary vascular resistance was less than 5 units and the blood gases were as described above, the cardiac output was raised but rarely above 10 liters per minute. When the pulmonary vascular resistance was higher, however, the output was usually normal or even low regardless of the blood gases. When both types were analyzed together the net result in Wood's series was a high normal output around 6 liters per minute at rest.

Ferrer has suggested that hypoxia may be the initiating factor of the increased cardiac output. Paul Wood also felt that hypoxia with its resulting vasodilatation was responsible for the hyperkinetic character of the circulation in Cor Pulmonale. Ferrer also suggested a role for the hyper volemia which is found in association with polycythemia. The cardiac output is not, however, increased in polycythemia rubra vera which is also accompanied by hypervolemia.

The work of Richardson et al established the importance of hypercapnia in the production of an increased cardiac output in Cor Pulmonale. They studied the effect on the general circulation of inhalation of carbon dioxide in 16 experiments on 10

normal subjects. He used 7% carbon dioxide in air breathed for seven minutes (Table II). Arterial carbon dioxide tension rose from a mean of 42 to 52 mm. of mercury. The cardiac output rose concurrently in every subject from a mean of 5.7 liters per minute to 8.2 liters per minute, an increase of 45%. Pulmonary ventilation rose from a mean respiratory minute volume of 9.0 to 44 liters and the pulse rate rose from 70 to 88 per minute. There was an increase of 20% in the stroke volume while the total calculated peripheral resistance fell by 23%. These results are highly significant (P less that 0.01). Similar degrees of hyperventilation with maintenance of constant arterial CO2 tension did not produce significant changes in circulatory dynamics and no increase in cardiac output. (Table III).

TABLE II
CIRCULATORY EFFECTS OF HYPERCAPNIA
(RICHARDSON ET AL)

	16 Controls (Mean)	16 Experiments (Mean)
Arterial pH	7.38	7.25
Arterial pCo ₂ (mm Hg.)	42.0	58.5
Cardiae Output (L/min)	5.7	8.2
Peripheral Resistance (mm of Hg/L/Min)	16.8	13.1
Heart Rate (beats/min)	70	88
Ventilation (L/min)	9	44

For Explanation see text

TABLE III
CIRCULATORY EFFECTS OF HYPERVENTILATION
(RICHARDSON ET AL)

	12 Controls (Mean)	16 experiments (Mean)
Arterial pH	7.37	7.38
Arterial pCO ₂ (mm Hg)	37.7	36.1
Cardiae Output (L/min)	5.2	5.2
Peripheral Resistance (mm.Hg/L/min)	14.2	15.2
Heart Rate (beats/min)	69.5	74.7
Ventilation (L/min)	11.8	39.6

The mechanism by which hypercapnia produces the demonstrated increase in cardiac output is not completely understood although carbon dioxide causes arteriolar vasodilatation and therefore a fall in systemic arterial resistance. The vigorous respiratory movements accompanying elevation in the blood CO2 tension cannot be responsible since comparable degrees of hyperventilation without a change in arterial pCO2 did not alter cardiac output. It would appear also that the fall in blood pH which accompanies hypercapnia is not an important factor in the rise in cardiac output since it has been shown that a similar decrease in pH during ammonium chloride or lactic acid infusion has no effect on cardiac output. Sechzer and co-workers have recently demonstrated that if inhaled, carbon dioxide concentration is high enough to raise the end respiratory CO2 tension to 50 or 60 mm. of Hg, there is an increase in plasma concentration of norepinephrine and epinephrine. These catecholamines may be responsible for the rise in cardiac output and blood pressure during hypercapnia.

The Hyperkinetic Circulation in Anemia

Investigations in anemic subjects have shown that the resting cardiac output may reach 13 liters per minute. There is no increase at rest, however, until hemoglobin values fall below 7.0 grams. Graettinger (1960) studied 25 patients with anemia and 11 controls. (Table IV). All patients had been anemic for at least two months. Group I had nine patients with a mild anemia (not below 7.5 grams %) and Group II had 16 patients who were severely anemic (hemoglobin below 7.1 grams %).

The mean cardiac output at rest in Group I was normal but in Group II it was significantly elevated. A significant increase in cardiac output which was greater than in the controls occurred during exercise in both Groups. The heart rate and stroke volume was significantly elevated at rest in Group II but not in Group I. At rest and during exercise the mean right atrial pressure in both groups was normal. A decreased systemic resistance was noted in the severely anemic patients at rest and during exercise.

What is the mechanism which results in the increased cardiac output in chronic anemia? On the basis of right atrial pressure measurements Sharpey-Schaefer suggested that the Starling mechanism may be important. In the investigation discussed above, however, the right atrial pressure was normal and this suggests that this mechanism plays no role in determining the increase in cardiac output in anemia. A decrease in blood viscosity would be expected to play some role in the increase in blood flow in these experiments. Stead and Warren proposed that the decrease in total peri-

pheral resistance secondary to the direct vasodilatory effects of anoxia on peripheral vessels was a prime mechanism. No evidence to support this was found by Hatcher or colleagues in studies of chronic post-hemorrhagic anemia in dogs.

TABLE IV
CIRCULATORY EFFECTS OF ANEMIA* +

	Normals	Group I	Group II
	N=11	N=9	N=18
HEMOGLOBIN (Gms%.)	13.5	9.5	5.2
CARDIAC INDEX			
(L/min/M ²)			100000
Rest	3.15	3.40	4.84
Exercise	4.38	5.76	7.30
HEART RATE (Beats/min)			1
Rest	73	81	87
Exercise	93	102	101
STROKE VOLUME			
INDEX (mls/beat.m ²			
Rest	43	44	56
Exercise	48	56	72
RIGHT ATRIAL			
PRESSURE (mm Hg)			
Rest	5	3	5 7
Exercise	3	4	7
SYSTEMIC		16	1 9
RESISTANCE			
(dynes. sec /cm ⁵)			
Rest	1500	1400	930
Exercise	1150	1000	714

^{*} For explanation see text

Hatcher et al found a humoral factor in control of cardiac output. Working with anesthetised dogs, they replaced blood with Dextran using exchange transfusion to produce severe anemia. An early rise in cardiac output at one and three hours fell to near normal levels by the second day, rising again by the fourth day. There was also an increased rate of extraction of arterial oxygen throughout the study, being highest on the second and third days.

From the third hour to the ninth day, the animal's blood contained high concentrations of a cardiotonic agent which induced changes in normal

⁺ After Graettinger

dogs comparable to those found in the Hyperkinetic Circulatory States. This agent is absent from normal blood. It is possible then that this cardiotonic agent is an important factor determining cardiovascular responses in chronic as well as acute anemias.

The term cardiotonic agent is used when referring to this material because of its effect in elevating the cardiac output. There is no evidence, however, to suggest that its only action is directly on the heart. Indirect mechanisms such as the production of peripheral arterial vasodilatation may be its mechanism of action.

The Hyperkinetic Circulation of Beriberi

Beriberi is a deficiency disease characterized by a multiple neuritis, changes in the cardiovascular system and frequently edema. The primary manifestations are attributable to thiamine deficiency. The essential features of Beriberi heart disease are the peripheral vasodilatation, the hyperkinetic circulation and the enlargement of the heart. Congestive failure invariably results in the untreated cases.

Despite the general belief that the cardiac output is high in heart failure due to thiamine deficiency the evidence for this is chiefly clinical and the number of measurements remarkably few. Blacket et al reviewed the world literature in 1960 and found only five cases with accurate measurements of the cardiac output. They added nineteen cases of their own. All of Blacket's cases were alcoholics but none of them had cirrhosis of the liver.

The cardiac output varied between 7.2 and 26.5 liters per minute and the cardiac index between 4.2 and 15.5 liters per minute per square meter. Interestingly, arterial oxygen desaturation was present in eight cases. The lowest saturation was 87%.

The pulse rate averaged 95 before treatment and 80 on recovery. There was no correlation between cardiac index and pulse rate. The highest cardiac index of 15.5 liters per minute per square meter was achieved with a heart rate of 88 per minute. The stroke volume varied accordingly. The right atrial pressure, although initially high, (mean level of 9 mm. Hg.) returned to normal with therapy. The calculated peripheral resistance tended to be low and always rose with recovery. In some cases the peripheral resistance was as little as $\frac{1}{4}$ of normal.

The block in the metabolic pathways induced by thiamine deficiency leads to arteriolar dilatation. This is maximal in skeletal muscles and produces, in effect, an arteriovenous fistula. As a result the peripheral resistance falls and the cardiac output rises.

It should be stressed that the symptoms of beriberi may begin abruptly and that the course may be fulminating with death occurring within a few days of onset. The possibility of beriber heart disease should be borne in mind in any case of heart failure of obscure origin as here is one of the fatal forms of heart disease which is curable. A reduction in cardiac output with a rise in peripheral resistance can be demonstrated within a few hours of giving thiamine.

The Hyperkinetic Circulatory State of Liver Disease

A hyperkinetic circulatory state may occur with chronic liver disease. Kowalski and Ableman noted an elevated cardiac index in approximately 1/3 of their patients with Laennec's cirrhosis and chronic alcoholism. These patients also had a low peripheral vascular resistance.

It is difficult to establish the factors involved in the production of a hyperdynamic circulation in liver disease. In her studies, Sherlock was careful to exclude patients with anemia as well as patients who might have beriberi. She found a mean cardiac index of 5.3 ± 1.98 liters per minute per square meter in 24 patients with portal cirrhosis. (Figure I). The control mean cardiac index was 3 to 4 liters per minute per square meter. The range in the cirrhotic patients was wide, but approximately one half the results were above the upper limits of normal. In contrast, four patients with biliary cirrhosis had a mean cardiac index of 3.97 ± 0.75 liters per minute per square meter. This is not significantly greater than the normal group. Furthermore, cardiac outputs as high as 15 liters per minute have been noted in patients with subacute hepatitis and liver failure who at autopsy show no portal collateral circulation. Some degree of hepatocellular failure is therefore the essential factor required to produce a Hyperkinetic Circulatory State.

Sherlock also reports that 6 patients with portal cirrhosis and portal caval shunts all had increased cardiac outputs. However, six patients with extrahepatic portal vein obstruction and extensive portal systemic vascular shunting had normal cardiac outputs. This suggests that although extra hepatic portal caval shunting of blood is not sufficient by itself to produce an increased cardiac output, it is probably an aggravating factor in the presence of hepatocellular failure.

In patients with liver disease the cardiac index is significantly greater in patients with angiomas than in patients without angiomas. There is no correlation, however, between the number of angiomas and the increase in the cardiac index. There is also no correlation between the cardiac index and the presence of liver palms.

A rough correlation is found between the degree of hypoalbuminemia and the cardiac output. However, this is not statistically significant.

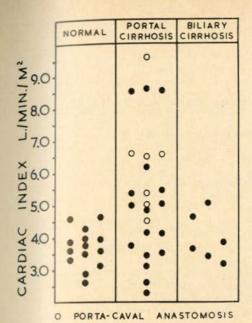


Fig. 1. The range of cardiac indices in normal adult subjects and in patients with portal cirrhosis and biliary cirrhosis. Normal = 3.68 ± 0.6 L./minute/Sq. M. Hollow circles represent patients with portacaval

anastomosis.

It is proposed that the hyperkinetic circulatory state in liver disease results from the opening up of a large number of normally present, but functionally inactive arteriovenous anastomoses. This is theoretically equivalent to the effect of a single large arteriovenous fistula.

Shorr et al have demonstrated the production of a vasodilator material (VDM) or Ferritin by the anoxic liver. The failure of the liver to metabolise a vasodilator substance produced elsewhere in the body or absorbed from the intestinal tract is an alternative suggestion to Shorr's hypothesis.

The only reported case of congestive heart failure due to the hyperkinetic circulatory state of liver disease, without associated thiamine deficiency, was reported by Sherlock in 1958. It is probable that most patients die of liver failure before congestive heart failure has had time to develop.

The Hyperkinetic Circulatory State of Arteriovenous Fistulas

Arteriovenous fistula may be congenital or acquired and may occur in any situation particularly in the brain, limbs or lung.

Congenital or cirsoid aneurysms consist of a twisted mass of dilated vessels in which the artery and vein are in direct communication. One or more superficial angiomas may be seen elsewhere or there may be a family history of such nevi. The great majority of acquired arteriovenous aneurysms are due to perforating gunshot wounds at war and are usually seen therefore in connection with the femoral, brachial or carotid arteries. Occasionally they may be syphilitic or mycotic in origin.

Warren et al (1951) reported their experience with 47 cases of arteriovenous fistula. These cases were studied before and after operation. None of the patients was in congestive heart failure.

Cardiac outputs were determined 6 days before and 14 days after surgery. The latter determination was considered to be the normal cardiac output for the patient. 25, or 53% of the 47 patients had pre-operative cardiac outputs which were significantly higher than normal. These range from 25 to 128% higher than normal outputs. The highest cardiac index recorded was 7.1 liters per minute per square meter. The increased cardiac output was primarily the result of an increase in stroke volume.

The Hyperkinetic State of Paget's Disease of Bone

The Hyperkinetic circulation associated with extensive Paget's disease was first demonstrated by McMichael et al in 1945. In one case described by McMichael the cardiac output was 13 liters per minute and it was estimated that from 4 to 5 liters of blood was shunted through the diseased bones.

REFERENCES

Blacket, R. B. and Palmer A. J., Brit. Heart J. 22: 483-501, 1960.

Braunwald, E. et al, J. Clin. Invest. 40: 1882-90, 1961.
Braunwald, E. et al, J. Clin. Invest. 39: 1874-84, 1960.
Chapman, C. B., Ann. Intern. Med. 53: 1272-80, 1960.
Chapman, C. B., Ann. Intern. Med. 57: supp 2: 1-43, 1960.
Epstein, F. H. et al, J. Clin. Invest. 32: 543-547, 1953.
Fritts, H. W., Med. Clin. N. Amer. 47: 563-78, 1963.
Frye, R. L. et al, J. Clin. Invest. 39: 1043-50, 1960.
Hamilton, W. F., Circulation 8: 527-543, Oct. 1963.
Hatcher, J. D. et al, Canad. J. Biochem. Physiol. 41: 1887-99, 1963.

Katz, L. N., Circulation 21: 483-98, 1960.
Murray, et al, Amer. J. Med. 24: 358-67, 1958.
Richardson, et al, J. Clin. Invest. 40: 31-43, 1961.
Sunahara, F. A. et al, Amer, J. Physiol. 176: 139-143, 1954.
Warren, J. V. et al, J. Clin. Invest. 30: 210-214, 1951.
Warren, et al, J. Clin. Invest. 30: 220-226, 1951.
Williams, J. F. et al, Amer. J. Cardiol. 10: 46-51, 1962.
Graettinger, J. S. et al, Ann. Intern. Med. 58: 617-26, 1963.

Adams and Veith, The Pulmonary Circulation, 1958. Rushmer, Cardiovascular Dynamics, 1961. Keele, Sampson Wright's Applied Physiology, 1961. Paul Wood, Diseases of the Heart and Circulation, 1958.

Figure 1 reproduced with permission from Amer. J. Med. March, 1958 after Murray, Dawson and Sherlock.

CONCLUDED

Venous Thrombosis and Pulmonary Embolism

C. EDWIN KINLEY, M.D., M.Sc., F.R.C.S. (C), and F. G. DOLAN, M.D., F.R.C.S. (C)*

There are many varieties of venous thrombosis and thrombophlebitis. This paper concerns those types which commonly lead to pulmonary embolism.

SITES OF ORIGIN OF PULMONARY EMBOLI – It is usually agreed that the majority arise in the deep veins of the lower limbs; another common site is the pelvic veins; less commonly, pulmonary emboli may arise in the right heart, the inferior vena cava, or the veins of the upper limbs. The disease is rare in infants and children, but occasionally pulmonary emboli arise from the hepatic, cerebral or nasopharyngeal veins.

PATHOGENESIS OF VENOUS THROM-BOSIS – The "triad of Virchow" still encompasses the various factors held responsible: (1) Decreased rate of blood flow. This is contributed to by such things as cardiac failure, immobility, obesity, age over 50. Local venous obstruction may exist, as with pregnancy, ascites, the Fowler position, prolonged sitting, or varicose veins. (2) Changes in the constituents of the blood, including dehydration, polycythemia, the expected post-operative increase in numbers and stickiness of platelets. (3) Damage to the vein wall, as may occur from external pressure, operative or other trauma, or infection (septic thrombophlebitis).

It has been shown that thrombosis often starts in the pockets of venous valves. The most frequent site is in the veins of the thigh (even though the signs may first appear in the leg). Pathologically, "phlebothrombosis" is characterized by a relatively normal vein wall containing within its lumen a loose friable clot. This condition is often not clearly or easily distinguished at the bedside from "thrombophlebitis". The latter stage shows an inflamed, edematous wall, with a variously adherent thrombus in its lumen. The underlying mechanisms of these two conditions is most often the same, and their clinical management is identical. "Phlegmasia alba dolens" and "Phlegmasia cerulea dolens" are more severe examples of these conditions.

INCIDENCE – Thrombosis of the lower limb veins occurs in 0.5 - 2% of all hospital patients, and in 3 - 4% of surgical patients. The

incidence is higher in older age groups and after operations of long duration. According to most series, pulmonary embolism occurs in 25% of patients who have post-surgical venous thrombosis and the embolus is fatal in about a third of the affected group. These figures are somewhat lower for postpartum patients.

The incidence of pulmonary embolism is not certain, but of fatal cases, only about 10% have had a clinical diagnosis of peripheral venous thrombosis.

CLINICAL FEATURES AND DIAGNOSIS OF VENOUS THROMBOSIS: Superficial vein thrombophlebitis is mentioned for completeness. It is manifested by a red, tender swelling along the course of the involved vein, which may be varicose. The disease may be multiple or recurrent, and rarely results in pulmonary embolism. Treatment is usually compression bandages and ambulation. Butazolidine is a very effective anti-inflammatory agent. Local compresses can be used intermittently. Ligation above the site of involvement (e.g. sapheno-femoral junction) is advised if the process is septic or advances despite the simpler measures. Ligation can also be combined with excision of the involved vein.

Deep venous thrombosis may be:

- (a) MILD with either absent or slight calf edema, plus a little pain and tenderness in the calf, and with no evidence of involvement of popliteal, femoral or iliac veins. The earliest signs are measurable increase in the circumference of the calf (a few inches above the ankle) and tenderness to palpation of the calf muscles. The superficial veins of leg and dorsum of foot may be distended.
- (b) SEVERE involvement is indicated by marked, rapid swelling of calf and/or thigh, with thrombosis of femoral and iliac veins. Phlegmasia alba dolens is an advanced stage, and in phlegmasia cerulea dolens the discolored limb shows incipient or established gangrene.

These patients may have systemic reactions, including fever, tachycardia, leucocytosis and hypotension.

^{*}From the Victoria General Hospital and the Department of Surgery, Dalhousie Medical School

CLINICAL FEATURES OF PULMONARY EMBOLI – They may result in sudden death or be entirely symptomless. Most cases fall in between these extremes. About 50% of pulmonary emboli result in infarctions. The clinical features may be divided into those occurring before and those after infarction.

(a) Before infarction, dyspnea without orthopnea is by far the most important symptom. Chest pain at this stage is ominous, as it accompanies large emboli; it is indistinguishable from pain of myocardial infarction. Apprehension and a sense of impending disaster may accompany pulmonary embolism. Symptoms of cerebral ischemia such as restlessness, syncope or convulsions may occur.

(b) After infarction develops, there may be pleuritic pain, which can be severe. Hemoptysis

occurs in about a third of infarctions.

PHYSICAL FINDINGS – There may be (1) signs of peripheral venous thrombosis. (2) Tachycardia and tachypnea. (3) Hypotension is usually of short duration unless the embolus is massive (or diagnosis wrong), and the same is true of cyanosis. (4) Other signs of embolism may be found, e.g., pulsation in left second interspace; loud P2; distended neck veins; enlarged liver: murmurs in 2nd left interspace.

After infarction fever is common, and there may be a pleural friction rub, rales, signs of effusion, and tenderness of overlying intercostal muscles.

X-RAY FINDINGS are not diagnostic and may change from day to day. Before infarction develops, angiography may be the only way of showing any abnormality. After infarction occurs, an infinite variety of shadows may be seen in the lung parenchyma (but not the classical "wedge shape with apex toward hilum", which is rare), or there may be a pleural effusion. The shadows may change from day to day.

ELECTROCARDIOGRAPHIC FINDINGS are absent in most cases, although larger emboli may result in transient changes, such as appearance of right axis deviation; development of S₁, S₂, S₃ and various S-T segments and T wave changes usually in left as well as right precordial leads.

Differential diagnosis of pulmonary embolism

(1) RESPIRATORY ILLNESS, particularly pneumonia may resemble pulmonary embolism, but sudden onset of dyspnea and chest pain is much more suggestive of embolism; a response to antibiotics suggests pneumonia; the dyspnea of embolism is out of proportion to the X-ray findings; the sputum is important in distinguishing these two conditions as in pneumonia it is purulent whereas with embolism the sputum, at least early, is frankly bloody. If doubt exists, treatment should be directed at both possibilities.

(2) MYOCARDIAL INFARCTION may complicate pulmonary embolism and vice versa. The differentiation of these two conditions may be very difficult early but most myocardial infarctions can be diagnosed by the EKG changes and changes in the serum enzymes (SGOT, LDH). If the EGG is not suggestive of myocardial infarction in the presence of sudden chest pain, dyspnea and hypotension, pulmonary embolism is likely.

Congestive heart failure may follow pulmonary embolism, but in such instances other findings usually point to the primary diagnosis of pulmonary embolism: bloody sputum, dyspnea and cyanosis out of proportion to lung congestion; predominance of right sided heart failure, and EGG evidence of right bundle branch block or RVH suggest pulmonary embolism, as does poor response to digitalis. The latter features are especially important in distinguishing recurrent small pulmonary emboli from primary cardiac disease.

(3) OTHER CONDITIONS requiring consideration include: pericarditis, cholecystitis,

pleurodynia, hyperventilation, etc.

PROGNOSIS OF PULMONARY EMBO-LISM – no final answer can be given. Many patients recover if further embolic episodes can be prevented. In general, about one third of patients die. The late development of cor pulmonale is a hazard to survivors.

Management of deep venous thrombosis

A) PREVENTION: (1) adequate hydration at all times, (2) most important is active movement. This is accomplished by encouraging very frequent and regular foot and leg exercises in bed patients and by early ambulation (not dangling feet over side of bed or sitting in a chair), (3) post-operative breathing exercises, (4) elastic stockings from toes to knees accelerate blood through deep veins, (5) anticoagulants are advised only in high risk groups as patients who have had pulmonary emboli in the past or patients in congestive heart failure, (6) avoidance of "Fowler" position (7) padding of operating tables.

B) Treatment of established thrombosis

- Elevation of foot of bed about 6 inches on blocks.
- 2) Anticoagulants should be used in every case. Heparin is the drug of choice for the first 3 5 days, after which time a change is made to dicumarol (or related drug) and the heparin is stopped. Anticoagulants are continued for at least three weeks after all signs of active venous disease have subsided, and the patient is fully ambulatory.
- Butazolidine may be given along with anticoagulants as an anti-inflammatory agent.
- Flow in small vessels may be improved by intravenous infusion of Rheomacrodex(R) daily for 3 - 5 days.
- 5) When edema has gone, gradual ambulation is begun, with elastic stockings being worn whenever the patient is upright. This helps prevent later "postphlebitic" syndrome.

C) Treatment of severe deep vein thrombosis (iliofemoral thrombosis).

1) Same as in (B) above

2) Epidural or lumbar sympathetic nerve blocks are of value in relieving pain and in treat-

ing arterial spasm.

3) Iliofemoral thrombectomy by an experienced surgeon is undoubtedly a useful procedure in certain cases. It is preceded and followed by anticoagulation.

Management of pulmonary embolism

The type of therapy offered frequently depends on the facilities available, and each case must be individualized.

1) ANTICOAGULANTS and rheomacrodex. as above, even through signs of peripheral throm-

bosis are minimal.

2) SUPPORTIVE THERAPY, which includes humidified oxygen (usually by tent); morphine for pain and apprehension; digitalis may be necessary; aminophylline will help relieve bronchospasm; vasopressors may be required to main. tain arterial pressure; antibiotics are useless un.

less infection is present.

3) VEIN LIGATION. Ligation of super. ficial femoral veins is generally not advised. Inferior vena cava ligation can be considered in the following situations: (a) repeated pulmonary emboli despite adequate anticoagulation or in presence of contraindications to anticoagulants e.g. bleeding ulcer, (b) the presence of septic pelvie thrombophlebitis with repeated pulmonary emboli (ligate ovarian veins also). If the IVC is "ligated" it need not be completely occluded, but instead "baffled" with multiple fine silk sutures at one point. Attention must be paid to prevention of peripheral edema after this procedure.

4) PULMONARY EMBOLECTOMY by conventional means has fallen into disrepute. The availability of "heart-lung" machines has revived interest in pulmonary embolectomy and centres having such equipment available are in a position

to offer this operation to selected cases.

Provincial Medical Board

OFFICERS AND COMMITTEES, PROVINCIAL MEDICAL BOARD OF NOVA SCOTIA

1964-1965

President Dr. John R. McCleave, Digby, N. S. Vice-President Dr. Gerald J. LeBrun, Bedford, N. S.

Registrar-Secretary-Treasurer ... Dr. M. R. Macdonald, Halifax, N. S.

Solicitor Mr. Donald MacInnes, Q.C., Halifax, N. S.

Executive Committee Dr. J. R. McCleave, Chairman

Dr. G. J. LeBrun

Dr. Maurice F. Fitzgerald Dr. J. Allen Myrden Dr. Gordon C. Macdonald

Discipline Committee Dr. J. R. McCleave, Chairman

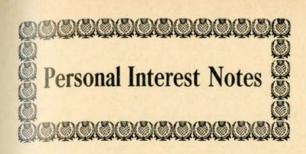
Dr. Abie R. Gaum Dr. George M. Saunders Dr. D. Robert Campbell

Legislation Committee Dr. J. R. McCleave

Dr. G. J. LeBrun Dr. Charles G. Harries Dr. Daniel F. MacInnis

Representatives to the Medical Council of Canada

Dr. John R. Macneil, Glace Bay, N. S. Dr. Gerald J. LeBrun, Bedford, N. S.



A LETTER TO ALL MEDICAL WIVES

"Dear Ladies:

Have your husbands informed you of the Canadian Medical Association Convention to be held in Halifax from June 14th to 18th of this year?

The Medical Society of Nova Scotia will be acting as the host society with the collaboration of the other Maritime societies. Plans are underway to make this a most eventful week. The Ladies Committee, under the chairmanship of Mrs. R. O. Jones, has arranged a full agenda of entertainment and activities. Some time has been left for your own leisure as well as joining your husbands for the evening social functions.

We are hoping that all ladies in the Atlantic area will consider themselves hostesses at large and help in extending a warm welcome to ladies attending the convention from outside our provinces.

Please watch this Journal for further notices regarding your Ladies Programme.

Sincerely yours, Mrs. J. Stewart, Manchester, Publicity Chairman"

PLEASE BRING THIS LETTER TO THE ATTENTION OF YOUR WIFE AND PLAN THAT BOTH OF YOU ARE IN HALIFAX FROM JUNE 14-18, 1965.

Cumberland Medical Society
The last issue of the Bulletin
reported the names of the various
doctors throughout the province
who had won recognition for their
work in St. John Ambulance.
Inadvertantly there was omitted
the name of Dr. Henry A. Myers

of Amherst, Divisional Surgeon, and Chairman of the Amherst Branch of the Order, who received the honour of appointment as Commander in the Order of St. John of Jerusalem at the hands of Governor General Vanier in Ottawa at the Investiture held on October 30, 1964. His brother Dr. Ralph Myers, Moncton, N. B. is also a Commander. We apologize and congratulate.

(Apropos of the above, the Halifax Mail-Star carried a notice recently that Dr. S. H. Kryzek, Director of Emergency Services in the province, had stated that at least 16 hours out of each school year should be devoted to first aid training.

St. John Ambulance, designated as training authority in First Aid for Emergency Measures Organization, recently presented a brief to Premier Stanfield as Minister of Education, urging first aid training in Nova Scotia schools. Lunenburg-Queens Society:

Dr. Anna Biechl O'Neill has recently announced the opening of her practice in General Medicine at 51 Maple Street Bridgewater, N. S.

DALHOUSIE UNIVERSITY FACULTY OF MEDICINE:

Dr. David M. Chapman, Assistant professor of Anatomy, delivered a paper at the annual meeting of the A.Z.S., in Knoxville, Tenn., on "Co-ordination in a Scyphistoma" during the Christmas holidays.

Dr. Richard Saunders, Head of the Department of Anatomy, after some months of work at the Neurological Institute, Montreal, is spending the rest of his Sabbatical year at the University of Lisbon, Portugal.

"Probing Mysteries of Arthritis at Dalhousie" was the heading of a feature article in the Halifax paper recently. It was a writeup on the work being done by Dr. D. M. Mehta in the Department of Medicine. Dr. Mehta is one of the forty people across Canada who are working under fellowships from the Canadian Arthritis and Rheumatism Society who are trying to find a cure for the disease which is disabling more than 285,000 Canadians. Dr. Mehta is a native of Nagpur. India where he graduated as B.Sc. and M.D. He has studied internal medicine in various Canadian centers since coming to Canada five years ago. Congratulations:

We extend congratulations to four Haligonians who will be among the 246 doctors to be admitted as Fellows of the Royal

College of Physicians of Canada

at a Convocation in Toronto on Jan. 21.

OBSTETRICS AND GYNAECOLOGY:

Drs. Stephen Clair MacLeod and Ethel Pereira. MEDICINE:

Dr. David Geoffrey Patrick Hawkins.

NEUROLOGY:

Dr. Stephen Frederick Bedwell Another successful candidate from the Maritimes was Dr. Kenneth Cornelius Grant, Charlottetown in General Surgery.

Congratulations are also in order to Dr. J. D. McLean, a native of New Brunswick, and a graduate of Dalhousie who is now director of training at the Hospital for Mental and Nervous Diseases at St. John's Newfoundland, who received his Certification of Psychiatry at recent Royal College Examinations. He was in Halifax for two years and took his postgraduate training in St. John's. (Please note elsewhere in these columns a further cause of congratulations to Dr. McLean -to be shared with his wife.)

Also a recipient of his Certification in Psychiatry, was Dr.

Claude Beland, a graduate of Laval University who was in Halifax for two years before returning to the province of Quebec. Births:

To Dr. and Mrs. Peter Gordon at the Johns Hopkins Hospital, Baltimore, Maryland, a daughter, on Dec. 14, 1964.

To Dr. and Mrs. John Graham McCleave, (née Louise Atkinson), at the Grace Maternity Hospital, Halifax, a daughter on Dec. 8, 1964.

To Dr. and Mrs. Floyd Mac-Donald, (née Ann Clouser), at the Queen's General Hospital, Liverpool, N. S a daughter, on Dec. 21, 1964.

To Dr. and Mrs. Adrian Mac-Kenzie, at the Halifax Infirmary, a son Jan 7, 1965.

To Dr. and Mrs. J. D. Mac-Lean, (née Dorothy Keating), at St. John's General Hospital, St. John's, Newfoundland, a son, James Andrew, on Dec. 28, 1964. Obituaries:

Dr. Malcolm Robertson Elliot died at his home in Wolfville on December 10th, 1964. "A Family physician in the most genuine sense", These words were a part of the citation when, in 1960 Dr. Elliot was made an honorary life member of the Canadian Medical Association. For 47 years he served as doctor and surgeon in

the university town of Wolfville. To his first Alma Mater, Acadia, he gave 30 years of service as chairman of its Board of Governors, and its new chemistry building is named in his honour. Since graduating in Medicine from Harvard in 1912 his whole medical career was spent in Nova Scotia. He was a former president of the Valley Medical Society and for more than 30 years was an examiner on the provincial medical examining board. Dr. Elliot played a prominent part in the activities of the Nova Scotia Mental Hygiene Association and was one of the founders of the Fundy Health Clinic and of the Eastern King's Memorial Hospital, on whose board he served as chairman for many years. Throughout his lifetime, keenly interested in church and community affairs outside his profession, he was for many years a deacon, and honorary deacon of the Baptist Church, chairman of the Wolfville school board, and active in the Rotary Club. To his wife and son and daughter we express our sympathy.

Dr. Robert F. Ross died suddenly at his home in Truro on January 4, 1965. He was born in Sydney 61 years ago and won the Governor General's Gold Medal on graduation from Sydney

Academy. On his graduation from Dalhousie in 1931, he was an honor graduate in both Arts and Medicine. Following gradua. tion, he taught anatomy at Dal. housie for three years and then practised in Elmsdale for ten years before setting up his practice in Truro. He was a past president of both the Nova Scotia, and the Colchester-East Hants Medical Society, and a director and member of the Maritime Medical Care since its beginning. He is survived by two doctor brothers and one son who is in his final year of medicine this year. To them, to his daughters. to his wife and other members of his family we extend sympathy. STOP PRESS

Dr. Allison Barss and his wife of Rose Bay were in a car accident on January 12th four miles from Lunenburg. They were taken to Halifax where the latest report was "satisfactory". Two of their children were also shaken up in the two car collision. We hope that they are now fully recovered.

At Press time we learn with deep regret of the passing of Dr. L. F. Doiron of Digby on January 15th. Our sympathy goes to his wife and daughters. A full appreciation will appear in the March Bulletin.

ADVERTISER'S INDEX

Ames Company of Canada Limited	Ш
Arlington - Funk Laboratories, Div. U.S. Vitamin Corp., of Canada Ltd	
Astra Pharmaceuticals (Canada) Limited	II
Ayerst, McKenna & Harrison Limited	VI
Chilcott Laboratories Limited, Warner	I
Connaught Medical Research Laboratories	IV
Pitman - Moore, Div. of Dow Chemical of Canada Limited	O.B.C.
North American Life Assurance Company	38
Seaman - Cross Limited	II
Searle & Company (Canada) Limited, G.D.	V
Smith Kline & French Inter - American Corporation	VIII
Wyeth & Bros. (Canada) Limited, John	VII