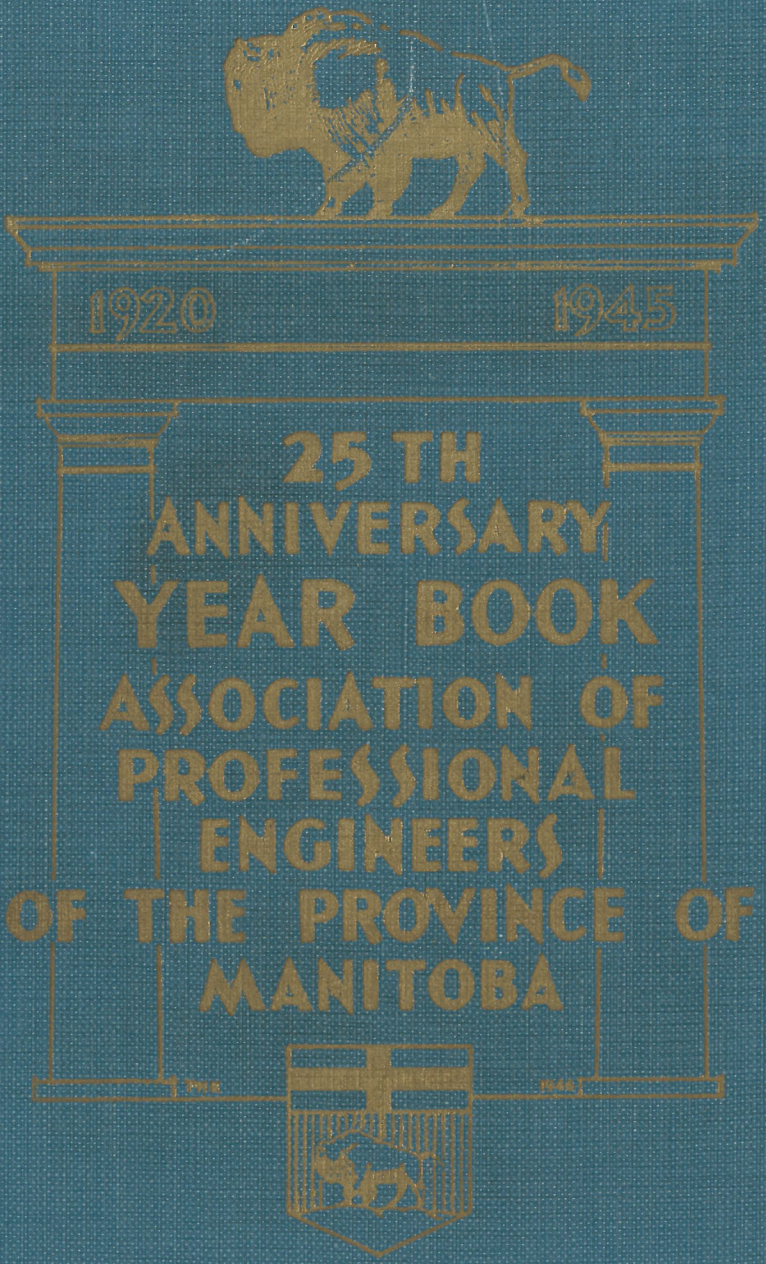


25TH ANNIVERSARY YEAR BOOK

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Twenty-Fifth Anniversary

YEAR BOOK

1945



Association
of
Professional Engineers
of the
Province of Manitoba

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THE "SCOTT GAVEL"

See page 57



WILFRED P. BRERETON



WALTER M. SCOTT



JOHN G. SULLIVAN

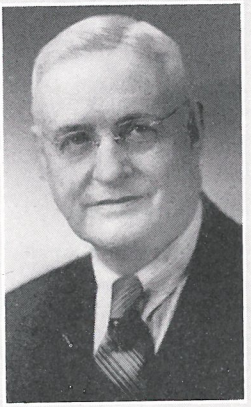
THE PROVISIONAL COUNCIL
OF
THE ASSOCIATION OF PROFESSIONAL ENGINEERS
OF
THE PROVINCE OF MANITOBA
1920
FATHERS OF THE ASSOCIATION



GUY C. DUNN



JAMES M. LEAMY



GEORGE L. GUY



THE "SULLIVAN GOLF TROPHY"

Presented by the late John G. Sullivan, LL.D.
for Annual Competition

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Sullivan Golf Trophy

Foreword

Twenty-five years ago a group of engineers gathered in Winnipeg to discuss the development of their profession in Manitoba. They were conscious that they were members of a truly great profession to belong to which was both a privilege and a responsibility. And, too, they recognized that if their profession was to develop to full stature, organization was necessary.

The outcome of that gathering was the creation of "The Association of Professional Engineers of the Province of Manitoba."

The six professional engineers chosen for the Provisional Council we are happy now to refer to as "The Fathers of the Association," for they gave to its organization the effective stimulus and guidance so necessary for success. To them the Association of today expresses its grateful appreciation of work well done. Two of the Fathers have passed to the Great Beyond. The Association cherishes with high regard the memory of James M. Leamy and John G. Sullivan. Four of the Fathers remain with us: Guy C. Dunn and George L. Guy in Ontario; William P. Brereton and Walter M. Scott in Winnipeg. To them the Association extends its best wishes for many more years of happy life.

To the Fathers of the Association this Twenty-Fifth Anniversary Year Book is dedicated in the hope that it will offer to members of the Association and friends throughout Canada and in the United States, a record of the Association's accomplishments in an endeavour to develop and maintain engineering on a professional level.

The Association now enters upon its second twenty-five years of active life, fully imbued with the desire to guarantee to industry, government, and society at large, the trustworthiness of the members of the Association, for no one realizes more fully than the professional engineer his obligation of service to society, by the protection of life, health, and property.

May the Association continue to develop in engineers a realization of their professional privilege and responsibilities.

GEO. E. COLE, President.
Winnipeg, Man., December 31, 1945.

Previous Councils of the Association

Provisional Council:

W. M. Scott, Chairman

Councillors:

J. G. Sullivan — J. M. Leamy
Guy C. Dunn — W. P. Brereton
G. L. Guy, Secretary-Treasurer and Registrar

Council 1920:

M. A. Lyons, President
J. G. LeGrand, Vice-President
P. Burke-Gaffney — W. P. Brereton
D. A. Ross — A. W. Smith
G. L. Guy, Secretary-Treasurer and Registrar

Council 1921:

M. A. Lyons, President
J. G. LeGrand, Vice-President
P. Burke-Gaffney — H. A. Dixon
W. M. Scott — D. A. Ross
G. L. Guy, Secretary-Treasurer and Registrar

Council 1922:

D. A. Ross, President
A. A. Young, Vice-President
H. A. Dixon — W. M. Scott
E. V. Caton — E. P. Fetherstonhaugh
G. L. Guy, Secretary-Treasurer and Registrar

Council 1923:

A. A. Young, President
E. V. Caton, Vice-President
E. P. Fetherstonhaugh — A. J. Taunton
F. H. Martin — C. H. Fox
G. L. Guy, Secretary-Treasurer and Registrar

Council 1924:

A. J. Taunton, President
C. H. Fox, Vice-President
J. W. Porter — N. M. Hall
F. H. Martin — J. W. Sanger
P. Burke-Gaffney, Secretary-Treasurer and Registrar

Council 1925:

C. H. Fox, President
C. A. Millican, Vice-President
D. L. McLean — J. W. Sanger
J. W. Porter — N. M. Hall
P. Burke-Gaffney, Secretary-Treasurer and Registrar

Council 1926:

D. L. McLean, President
C. A. Millican, Vice-President
C. H. Fox — Wm. Aldridge
H. W. McLeod — N. Barritt
Jas. Quail, Secretary-Treasurer and Registrar

Council 1927:

Wm. Aldridge, President
W. M. Scott, Vice-President
C. H. Attwood — D. L. McLean
A. V. Redmond — *W. Youngman
N. Barritt
Jas. Quail, Secretary-Treasurer and Registrar
*W. Youngman elected for one-year term, filling unexpired term of A. V. Redmond (deceased).

Council 1928:

W. G. Chace, President
W. M. Scott, Vice-President
E. P. Fetherstonhaugh — C. H. Attwood
D. L. McLean — Jas. Quail
Eric W. M. James, Secretary-Treasurer and Registrar

Council 1929:

C. H. Attwood, President
W. G. Chace, Vice-President
E. P. Fetherstonhaugh — Hugh McNair
H. E. Brockwell — C. A. Clendening
Eric W. M. James, Secretary-Treasurer and Registrar

Council 1930:

C. H. Attwood, President
R. W. McKinnon, Vice-President
Hugh McNair — H. E. Brockwell
A. W. Fosness — C. A. Clendening
Eric W. M. James, Secretary-Treasurer and Registrar

Council 1931:

R. W. McKinnon, President

J. N. Finlayson, Vice-President

H. M. White — A. W. Fosness

A. McGillivray — J. W. Sanger

Eric W. M. James, Secretary-Treasurer and Registrar

Council 1932:

J. W. Sanger, President

J. N. Finlayson, Vice-President

R. W. McKinnon — Geo. E. Cole

H. M. White — A. McGillivray

Eric W. M. James, Secretary-Treasurer and Registrar

Council 1933:

J. W. Sanger, President

Geo. E. Cole, Vice-President

J. N. Finlayson — R. W. McKinnon

J. A. Meindl — H. M. White

Eric W. M. James, Secretary-Treasurer and Registrar

Council 1934:

H. M. White, President

J. A. Meindl, Vice-President

A. L. Cavanagh — J. W. Sanger

J. N. Finlayson — E. W. M. James

C. S. Landon, Secretary-Treasurer and Registrar

Council 1935:

J. N. Finlayson, President

A. L. Cavanagh, Vice-President

J. A. Meindl — J. W. Sanger

Geo. E. Cole — E. W. M. James

C. S. Landon, Secretary-Treasurer and Registrar

Council 1936:

A. L. Cavanagh, President

J. A. Meindl, Vice-President

J. W. Sanger — J. N. Finlayson

Geo. E. Cole — W. Youngman

C. S. Landon, Secretary-Treasurer and Registrar

Council 1937:

E. V. Caton, President

W. Youngman, Vice-President

A. L. Cavanagh — Victor Michie

J. A. Meindl — P. Burke-Gaffney

C. S. Landon, Secretary-Treasurer and Registrar

Council 1938:

P. Burke-Gaffney, President
W. Youngman, Vice-President
A. L. Cavanagh — Victor Michie
J. A. Meindl — E. V. Caton
C. S. Landon, Secretary-Treasurer and Registrar

Council 1939:

W. Youngman, President
F. S. Adamson, Vice-President
A. L. Cavanagh — E. Murray M. Hill
J. A. Meindl — E. P. Fetherstonhaugh
C. S. Landon, Secretary-Treasurer and Registrar

Council 1940:

F. S. Adamson, President
E. Murray M. Hill, Vice-President
J. A. Meindl — E. P. Fetherstonhaugh
C. V. Antenbring — Geo. E. Cole
C. S. Landon, Secretary-Treasurer and Registrar

Council 1941:

Geo. E. Cole, President
C. V. Antenbring, Vice-President
H. R. Urie — J. A. Penrose
H. S. Rimmington — A. E. Macdonald
C. S. Landon, Secretary-Treasurer and Registrar

Council 1942:

C. V. Antenbring, President
H. S. Rimmington, Vice-President
J. A. Penrose — H. R. Urie
A. E. Macdonald — N. Barritt
C. S. Landon, Secretary-Treasurer and Registrar

Council 1943:

H. S. Rimmington, President
N. Barritt, Vice-President
C. V. Antenbring — Geo. E. Cole
H. R. Urie — J. W. Battershill
C. S. Landon, Secretary-Treasurer and Registrar

Council 1944:

H. S. Rimmington, President
J. W. Battershill, Vice-President
H. R. Urie — Geo. E. Cole
McCrae P. Blair — W. J. D. Cameron
C. S. Landon, Secretary-Treasurer and Registrar

1945 Council

Geo. E. Cole	**President**
J. W. Battershill	**Vice-President**
H. S. Rimmington	Member
H. R. Urie	Member
McCrae P. Blair	Member
W. J. D. Cameron	Member
C. S. Landon	Secretary-Treasurer and Registrar

Board of Examiners, 1945

Chairman:

E. P. Fetherstonhaugh, M.C., B.Sc., D.Sc.,
Dean of the Faculty of Engineering and Architecture,
University of Manitoba.

Members of the Board

C. V. Antenbring, B.Sc., Design Engineer,
Cowin and Co., Ltd., Structural Engineers

A. Campbell, B.Sc., M.Sc., Contract Engineer,
Dominion Bridge Co., Ltd.

N. M. Hall, O.B.E., B.Sc., Professor of Mechanical Engineering,
University of Manitoba.

T. T. Wilson, Chief Engineer, Highways Branch,
Department of Public Works, Manitoba.

Standing Committees, 1945

Employment:

G. H. Herriot
C. S. Landon

Engineering Representation:

J. C. Davis, Chairman
P. Burke-Gaffney
F. S. Fowler
J. W. Sanger

Golf:

A. L. Cavanagh

Graduates' Welcoming Dinner

Geo. E. Cole

Investment of Funds:

Geo. E. Cole
C. S. Landon

Insurance:

H. Hunter

Rehabilitation and Construction:

Geo. E. Cole

University Scholarships:

W. M. Scott

A Short History of the Association of Professional Engineers of the Province of Manitoba, 1920-1945

C. S. LANDON
Secretary-Treasurer and Registrar

Following the Great War, 1914-1918, development in Western Canada was greatly accelerated and a large number of projects, both public and private, were planned and carried out. Regulations controlling these were rather lax and in many instances, men wholly unqualified held positions of engineering responsibility. Although no disasters were reported, it was evident that waste of many materials of construction and faulty design had occurred.

In the Provinces of Alberta and Saskatchewan, committees of branches of the Engineering Institute of Canada reviewed the situation and studied proposals for legislation which would define engineering and set legal standards of qualifications for the safe practice of engineering, and which would also give legal status to those who qualified and were registered to practise.

The members of the Winnipeg Branch of the Institute received their first official information of this movement when the Branch was requested by the Saskatchewan Branch to assist, by sending a resolution to Council of the Institute at Montreal, asking that it open negotiations looking to the securing of Federal legislation which would give engineers definite and uniform legal and professional standing throughout Canada. The Saskatchewan Branch had submitted a copy of the resolution which it had presented to Council of the Institute and a similar resolution was adopted and transmitted by the Winnipeg Branch. It set out that the Winnipeg Branch was desirous of having the Headquarters of the Engineering Institute of Canada approach the Federal Government with a view to securing national legislation which would give members of the Engineering Profession legal status.

After receiving petitions from all of its branches, the Institute made representations to the Dominion Government,

and was informed that Parliament did not possess authority to pass legislation of this nature until after there were enabling Acts on the statute books of each of the Provinces. Accordingly, Council of the Institute prepared a "Model Act" to be submitted by engineers to the Legislative Assemblies in each of the provinces of the Dominion.

At the session of the 1920 Legislature of the Province of Manitoba, a group of engineers presented a petition praying for the incorporation of "The Association of Professional Engineers." The Government of the day decided to sponsor a Public Bill, framed in such a way that it conformed very closely to the draft submitted with the petition. As a result, "An Act respecting the Engineering Profession" was passed, and assented to March 27, 1920. "The Association of Professional Engineers of the Province of Manitoba" became a body, politic and corporate, with perpetual succession and common seal (Chapter 38, Statutes of Manitoba, 1920).

The Act conferred on the Association the power to make By-laws for management and administration, defined the practice of Professional Engineering and set out clearly who might practise as a Professional Engineer. It provided that each Registered Professional Engineer shall have an impression seal, and also named a Provisional Council of the Association.

Those engineers so named by the Act were: J. G. Sullivan, W. M. Scott, Guy C. Dunn, W. J. Dick*, J. M. Leamy and W. P. Brereton.

The duties of the Provisional Council, as enacted, were to provide the register called for by the Act, to enter therein the names of those entitled to registration and to call within six months of the coming into force of the Act, the first General Meeting of the Association for those purposes or any other organization purposes of the Association; this Provisional Council was to have the powers conferred by the Act on Council of the Association. These powers were to cease on the election of the regular Council of the Association.

On April 9, 1920, the Provisional Council convened and W. M. Scott and G. L. Guy were elected Chairman and Secretary, respectively.

*W. J. Dick moved to Alberta and was unable to take any further action in the Association.

At this time, the Association was not in possession of funds. Such as were required to defray the expenses of organization, stationery, advertising, and such other items as occurred, were obtained on security furnished by the personal obligation of members of the Provisional Council.

On Monday, August 23, 1920, the Provisional Secretary was empowered to obtain and open a register for the registration of members. The form of the application and certificate of registration as used by "The Association of Professional Engineers of New Brunswick," with alterations to suit the requirements of the Manitoba Act, were adopted as official stationery of the Association. The Provisional Council met again September 25, 1920, and approved the applications of 168 Manitoba Engineers.

The first General Meeting of the Association was held September 27, 1920, in the Engineering Building of the University of Manitoba, located at the corner of Portage Avenue and Sherbrook Street, in the City of Winnipeg, with the Provisional Chairman, W. M. Scott, presiding. Seventy-one Registered Professional Engineers and five non-registered Engineers were present. The By-laws as prepared by the Provisional Council were reviewed and adopted, or amended and adopted, clause by clause. The discussion was lengthy and at times quite lively, but finally a set of By-laws was evolved, which with relatively few amendments has effectively controlled the operation of the Association through the first twenty-five years of its life.

The presiding officer then called for nominations of members for the first Council of the Association, to consist of seven members, the four receiving the highest number of votes to act until the Annual General Meeting in 1922, and the other three elected until the Annual General Meeting of 1921. In that year and subsequent alternate years, three members and in 1922 and subsequent alternate years four members have been elected to Council for a term of two years. In all, seventeen were nominated and upon report of the scrutineers, M. A. Lyons, P. Burke-Gaffney, G. L. Guy and J. G. LeGrand were elected to serve until 1922, and A. W. Smith, D. A. Ross and W. P. Brereton until 1921.

As has become the established custom, the members elected to Council retired from the meeting to elect, from their

number, the officers of the Association. Upon their return, they reported that the first regular officers were:

M. A. Lyons, President
J. G. LeGrand, Vice-President
G. L. Guy, Secretary and Registrar

who with P. Burke-Gaffney, A. W. Smith, D. A. Ross and W. P. Brereton comprised the first Council of the Association. With the setting up of this Council, the Association was started along the way. That no serious constitutional crisis, no conflict with governmental, municipal, or corporate authority or with any other Provincial Association of Engineers and no great difficulty with practising engineers has arisen, is evidence that each succeeding Council has sought to administer the provisions of "The Engineering Profession Act" with dignity and in fairness to all.

The newly elected Council held meetings frequently following the first General Meeting, with the reception and consideration of applications engaging the major portion of the time of Council. Policies of administration were, even at that early date, beginning to take shape and the Secretary was instructed at a meeting on November 22, 1920, to write to officials of government, transportation companies operating in the Province, public utilities corporations, bridge and steel companies, and municipal authorities, informing them of the provisions of "The Engineering Profession Act."

At a meeting held December 22, 1920, a letter from W. M. Scott, to the President, was read suggesting that the Association should offer the University of Manitoba a scholarship annually during the pleasure of the Association. This matter was held over for discussion at the Annual General Meeting, January 21, 1921, when Council was authorized to appoint a Standing Committee to deal with this and any other matters affecting the engineering undergraduates of the University.

This was followed on November 15, 1921, by the Association tendering a scholarship of $150.00 to be awarded annually to the engineering undergraduate in the Faculty of Engineering and Architecture who obtained the highest marks in the examinations of the first two years. The awards were made each year until 1939 when the amount was increased so as

to make two scholarships available, each of the value of $100.00*. This became effective in 1940.

During 1921, a Committee of the Board of Examiners reported in respect to a syllabus for a qualifying examination. It was agreed that there should be:

(a) A general qualification examination for those applicants who were practising engineering and who had not satisfied the Board that they were eligible for registration under the provisions of the Act. This examination was to consist of the following tests covering in the main, the branch of engineering in which the applicant was engaged:

(1) A paper of a general nature containing a series of questions.

(2) A problem.

There has been no change in this policy and all examinations have been set on the same broad basis.

(b) The form of examination of articled students was also established and consisted of a preliminary test to be taken within one year of the date of commencement of their articled apprenticeship—and a final examination to be passed before the student could be registered to practise as a Professional Engineer. The details were approved, but space does not permit the setting out here of the subjects of pure science and groups of engineering subjects which were to be covered during the articled apprenticeship.

The first Annual General Meeting of the Association was held in Winnipeg January 20, 1921. The following motion was adopted:

> "That a Committee of the Association be appointed to consider the matter of providing an Engineering Library for the benefit of the membership and that the Committee report its decisions direct to Council."

The Committee appointed carried out its duties with despatch and presented a report in March of 1921 which was adopted:

> "That arrangements with the Carnegie Library in Winnipeg having been completed, an initial sum not

*For further information regarding the award of Scholarships see pages 52-56.

exceeding $500.00 be authorized for the purpose of purchasing books and a sum not exceeding 10 per cent. of the annual income from dues, hereafter be set aside for this purpose."

Early in the administration of the Act by Council of the Association, a situation arose in connection with the practice of members of the Manitoba Land Surveyors Association, which if it had not been dealt with in the most co-operative manner, could have lead to serious conflict of opinion. It was pointed out that there were forty members of the Land Surveyors Association, many of whom had engaged in such practice as land drainage, reports on water supply, hydrographic surveys, and the location of roads, highways and railroads. At the time, ten Land Surveyors were members of the Association of Professional Engineers and representatives of the Land Surveyors Association enquired if it was the intention of Council to restrict the scope of the work to be undertaken by Land Surveyors who were not Professional Engineers. Assurance was given that no such restriction was contemplated.

On May 30, 1921, a Committee was appointed to draft a Code of Ethics. The report of the Committee was presented to a General Meeting on November 1, 1921. The report was received and, on motion, the Code of Ethics as finally amended and accepted, was adopted as the Code for "The Association of Professional Engineers of the Province of Manitoba," and Council was authorized to have the same printed and issued to each of the members.

At the meeting on May 30, 1921, a Committee to draft a Schedule of Fees for professional services was appointed. Council discussed this matter further on August 16, and resolved:

> "That the Committee of the Association of Professional Engineers of the Province of Manitoba, appointed to draft a Schedule of Fees for professional engineering service, be requested to consider and recommend to the Council of the Association on or before the third Tuesday in September, what may be deemed to be fair and reasonable salaries for Professional Engineers as required by the Corporation Taxation Act of 1921."

The Secretary reported that the Winnipeg Branch of the Engineering Institute of Canada had written to suggest that

the schedule of fees published in the Engineering Journal of October, 1923, be adopted by the Association. This schedule was finally adopted and an order made that it be published.

About this time, there appeared in the Minutes of Council the first reference to a co-ordinating movement, which has perhaps engaged the deliberation of more of the members of the Association than any other single question. Reporting for the Committee on co-ordination with the Engineering Institute of Canada, D. A. Ross stated at a meeting on January 17, 1923, that a joint committee had been formed which was awaiting action by Headquarters of the Engineering Institute of Canada, where the subject was under advisement. The matter of defining the relative jurisdiction of the Institute and the Association of Professional Engineers of Manitoba was also receiving the attention of Institute Council and Councils of other Provincial Associations. To some, there seemed to be an overlapping of functions and objection was taken by others to the paying of three annual fees—to the Winnipeg Branch and to Headquarters of the Institute and, of course, the statutory fee to the Association. This condition of affairs was one of the reasons for the suggestion that amalgamation of the activities of the Institute and the Association be effected.

The President of the Association wrote to Council of the Institute requesting a statement of its attitude toward the Provincial Associations, a reply to which was received February 23, 1923. In this letter the Association was invited to send a delegate to a meeting to be held in Montreal for the purpose of reviewing the whole question of Institute-Provincial Associations relations. A delegate was sent. The President was authorized to name a committee to act jointly with one acting for the Institute to consider and report on ways and means of accomplishing the co-ordination of the functions of the two organizations. This Committee was established and continued to function at the pleasure of Council.

The following report was presented to the Annual General Meeting on January 23, 1930, by the Co-ordinating Committee:

> "That the legal requirements of registration in the Association handicapped negotiations towards closer relationship with the Institute, because those who are members of one body only, would, under an agreement of amalgamation of the two bodies, be required to pay

increased fees to which procedure a number of members had expressed strong objection."

The lack of any formal recognition by practising engineers of the entering into the profession of members of graduating classes of the Faculty of Engineering and Architecture of the University of Manitoba had long been felt. Therefore, when Council was advised that J. R. Fairbairn of Montreal intended to visit Winnipeg for the purpose of forming a Camp and exemplifying the "Ritual" composed by Rudyard Kipling for "The Calling of an Engineer" it was thought that here at last might be a medium through which a formal welcome into the profession might be extended to graduating engineers.

The matter was raised also regarding the further establishing of precedent by instituting an annual luncheon or dinner at which the graduating class of the Faculty of Engineering and Architecture would be the guests of the Association and which would follow the workings of the "Ritual," provided the consent of the Wardens of Camp 8, who control the "Ritual" in the area, could be obtained. The Association has been able to have the exemplification of the "Ritual" as one of its chief annual functions.

On June 17, 1932, a letter was received from A. S. Gentles, President of the Association of Professional Engineers of British Columbia, regarding the Gagnon Bill of the Dominion Parliament. He referred to this again in a communication received in November, 1932, and dealt with the recommendation of the Civil Service Commission of Canada regarding qualifications for engineering positions in the Dominion Civil Service. He advised that William Foran, Secretary of the Commission, had written to the British Columbia Association asking it to submit the necessary qualifications for engineers to be employed by the Commission. Mr. Foran also had requested information in respect to the qualifications for registration to practise engineering required by the Association of Professional Engineers of the Province of British Columbia.

Mr. Gentles asked Council if any further action had been taken on what he considered to be one of the greatest steps forward in the matter of the recognition by the Dominion Government of the professional status of technically qualified engineers.

Following a discussion of the matter, it was moved:

"That the Secretary of the Civil Service Commission of Canada be advised that this Council recommends that the basic qualifications for the employment of engineers in the Civil Service of Canada, should be equivalent to those required for registration as a Professional Engineer by any of the Provincial Associations or Corporation of Professional Engineers created by Provincial Engineering Acts. Further that the educational qualifications for employment in the engineering staff of the Civil Service where the person so employed is eligible for promotion to a higher grade, particularly where such promotion may ultimately lead to employment as an engineer, shall be equivalent to matriculation in a recognized University."

Qualifications as stated above are now included in all advertisements for engineers which are issued by the Civil Service Commission of Canada.

A special Committee on joint control of the Winnipeg Branch of the Engineering Institute of Canada and the Association, consisting of E. V. Caton and J. W. Sanger, presented its report to Council October 23, 1934, and as a result it was decided to call a General Meeting of the membership of both organizations on October 26 to discuss the proposal set out in the report. It was considered by Council, at the time, that unless 75 per cent. of the membership was in favor of a joint executive control, the Association would not proceed further with the scheme.

A joint General Meeting was accordingly held and while the majority of those present appeared to be in favour of a scheme for consolidation, the attendance was too small to be considered sufficiently representative. A questionnaire was sent to all members of both bodies and the result of the returns was discussed by Council December 10, 1934. Further consideration of the question was adjourned until two days hence, at which time the Executive of the Institute was present.

Council of the Association conveyed its decision to the Winnipeg Branch, which was to the effect that the opinion of the members, as expressed by the questionnaire returned, was not sufficiently conclusive and, therefore, it would not be advisable to proceed further in the matter. However, it was suggested that a new approach to the subject might be undertaken in the near future.

During the year 1934, a Committee under the Chairmanship of Professor J. N. Finlayson*, worked on the draft of a new "Engineering Profession Act," and the Committee also prepared a set of amendments to the 1920 Act, either of which would make for a more efficient and satisfactory administration and would, at the same time, afford added protection to the public by a clarification of what the practice of Professional Engineering embraces, and who could be qualified to practise. After a thorough discussion by Council and when the whole matter had been reviewed by a Special Meeting of the Association called for the purpose, Council was instructed to petition for an entirely new Act, the draft of which was presented to the Legislature, then in session, by the Government as a Public Bill. It passed the Legislative Assembly without amendment, and was given royal assent on April 6, 1935, and thereafter became "The Engineering Profession Act," Chapter 13 of the Statutes of Manitoba, 1935. In the Revised Statutes of Manitoba, 1940, the Act became Chapter 63.

The question of amalgamation of the Engineering Institute of Canada and the Association was presented again to Council on May 14, 1935. J. W. Sanger, who had been a member of the original committee, stated that a new scheme was now proposed. Five members of the Association were named to represent it on a joint committee appointed to examine the new proposal which was to form the basis of a consolidation agreement which, if ratified, would require the Association to assume all the functions of the Winnipeg Branch of the Institute and also make necessary a revision of the annual fees of the Association.

It was apparent to many that Headquarters of the Engineering Institute of Canada would not accept the proposal as drawn up but, in any event, a decision was taken to place the question before the membership of both bodies again by means of the questionnaire. The result of this vote was in favour of consolidation but as on former occasions there were enough who expressed opposition to the proposal to lead Council to the opinion that with such a large group of non-co-operative members existing, the consolidation would not achieve the results desired.

*Now Dean of the Faculty of Applied Science, University of British Columbia, Vancouver, B.C.

The Annual Meeting of the Association on January 29, 1938, took up the matter of consolidation with the Engineering Institute of Canada. The following is an extract from the minutes:

"In 1936, our members voted in favour of consolidation with the Institute on a basis of five proposals prepared by the Joint Committee on Consolidation. After these proposals were submitted to Council of the Institute, that body requested that it be not required to make answer until after the result was known of the voting by its members on certain proposed changes to its By-laws to make consolidation with the several Professional Associations possible.

"The change in the Institute By-laws was not ratified by its members and we have no intimation from its Council regarding any action it might take in respect to our proposals.

"The President of our Association attended the Annual Meeting of the Institute last February, and about all the information he could obtain, was to the effect that the Institute had set up another committee to study ways and means of affecting consolidation with any or all of the Professional Associations."

From this time until the year 1943, joint committees were set up to continue the study of the question of consolidation of the functions and activities of the Engineering Institute of Canada and the Association of Professional Engineers of the Province of Manitoba.

In the year 1943, the joint membership was again asked to express its opinion by way of a questionnaire on the following questions:

"Are you in favour of the Association entering into the agreement?" To this question 164 ballots were returned, 72 per cent. having answered "YES" and 28 per cent. "NO." Returns in respect to question 2, quoted:

"If the agreement is put into effect, will you become a member of the Engineering Institute of Canada under the terms of the agreement?" 71.1 per cent. answered "YES," 23.7 per cent. answered "NO," and 6.7 per cent. of the 164 members failed to answer the question.

On the basis of these replies, a notice of motion was given

to Council on February 9, 1944, calling for revisions of the By-laws which would allow for the putting into effect of the joint agreement with the Institute. A Special General Meeting of the Association was therefore called for Tuesday, March 28, 1944, for the purpose of dealing with the notice of motion referred to above. The amendments to By-laws which would be necessary if a consolidation were to be effected under the latest proposal had to do with Grants, Section 31, Paragraph 1, and Fees, Section 32, Paragraphs 2, 3 and 4. These amendments were very carefully considered and thoroughly discussed at this meeting. The motion, upon vote by ballot, was lost as it did not receive the support of two-thirds of the members present, as required by the General By-laws of the Association. There the matter rests.

The question of amalgamation, or as it had been called, "Consolidation," has been the most prominent and contentious of any with which the membership of the Association has been called upon to deal with during the first twenty-five years of its existence. There seems to have been throughout, unanimity of opinion that it might be in the best interests of the engineers of Manitoba to have the functions of the Association and the Winnipeg Branch of the Institute consolidated, but there never has been a unanimous expression from the members as to their desire in the matter of how this should be accomplished and in what proportion the joint fees collected should be distributed.

The chief duty imposed on the Association by the Legislature of the Province of Manitoba is to administer "The Engineering Profession Act," and in carrying out this duty Council is concerned with ascertaining that all whom it registers are competent to fulfil the functions of a Professional Engineer, to the end that the public may be protected against incompetence in the design, supervision, and inspection of engineering projects.

As a corollary to this, and in order that men of high mental ability, with deep social consciousness, may be attracted to the Engineering Profession, the Association has endeavoured to improve the social and economic standing of the profession.

Care has been exercised not to engage in activities which might tend to infringe on the fields of endeavour of the voluntary societies, more particularly the Engineering Institute

of Canada, the Canadian Institute of Mining and Metallurgy, and the Canadian Institute of Chemistry, each of which has long established functions to facilitate the acquirement and interchange of technical and scientific knowledge amongst its members.

In pursuance of its prime purpose the Association has been able to ensure that the provisions of the Act are carried out without having recourse to court action. It has established a procedure with the Provincial Secretary, so that any application for incorporation of a company in which the word "engineer" is used, is submitted to the scrutiny of Council of the Association before action is taken by the Government. It has established that the Court of King's Bench requires engineering plans and evidence to be presented by a Registered Professional Engineer.

The Association has worked out a liaison with the Dominion Government Immigration Branch under which the Registrar is notified of the intention of a foreign engineer to enter the country, so that it may be established that he is qualified before entry is permitted, and in order that he may be informed of the necessity of being licensed by the Association before he begins the practice of engineering in the Province.

In carrying out a secondary function the Association has secured an Act of the Legislature incorporating an Engineers' Club. This unit is not receiving the support its purpose and privileges deserve. While the Club does not possess quarters yet, it is comfortably and agreeably housed and can hold out quite satisfactory inducements to prospective members.

In performing its secondary function, the Association is hampered by lack of funds. No less than 30 per cent. of its income is derived from earnings from securities which have been purchased solely by monies collected as registration fees. The annual fee originally set, as collected today, was never intended to provide more than sufficient revenue to carry on the administrative duties of Council.

Many of the securities owned by the Association are approaching maturity with no possibility of making re-investment at such favorable interest rates as have prevailed in the past. The income from this source will soon be reduced by nearly 50 per cent.

With the accelerating impact of social legislation on employee groups, the Association finds itself compelled, notably by the incident of the Dominion of Canada Order-in-Council P.C. 1003 on professional employees, to act for its members in protection of their civil rights and of their professional status. These activities and others, in addition to the routine of administration, are building up a mass of business which is placing an ever-increasing load upon Council of the Association.

At the beginning of this history of our Association reference was made to work done by engineers after the First Great War, 1914-1918. In that war the engineer professionally trained had won a name both in the field of industry where he designed and produced munitions and machinery necessary for battle and in the field of active service where he saw many military works evolved on an engineering basis. The world realized as never before the part that engineering could play in the conduct of war.

It is a matter of interest to review the services into which the professional engineer went in 1914-1918, as compared with the war which began in 1939. In the First Great War the engineer enlisted for the most part in engineer and infantry units. In the Second Great War, the Air Force called for a large number of professional engineers to plan, construct and maintain the many stations for which, fortunately, our widespread Dominion has provided the accommodation for an Empire Training Scheme which attained magnificent proportions.

Fourteen members of our Association were welcomed into the service of the R.C.A.F., where their training in the science of engineering was readily adapted to the exigencies of war. Seven others gave valuable service in engineering units of the Armed Forces. Many others, where age made them unacceptable for Active Service, were employed usefully in civilian capacities, such as inspection and construction work.

In paying tribute to our membership engaged in war work, it should not be forgotten that this war which began in 1939 was different from any previous one in that it made a ruthless demand on the youth of our Dominion. It may be styled an Engineers' War, but the work of the practising engineer has been devoted for the most part to the production of material which youth could use in bringing the enemy to defeat.

From the families of our members young men and women have gone freely, willingly and determinedly to fields of Active Service. Some we regret have paid the supreme sacrifice. To those members who have suffered the loss of a son or daughter goes our heartfelt sympathy. To those young folks who have returned from the scenes of war we would pray for richest blessing as they return to the pursuits of peace. And if then it is their decision to follow their fathers in the field of professional engineering, may they be mindful of the fact that, in that particular field, their forebears sought to foster professional engineering by erecting a structure on a sound foundation.

The Association of Professional Engineers of the Province of Manitoba has passed through its first twenty-five years of life. They have been years varying in activity from peace to war. The second twenty-five years have begun with the hope for peace. In the consummation of that hope, the professional engineer will be happier in the pursuits of peace than in the destruction wrought by war.



Engineering Profession Acts in Manitoba

The following Acts respecting the Engineering Profession have been passed by the Manitoba Legislature:

1896—Manitoba Civil Engineers' Act; S.M., Chapter 2.

1913—Manitoba Civil Engineers' Act; R.S.M., Chapter 32. Repealed 1920.

1920—The Engineering Profession Act; S.M., Chapter 38. Repealed 1935.

1935—The Engineering Profession Act; S.M., Chapter 13.

1940—The Engineering Profession Act; R.S.M., Chapter 63.

An Act respecting the Engineering Profession

(Being Chapter 63 of the Revised Statutes of Manitoba 1940)

His Majesty, by and with the advice and consent of the Legislative Assembly of Manitoba enacts as follows:

SHORT TITLE

1. This act may be cited as "The Engineering Profession Act." S.M. 1935, c. 13, s. 1.

INTERPRETATION

2. In this Act, unless the context otherwise requires,

(a) "Association" means the Association of Professional Engineers of the Province of Manitoba;

(b) "Board" means the Board of Examiners of the Association;

(c) "By-laws" means the by-laws of the Association;

(d) "Council" means the Council of the Association;

(e) "Licensed" means that permission has been given to a non-resident engineer to engage in Manitoba in the practice of professional engineering temporarily without being registered, and "license" means the certificate under the seal of the Association evidencing such permission;

(f) "Member" means a member of the Association in good standing;

(g) "Practice of professional engineering" or "practice of engineering" means the carrying on for hire, gain or hope of reward, either directly or indirectly, of one or more of the following branches of the science of engineering; namely, chemical, or civil, or electrical, or forest, or mechanical, or mining, or geological, or metallurgical, or structural, or such other branch as hereafter may be recognized and adopted by by-law of the Association as a branch of engineering; and without restricting the generality of the foregoing shall include reporting on, advising on, valuing of, measuring for, laying out of, designing of, engineering inspection of (including the direction or supervision of any of the foregoing), directing of or supervising of any of the works or processes set forth in Schedule A hereto, or the construction, alteration, improvement or enlargement of them or any of them, or of any such works or processes omitted therefrom which are similar to those set forth in Schedule A by reason of their requiring in connection with any of the operations above set forth the skilled or professional application of the principles of mathematics, physics, mechanics, aeronautics,

hydraulics, electricity, forestry, chemistry, geology or metallurgy, but does not include the operation, execution or supervision of works as superintendent, foreman, inspector, road master, track master, bridge master, building master, or contractor, wherever such works have been designed by and are constructed under the responsible supervision of a professional engineer;

(h) "President" means the president of the Association;

(i) "Professional engineer" means any person who is a member of the Association and registered as a professional engineer under the provisions of this Act or who, being a non-resident, is in possession of a subsisting license, granted under the provisions of the Act;

(j) "Registrar" means the registrar of the Association;

(k) "Secretary" means the secretary-treasurer of the Association. S.M. 1935, c. 13, s. 2 am.

INCORPORATION OF ASSOCIATION

3. (1) The Association of Professional Engineers of the Province of Manitoba, heretofore incorporated by Acts of the Legislature, is continued as a body corporate under the same name.

HEAD OFFICE

(2) The head office of the Association shall be at Winnipeg. S.M. 1935, c. 13, s. 3.

MEMBERSHIP

4. The members of the Association shall consist of such persons as are now members thereof, together with such other persons as hereafter, pursuant to the provisions of this Act, become members thereof and whose names are entered on the register of the Association as professional engineers. S.M. 1935, c. 13, s. 4.

Note: See sec. 13.

Powers of Association

5. The Association shall have power to acquire and hold personal property and real property not producing at any time an annual income in excess of ten thousand dollars, and to alienate, exchange, mortgage, lease or otherwise charge or dispose of such property or any part thereof as occasion may require. S.M. 1935, c. 13, s. 5.

Council

6. There shall be a Council of the Association consisting of the president, vice-president, and not fewer than five councillors, who shall be elected from the members of the Association and hold office as provided by the by-laws of the Association. S.M. 1935, c. 13, s. 6 am.

Tenure of Office

7. The tenure of office of all members of the Council elected pursuant to the provisions of any Act which is repealed by this Act shall continue until the expiry in due course thereof as if this Act had not been passed. S.M. 1935, c. 13, s. 7.

Powers of Council

8. The Council shall have the sole control and management of the property of the Association, subject to the by-laws thereof; but no real property shall be acquired, alienated, mortgaged, leased, charged or disposed of without the previous authorization of two-thirds of the members of the Association present at an annual meeting or at a special meeting of the Association called for the purpose. S.M. 1935, c. 13, s. 8.

BY-LAWS AND REGULATIONS

9. The Association may make by-laws and regulations, not inconsistent with this Act, respecting

(a) the management of its property;

(b) the election of the members of the Council;

(c) the regulation of the meetings and proceedings of the Association and the Council and all matters pertaining thereto;

(d) the holding and conduct of examinations of candidates for registration as professional engineers;

(e) the prescribing of subjects upon which the candidates are to be examined, and the qualifications of a candidate;

(f) the establishment of a scale of fees to be paid by candidates for examination, by applicants for registration and by members for annual dues, and by applicants for licenses;

(g) the appointment, remuneration and defining of the duties of officers, employees of the Association and the Board;

(h) the prescribing of fines and penalties for default in payment of fees and terms of re-admission to the privileges of the Association, whether the default occurred before or after the passing of this Act;

(i) the government and discipline of its members, including the imposition of fines upon, or the censure, suspension, or expulsion from the Association of a member found by the Council to be guilty of conduct detrimental to public interest, or of wilful negligence, or of misconduct in the practice of engineering, or convicted of a crime; but subject, in case of suspension or expulsion, to any right of appeal given by this Act to the person affected thereby;

(j) the assistance, pecuniary or otherwise, of other associations or organizations where, in the opinion of the Council, such assistance will be of benefit to the Association or the members thereof;

(k) any other matter requisite for carrying out the objects of this Act. S.M. 1935, c. 13, s. 9.

Existing By-laws Validated

10. By-laws, rules and regulations heretofore passed, not inconsistent with this Act, shall be valid and effectual, but subject to be repealed or altered under this Act. S.M. 1935, c. 13, s. 11.

MEETINGS OF THE ASSOCIATION

Annual Meeting

11. (1) The members of the Association shall hold an annual general meeting once in each year. The annual general meeting shall be held at such time and place as are fixed by by-law. Notice of the time and place of the meeting shall be given in the manner provided by the by-laws.

Special Meetings

(2) Other general or special meetings of the Association may be held as provided by the by-laws.

Voting at Meetings

(3) Only members of the Association shall be entitled to vote at a meeting of the Association.

Majority Vote

(4) Except as by this Act or by by-law provided, at all meetings of the Association and of the Council, a majority of the members present, having a right to vote thereat respectively, shall decide upon the matters proposed, and the person presiding shall have a casting vote in case of an equality of votes. S.M. 1935, c. 13, s. 11 am.

AUTHORITY TO PRACTISE

Who May Practise

12. (1) Only those persons who are members of the Association or who have received a license from the Council as hereinafter provided, shall be entitled within the Province of Manitoba to engage in the practice of professional engineering, or to take or use the title of professional engineer or any abbreviation thereof.

Who Is Deemed Not To Be Practising

(2) The performance of engineering work by any person who is employed or engaged under the immediate and direct personal supervision and guidance of a professional engineer who assumes all responsibility for the technical quality of such work shall not be deemed to be the practice of professional engineering by that person nor require him to be registered under this Act. S.M. 1935, c. 13, s. 12 am.

MEMBERS' QUALIFICATIONS

13. No person not otherwise qualified as herein mentioned shall be entitled to be registered as a professional engineer or to become a member of the Association unless he is of the full age of twenty-one years, and

(a) submits evidence to Council showing that either

(i) he is a graduate in engineering of a university, college or school recognized by Council and has had such experience in engineering work as is satisfactory to Council; or

(ii) he has had at least six years' actual experience in engineering work of a nature satisfactory to Council and submits to an examination or produces credentials in lieu thereof, whichever the Council decides,

and Council certifies in writing to the registrar by minute or otherwise that such evidence, examination or credentials are satisfactory to it; and

(b) he has paid such fees or dues as are prescribed by the by-laws; and

(c) he has complied with such other terms and conditions as the Council in accordance with this Act and the by-laws imposes. S.M. 1935, c. 13, s. 13 am.
Note: See sec. 4.

Registration of Members of Similar Association in Canada

14. (1) Any person who comes to reside in the Province of Manitoba and who is a duly registered member in good standing of an association or institute similarly constituted of any other province of the Dominion of Canada, may be admitted to membership, if he produces to the Council a certificate of membership in such association or institute and otherwise complies with the requirements of Council.

Non-Resident of Canada

(2) Any person who comes to reside in the Province of Manitoba and who at that time is a duly registered member in good standing of any association or institute in other parts of the British Commonwealth of Nations or in the United States of America similarly constituted to this Association, and which grants reciprocal privileges and who applies for membership in this Association, may be admitted to membership, if he produces to the Council a certificate of membership in such association or institute and otherwise complies with the requirements of the Council.

Non-Resident of Manitoba — Temporary License

(3) The Council may, subject to such terms and conditions as it may impose and upon payment of the prescribed fee, grant any engineer residing outside of the Province of Manitoba and who is a member in good standing of any association or institution of engineers of a standing recognized by it, a temporary license to engage in the practice of professional engineering in Manitoba, and such license shall specify the purpose for which it is granted and the period it shall remain in force. S.M. 1935, c. 13, s. 14.

Engineers Practising in Two or More Provinces

15. Any person who is employed as professional engineer by a corporation or a department of a government, whose business is normally carried on in two or more of the provinces of Canada, and who is by reason

of his employment required to carry on the practice of professional engineering in provinces other than that of his residence, may be licensed to practice in the Province of Manitoba if he produces credentials satisfactory to the Council. S.M. 1935, c. 13, s. 15.

Partnerships

16. No partnership, corporation or association of persons shall be registered as a member of the Association or licensed to engage in the practice of professional engineering. S.M. 1935, c. 13, s. 16.

ANNUAL FEES

17. Each person who is registered or licensed to practise under this Act shall pay in advance to the secretary, or any person deputed by the Council to receive it, such annual fee as may be determined by the by-laws of the Association, which fee shall be deemed to be a debt due by the member to the Association and recoverable with costs in any court of competent jurisdiction. S.M. 1935, c. 13, s. 17 am.

Penalty for Non-payment

18. If any member omits to pay the prescribed annual fee within six months of the date upon which it becomes due, the registrar shall cause the name of such member to be erased from the register, and he shall thereupon cease to be a member; but shall at any time thereafter, upon paying such fee and complying with the by-laws relative thereto, be entitled to reinstatement as a member from the time of such payment and compliance. S.M. 1935, c. 13, s. 18 am.

INDIVIDUAL SEAL

19. Every person registered under this Act shall have a seal, the impression of which shall contain the name of the engineer and the words "Registered Engineer, Province of Manitoba," with which all estimates, specifications, reports, working drawings, plans and other documents issued from his hand shall be sealed. S.M. 1935, c. 13, s. 19.

EMPLOYMENT OF ENGINEERS

20. Except as herein otherwise provided, no person shall knowingly employ as a professional engineer or for any work which requires the services of a professional engineer, any person who is not a member of the Association or who is not the holder of a license issued pursuant to the provisions of this Act. S.M. 1935, c. 13, s. 20.

BOARD OF EXAMINERS

21. The Council shall, subject to approval of the Lieutenant-Governor-in-Council, appoint annually a Board which shall conduct the examinations of applicants for registration in accordance with the by-laws of the Association. S.M. 1935, c. 13, s. 21.

Joint Examination Board

22. The Council shall have power to establish conjointly with any council of any association similarly constituted in one or more of the provinces of Canada, a central examining board, and to delegate to the central examining board all or any of the powers possessed by the Association respecting the examinations of candidates for admission to membership, provided that any examination conducted by the central examining board shall be held in at least one place within the Province of Manitoba. S.M. 1935, c. 13, s. 22 am.

REGISTRAR

23. The registrar shall make and keep a register of all persons registered under this Act, but the register in use by the Association on the coming into force of this Act shall be deemed to be the register of the Association. The registrar shall also keep an annual register for the current year of all members in good standing and persons licensed to practise as in the province for the year. S.M. 1935, c. 13, s. 23.

REGISTER

24. No name shall be entered in either register except of persons authorized by this Act to be registered or to practise, nor unless the registrar is satisfied by proper evidence that the person claiming is entitled to be registered or to practise. Any appeal from the decision of the registrar may be decided by Council. S.M. 1935, c. 13, s. 24 am.

CERTIFICATE OF REGISTRATION

25. The registrar shall issue to each professional engineer registered under this Act a certificate of registration, stating that the person whose name is inscribed thereon is entitled to engage in the practice of professional engineering in the Province of Manitoba. The certificate shall be signed by the president and the registrar under the seal of the Association and shall remain the property of the Association, subject to recall by the registrar upon the name of the holder being struck off the register for any cause. S.M. 1935, c. 13, s. 25.

Right of Appeal

26. In the case of any refusal by the Council to register the name of any person as a member of the Association, or of refusal to issue a license, the person aggrieved may apply to a judge of the Court of King's Bench, who upon due cause shown, may issue an order to the Council to register the name of such person, or to grant him a license to practise or make such other order upon such appeal as may be warranted by the facts, and the Council shall forthwith comply with such order. Such order when so made shall be final. S.M. 1935, c. 13, s. 26.

SUSPENSION AND EXPULSION

Disciplinary Powers of Council

27. (1) The Council may, subject to the by-laws, reprimand, censure or suspend or expel from the Association any member guilty of unprofessional conduct, negligence, or misconduct in the execution of the duties of his office, or convicted of a criminal offence by any court of competent jurisdiction, but shall not take any such action until a complaint under oath has been filed with the registrar and a copy thereof forwarded to the member accused. The Council shall not suspend or expel a member without having previously summoned him to appear to be heard in his defence, nor without having heard evidence under oath offered in support of the complaint and on behalf of the member, if any. The Council shall have the same powers of taking evidence compelling the attendance of witnesses, the production of books, papers and documents and the punishing for contempt or the failure to comply with the orders of the Council as a commissioner appointed to hold a public enquiry has under "The Manitoba Evidence Act." All evidence shall be given under oath and taken down in writing by the registrar or by a reporter duly sworn.

Appeal

(2) Any member so suspended or expelled may, within thirty days after the date of the order or resolution of suspension or expulsion, appeal to a judge of the Court of King's Bench from such order or resolution, giving seven days' notice of appeal to the Council, and may require the evidence taken to be filed with the proper officer of the court, whereupon such judge shall decide the matter of appeal upon the evidence so filed and confirm or set aside the suspension or expulsion, without any further right of appeal; and, if the suspension or expulsion be confirmed, the cost of the appeal shall be borne by the member suspended or expelled.

Prohibited from Practice

(3) Unless the order or resolution of suspension or expulsion is set aside on the appeal or the judge or the Council otherwise orders, the member so expelled shall not engage in the practice of professional engineering in Manitoba or the member so suspended shall not practise until expiry of the period of suspension.

No Practice Pending Appeal

(4) Pending an appeal the member so suspended or expelled shall not practise. S.M. 1935, c. 13, s. 27 am.

No Action Against Council

28. No action shall lie against the Council or any committee or member of the Association for any proceedings bona fide taken or enforced or attempted under a by-law or regulation of the Association or for anything done in good faith and pursuant to the provisions of this Act. S.M. 1935, c. 13, s. 28.

PROHIBITIONS

29. Save as in this Act otherwise provided, no person shall

(a) engage in the practice of professional engineering; or

(b) assume verbally or otherwise the title of "professional engineer" or any abbreviation thereof or any name, title, designation or descriptive term which may lead any other person to believe that he is a professional engineer or entitled to engage in the practice of professional engineering; or

(c) act in such manner as to lead to the belief that he is authorized to fulfil the office of or to act as a professional engineer; or

(d) advertise, list, display or use at any time or in any manner or permit to be used at any time or in any manner in connection with his name, any name, title, designation or descriptive term, implying or calculated to lead any other person to infer that he is registered under this Act or entitled to engage in the practice of professional engineering;

unless he is registered under this Act and is a member of the Association or is the holder of a subsisting license granted pursuant to the provisions of this Act. S.M. 1935, c. 13, s. 29.

Note: See also sec. 20.

PENALTIES AND PROSECUTIONS

Penalties

30. Any person violating any of the provisions of this Act shall, for each first offence, incur a penalty of not less than twenty-five dollars, and not more than one hundred dollars, and costs of prosecution, and for each offence committed subsequent to the first conviction, to a penalty of not less than one hundred dollars and not more than two hundred dollars, and the costs of prosecution. S.M. 1935, c. 13, s. 30.

Note: Penalties recoverable under "The Manitoba Summary Convictions Act."

Limitation

31. No prosecution shall be commenced for any offence against this Act after one year from the date of the alleged committing of the offence. S.M. 1935, c. 13, s. 31.

Onus to Show Entitlement to Practise

32. In any action or prosecution under this Act it shall be presumed, until the contrary is shown, that the accused is not a professional engineer and the onus shall be upon the accused to show that he is a professional engineer entitled to practise as such. S.M. 1935, c. 13, s. 32.

Onus Respecting Publication of Signs

33. In any action or prosecution under this Act where it is shown that a name, title, designation or descriptive term has been used indicating therein that any person has held himself out or has been held out by any other person as being a professional engineer entitled to engage in the practice of professional engineering, it shall not be necessary for the prosecution to prove that the name, title, designation or descriptive term

was used by the accused or with his knowledge, but the onus shall be on the accused to establish that the sign, title, advertisement or descriptive term was not used by him or with his knowledge. S.M. 1935, c. 13, s. 33.

Practise Proved by Single Act

34. In any prosecution under this Act, it shall be sufficient proof of the offence alleged if it is proved that the accused has done or committed a single act of the kind complained of. S.M. 1935, c. 13, s. 34 am.

Who May Lay Information

35. Any information for an offence against this Act or the by-laws of the Association may be laid by any member of the Association or by any person appointed by the Council. S.M. 1935, c. 13, s. 35.

Moneys to Association

36. Any fee, fine, penalty or sum receivable or recoverable under this Act or the by-laws passed pursuant thereto when paid or recovered shall belong to the Association for the use thereof. S.M. 1935, c. 13, s. 36.

EXEMPTIONS

Military Engineers Exempt

37. The provisions of this Act shall not apply to any person employed in actual service in His Majesty's naval, military or aerial services. S.M. 1935, c. 13, s. 37.

Architects and Surveyors Exempt

38. Nothing in this Act shall apply to anyone registered as an architect under any Act of the province relating to the practice of architecture where the practice of such person is confined to architecture; and nothing in this Act shall apply to any Manitoba or Dominion land surveyor practising his profession, except that such surveyor or architect shall not style or hold himself out as a professional engineer unless he is registered or licensed under the provisions of this Act. S.M. 1935, c. 13, s. 38 am.

Electricians and Enginemen Exempt

39. Nothing in this Act shall apply to electricians under "The Electricians' License Act," or to steam engineers under "The Steam Boiler and Pressure Plant Act," or to locomotive enginemen under the Railway Act (Canada), so long as persons qualified under those Acts confine themselves to these titles and do not engage in the practice of professional engineering. S.M. 1935, c. 13, s. 39 am.

Exemption of Work for Personal Use and Work of Limited Value

40. Nothing in this Act contained shall be construed as preventing the carrying-on by any person on his own property of any work for the sole use of himself and his domestic establishment; nor the designing, construction, or installing by any person of appliances, works, or plants of a value not exceeding two thousand dollars where such work does not involve the safety of the general public. S.M. 1935, c. 13, s. 40.

SCHEDULE A

1. Transportation work, roads, railways, waterways, and all detail works connected therewith, such as bridges, tunnels, yards, docks, lighthouses, rolling stock and vessels, also aeroplanes, airships and airports.

2. Public utility work, such as telegraph systems, telephone systems, electrical generation, transmission and distribution systems, water works, gas works, irrigation works, drainage works, sewerage works, and incinerators and all other engineering works.

3. Mechanical works, such as steam boilers, engines, turbines, condensers, pumps, internal combustion engines, and other motive power machinery and accessories.

4. Electrical machinery and apparatus and works for the development, transmission and application of all forms of electrical energy.

5. Mining and metallurgical works, such as mining properties, mine and concentrator machinery and apparatus, oil and gas wells, smelters, cyanide plants, acid plants, metallurgical machinery, equipment and apparatus, and works necessary for the economical winning or preparation of metals, minerals, oils or gases.

6. All buildings and structures necessary for the proper housing or operation of the above-mentioned works.

7. The mechanical, electrical, chemical, electro-chemical, mining, or metallurgical treatment of the inorganic elements and combinations thereof for all industrial purposes.

8. Investigations relating to the examination, exploration and development of rocks and minerals, mineral deposits, rock structures, oil and gas structures, and the application of geology to the industries or arts or to engineering.

By-Laws

The Association of Professional Engineers of the Province of Manitoba is authorized under Section 9 of "The Engineering Profession Act," 1940, to make certain by-laws and regulations, not inconsistent with the Act.

1. OFFICERS

The Council of Management of the Association shall consist of—

A President,

A Vice-President,
(both of whom shall be members of Council.)

Five additional Councillors, of whom one shall be Secretary and Registrar.

2. NOMINATION FOR MEMBERS OF COUNCIL

The Secretary shall, at least thirty days before each Annual General Meeting, notify all members of the Association of the date and place of the Annual General Meeting, and that nominations for Council as provided under this by-law will be received by him up to a date which shall be twenty days before the date of the Annual General Meeting. He shall enclose to each member a nomination form. All nominations shall be made upon this form, shall be signed by the nominator and two other members in good standing and delivered to the Secretary's office not later than twenty days before the date of the Annual General Meeting. The consent of the nominee shall be obtained.

3. VOTING FOR MEMBERS OF COUNCIL

The Secretary shall prepare and mail to each Member a blank ballot containing the names of those nominated for Council at least ten days before the date of the Annual General Meeting. Ballots shall be returnable to the Secretary up to 5 p.m. of the day prior to the date of the Annual General Meeting. The candidates receiving the highest number of votes shall be elected.

Each ballot shall be marked for not more than the number to be elected; otherwise it will not be counted.

Only members in good standing shall be eligible to vote, to hold office or to act upon Council.

Prior to the Annual General Meeting the President shall appoint the scrutineers who shall count the votes as handed to them by the Secretary and shall report the result at the Annual General Meeting to the Presiding Officer who shall make the declaration.

In the event of a tie vote between two or more candidates receiving the least number of votes to qualify, the meeting shall elect by ballot from among the candidates so tied. In the event of a further tie the Presiding Officer shall cast the deciding vote.

4. ELECTION OF OFFICERS

At the Annual General Meeting to be held in January, 1946, three members shall be elected to Council, whose term shall expire at the end of the Annual General Meeting in January, 1948.

In 1947 and subsequent alternate years four members, and in 1948 and subsequent alternate years, three members shall be elected to Council for a term of two years.

The members elected to Council for the ensuing year shall immediately after or during the Annual Meeting assemble for the purpose of electing from their number a President, a Vice-President and a Secretary who shall also be the Registrar of the Association.

Members of Council shall retain office until the close of the Annual General Meeting, including all adjournments thereof, at which their successors are elected.

5. TERM OF OFFICE OF PRESIDENT

The term of office of the President shall be one year. A member shall not hold the office of President for more than two years in succession.

6. TERM OF OFFICE OF VICE-PRESIDENT

The term of office of the Vice-President shall be one year. A member may not hold the office of Vice-President for more than two years in succession.

7. TERM OF OFFICE OF SECRETARY AND REGISTRAR

The term of office of the Secretary and Registrar shall be one year. He may hold this office as often as re-elected by Council.

8. VALIDITY OF COUNCIL'S ACT

The transactions of Council or of a Committee of Council, notwithstanding that it may afterwards be discovered that there was some cause for disqualification or some defect in the election, shall be as valid as if all had been regularly elected and were qualified to act.

9. RESIGNATION OF MEMBERS FROM COUNCIL

A member of Council may at any time give notice in writing to Council of his wish to resign, and on the acceptance of his resignation by Council, but not before, his office shall become vacant.

10. VACATION OF OFFICE

The office of Member of Council is vacated by resignation, by death, by ceasing to be a member of the Association, or by absence from more than three consecutive meetings of Council, without consent of Council. When vacancies occur in Council from any cause such vacancy may be filled by Council until the next Annual General Meeting, when members shall be elected by the Association to complete any unexpired term.

11. AUDITOR

At the Annual General Meeting each year an auditor shall be appointed for the ensuing year.

The Secretary, not less than ten days before the day of the Annual General Meeting of the Association, shall deliver to the Auditor the books of the Association together with a full statement of the income and expenditure of the Association for the year ending 31st December, last preceding. The Auditor shall examine into the financial condition of the Association, prepare a balance sheet and report thereon. Such balance sheet and report shall be delivered to the Secretary by the Auditor within seven days after receiving the books and statement, and the same shall be read at the Annual General Meeting.

12. WHO SHALL PRESIDE

The President shall preside at all meetings of the Association and of Council. In his absence the Vice-President shall preside. In the absence of the President and Vice-President, a Chairman shall be elected by the meeting.

The Chairman shall not vote, except in the event of a tie, in which case he shall cast the deciding vote.

13. SECRETARY

The Secretary shall conduct all correspondence of the Association and Council, attend all meetings and keep a correct record of the proceedings. He shall see that all notices are duly sent to the members of the Association, Council and Committees. He shall receive all payments to the Association, see that the proper fees are levied and collected, keep correct accounts, furnish same for audit when required and perform such other secretarial duties as Council may prescribe.

14. CARE OF FUNDS

All money received on behalf of the Association shall be deposited in a chartered bank in the name of the Association, or, if considered advisable by Council, may be invested in approved securities guaranteed by the Dominion or Provincial Governments or municipalities; said securities, if purchased, to be placed in a safety deposit vault, subject to access only on the written order of the Secretary and President or other person duly authorized by Council, and said securities may be disposed of on a vote of at least five-sevenths of the Members of Council.

All payments shall be made by cheque signed by the Secretary and countersigned by the President, or other person duly authorized by Council.

15. BONDS

Any officer having the custody of any funds of the Association exceeding $1,000 shall furnish bonds in an approved Guarantee Company for such amount as Council may from time to time determine. The cost of such bonds shall be paid by the Association.

16. NOTICES

All notices required to be given to members of the Association shall be deemed to have been given if mailed prepaid in Winnipeg Post Office within the time specified for such notice addressed to the member at the address given by him to the Association. If no address has been given, then the member's address shall be deemed to be in Winnipeg, and such notice shall be so addressed to the member. A declaration by the Secretary shall be conclusive evidence of the mailing of such notice.

17. ANNUAL GENERAL MEETING

The Annual General Meeting of the Association shall be held in the Province of Manitoba on the third Thursday of January of each year unless the said Thursday be a statutory holiday, then at such time as Council may determine.

18. GENERAL MEETING

General Meetings of the Association for the transaction of general business, the reading of papers or discussion of questions of interest to the profession may be held whenever called by the President or by Council.

19. SPECIAL MEETINGS

Special meetings of the Association shall be held at the call of the President or Council or after the receipt of a requisition signed by not less than six members for such meeting. Not less than two days' notice shall be given for such a meeting. The notice shall specify the business to be brought forward, and no business shall be dealt with except that for which the meeting was called.

20. ADJOURNMENTS

Meetings of the Association may be adjourned from time to time by a resolution of a majority of the members present. No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.

21. QUORUM

The necessary quorum for transaction of business shall be: in the case of the Annual General Meeting, twenty-five; in the case of a General or Special Meeting, ten; in the case of Council Meetings, four. If, within half an hour after the time appointed for a meeting, a quorum be not present, the meeting may be cancelled or adjourned.

22. VALIDITY OF VOTE

No objection to the validity of any vote will be allowed except at the meeting and time at which such vote is taken. The Chairman of the meeting shall be the sole and absolute judge of the validity of every vote tendered at any meeting or poll.

23. MINUTES OF MEETINGS

The minutes of all meetings of the Association or Council as recorded and signed by the Chairman of a following meeting, and by the Secretary, shall in the absence of proof to the contrary, be deemed to be a correct record of the proceedings of any such meetings.

24. COUNCIL MEETINGS

Meetings of Council shall be held monthly at the call of the President at such hour and place as he shall determine. Special meetings of Council may be held at any time on the call of the President or by requisition of two members of Council. At least twenty-four hours' notice shall be given of all Council meetings.

25. COMMITTEES

Council may, from time to time, appoint Committees from the membership of the Association for the purpose of facilitating business or for any other purpose, in the interests of the profession. The President and Secretary shall be ex-officio members of all committees.

When Committees are appointed by Council, or by the Association, the first named member shall act as convenor until the Committee shall have elected its Chairman. Committees shall report, if possible, to Council at least once each month.

26. BOARD OF EXAMINERS

Council shall, at its first regular meeting following the Annual General Meeting, appoint a Board of Examiners. The duty of the Board of Examiners shall be to report to Council upon all applications for examinations and upon such applications for registration as may be referred to it by Council; to make all necessary arrangements for examinations, and to hold examinations at least once a year, when there are applicants to be examined, and to report to Council the result thereof.

Council may at any time fill any vacancies in the Board of Examiners, replace any member of the Board, or add to its number.

27. TERM OF OFFICE OF BOARD OF EXAMINERS

Members of the Board of Examiners shall hold office for one year and shall always be eligible for re-appointment.

28. ORDER OF BUSINESS

The order of business shall be as follows:

A.—Annual General Meeting.

1. Reading and confirming or correcting Minutes.
2. Business arising out of Minutes.
3. Declaration of result of ballot.
4. Appointment of Auditor.
5. Reading and considering correspondence.
6. Reading and considering reports of Council and Committees.
7. General Business.

This order may be changed by the President, if necessary, to suit the business in hand.

B.—Meetings of Council.

1. Reading and confirming or correcting Minutes.
2. Business arising out of Minutes.
3. Reading and considering correspondence and reports from the Board of Examiners.
4. Reading and considering Committee reports and correspondence.
5. Reading and considering general correspondence.
6. Receiving applications for registration.
7. Passing Accounts.
8. General Business.

29. PROCEDURE

The proceedings at all meetings shall be governed by the rules laid down in "Bourinot's Rules of Order" except as otherwise provided by the by-laws of the Association.

30. LIBRARY

Council may on instructions from the Association undertake the formation or maintenance of a library for the use of the Association, and may purchase books and periodicals, and pay for these out of the funds of the Association. It shall make such rules respecting the custody of the library as it may find advisable.

31. GRANTS

Council may pay for the reception and entertainment of important guests, and may pay expenses incurred in matters pertaining to the interests of the Association.

32. FEES

1. **Registration Fee**—Each applicant on applying for registration shall pay the Secretary $25.00 as registration fee, which shall include the annual dues for the current year.

2. **Annual Fee**—Each person who is registered under "The Engineering Profession Act" shall pay in advance to the Secretary of the Association on the first day of January of each year a fee of Five Dollars ($5.00). Should a member omit to pay this fee within six months after the above date, the Registrar shall remove his name from the roll of Professional Engineers of the Province of Manitoba.

3. **Fees for License to Practise** — Except as otherwise provided in the Act, the fee for temporary license for non-residents to practise in Manitoba shall be:

(a) $5.00 for any non-resident engineer who is a member in good standing of any association or corporation of engineers similarly constituted in any other province of the Dominion of Canada.

(b) $25.00 for any other non-resident engineer.

The fee shall be payable upon application for the license and the term of the license shall be twelve months from the date of issue. Any engineer who resides in the Province of Manitoba continuously for a period of twelve months shall cease to be considered a non-resident, and must apply for membership in the Association.

4. **Examination Fees**—Candidates for the General Qualification Examination shall be required to pay a fee of $15.00.

Candidates shall forward the full amount specified above with their application for examination.

33. TEMPORARY WITHDRAWAL

Any member in good standing may withdraw from active membership in this Association upon written notice given to the Secretary before the 31st December, in the year in which such resignation takes place; should such withdrawal become effective prior to July 1st, a rebate of one-half the annual fee of that year shall be made. Such member may be readmitted to full membership in the Association at any time, upon formal application to the Secretary, approval by Council and payment of the Annual Fee for the year in which such application is made. A second registration fee shall not be required.

34. ASSOCIATION SEAL

The seal of the Association shall contain the words: "ASSOCIATION OF PROFESSIONAL ENGINEERS OF THE PROVINCE OF MANITOBA."

35. SCHEDULE OF CHARGES AND SALARIES

The schedule of professional charges and of salaries shall be those adopted by the Association from time to time.

36. INTERPRETATION

In the event of any dispute as to the meaning or intent of any of these by-laws or of any by-laws which may hereafter be made, the interpretation of Council shall be final.

37. AMENDMENTS TO BY-LAWS

The proposal to introduce new by-laws, or to repeal or amend existing by-laws may be approved, at any regularly convened meeting of the Association, by a two-thirds vote of the members present, provided that notice of such proposal is signed by not less than six members and is given to the Secretary at least thirty days before the meeting. The Secretary shall issue notice of the meeting and notify the members of the proposd by-laws, amendments or repeal.

The new by-laws, amendments or repeals shall become effective on ratification by a two-thirds majority of those members voting by a letter ballot returnable within thirty days of the meeting at which the proposal has been approved.

The following amendment to the by-laws was adopted at a meeting held June 16, 1939:

By-law 32, Subsection 2, Fees — is hereby amended by striking out the words and figures, "Five Dollars ($5.00)," at the end of the first sentence and substituting therefor the words and figures, "Fifteen Dollars ($15.00)."

This amendment to Subsection 2 of By-law 32 shall come into force upon a co-operative agreement being brought into effect between the Association and the Engineering Institute of Canada, such as will give the members of the Association the additional privileges of membership in the Engineering Institute of Canada.

Association of Professional Engineers of the Province of Manitoba

The following rules are a general guide to conduct and are not intended to deny the existence of other duties equally important though not specifically mentioned.

Council is empowered to enforce the rules herein established, but it is the privilege of any member to consult Council as to the proper conduct to pursue in any specific case.

CODE OF ETHICS

To the State

1. The Professional Engineer owes a duty to the State, to maintain its integrity and its law, and not to aid, counsel or assist any person to act in any way contrary to its laws.

2. When engaged as an expert witness he shall at all times act with candor and fairness, and give, to the best of his knowledge and ability, an honest opinion based on adequate study of the matter in hand.

To His Client

3. He shall act in all professional matters strictly in a fiduciary manner with regard to any clients whom he may advise and his charges to such clients shall constitute his only remuneration in connection with such work, except as provided by Clause 6.

4. He shall not accept any trade commission, discounts, or allowances, under any circumstances, nor any indirect profit, except as provided by Clauses 5 and 6, in connection with any work which he is engaged to design or superintend or with professional business which may be entrusted to him.

5. He shall not, while acting in a professional capacity, be at the same time, without disclosing the fact in writing to his Clients, a Director or Member, or a Shareholder in, or act as Agent for, any contracting or manufacturing company or firm or business with which he may have occasion to deal on behalf of his Clients, or have any financial interest in such a business.

6. He shall not receive, directly or indirectly, any royalty, gratuity or commission, on any patented or protected article or process used on work which he is carrying out for his Clients, without first disclosing the fact in writing to his Clients.

7. He shall not improperly solicit professional work, either directly or by an agent, nor shall he pay, by commission, or otherwise, any person who may introduce Clients to him.

8. He shall not be the medium of payments made on his Clients' behalf to any contractor or business firm (unless specially so requested by his Clients), but shall only issue certificates or recommendations for payment by his Clients.

To His Fellow Engineer

9. He shall not attempt to injure, directly or indirectly, the reputation, prospects or business of a fellow Engineer.

10. He shall not accept employment by a Client while a claim for compensation or damages, or both, of a fellow Engineer previously employed is unsatisfied, or until such claim has been referred to arbitration, or issue has been joined at law or unless the Engineer previously employed has neglected to press his claim, except in special cases where authority has been obtained from Council to accept such employment.

11. He shall not attempt to supplant a fellow Engineer after definite steps have been taken towards the employment of said Engineer.

12. He shall not compete with a fellow Engineer for employment on the basis of professional charges, by reducing his usual charges and attempting to underbid after being informed of the charges named by his competitor.

13. He shall not accept any engagement to review the work of a fellow Engineer, for the same Client, without notifying such Engineer in writing, or unless the connection of such Engineer with the work has been terminated.

14. In general the Engineer should think highly of his profession, its history and traditions, and should ever act in a manner worthy of its honor and dignity.

15. A breach of any of the foregoing Rules of Conduct by any member of this Association shall be considered inconsistent with honorable and dignified deportment in his professional practice, and such a member may be deemed guilty of unprofessional conduct, and thereby subject to discipline under Section 27, sub-section 1, of "The Engineering Profession Act."

Adopted November 1st, 1921.

Revised April 6th, 1935.

Rules and Regulations relating to Examination for Membership in the Association of Professional Engineers of the Province of Manitoba

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1. The regular examinations for candidates for registration who are required to submit to an examination under Section 13, sub-section (a) (ii), of "The Engineering Profession Act," Revised Statutes of Manitoba 1940, Chapter 63, will be held on the second Tuesday and succeeding days, excluding Sundays and statutory holidays of the month of February.

The examination sittings will commence each day at 9 a.m. and 2 p.m.

2. Applicants for registration under Section 13, sub-section (a) (ii) of the Act, who have been formally notified by the Secretary that they are required to pass an examination, shall make application to the Secretary for examination at least one month in advance of the dates mentioned in Rule 1.

3. All applications for examination shall be made on printed forms which may be obtained from the Secretary of the Association and shall be accompanied by the fees prescribed in Clause 32 of the by-laws.

4. If the candidate is unable to write his examination on the date fixed in his notice, his examination fee will not be returned, but no additional fee will be required for that examination at a subsequent date.

5. The stationery required for examinations will be supplied by the Board of Examiners. The answers shall be written in ink (except necessary diagrams which may be in pencil) and on one side only of the paper.

6. Candidates shall present themselves punctually at the hours appointed for the commencement of the examinations, and no candidate will be allowed to enter the examination room later than fifteen minutes after that time, nor will any candidate be allowed to leave the room during a sitting save in cases of extreme necessity, but as soon as he has finished his papers, he may hand them to the examiner and retire until the next sitting. No candidate, however, shall leave the room within half an hour of the commencement of the examination.

7. Candidates shall not bring into the examination room any books, papers or notes except such as may be approved by the Board of Examiners. Should it appear to the presiding examiner during an examination, or to the members of the Board of Examiners, during the reading of the answers that any candidate has broken this rule, or has obtained assistance from any other candidate, the papers of such candidate obtaining assistance shall be cancelled. The candidate from whom such assistance was obtained shall be held to be equally guilty and shall be dealt with accordingly.

8. Silence shall be observed by the candidates in the examination room while the examination is in progress.

9. Candidates shall bring with them ordinary drawing instruments, set squares, and both architect's and decimal scales, for use if required in answering any of the papers. The use of the slide-rule is permitted.

10. No person shall be admitted in the examination room while the candidates are writing without the permission of the presiding examiner.

11. No candidate shall be considered to have passed in either part of the examination unless he has obtained at least 50 per cent. of the maximum number of marks in that part.

12. A candidate who fails in either part may present himself for examination in that part at any subsequent regular examination.

13. Each candidate will be notified by the Secretary of the Association of the result of his examination. No information regarding these results shall be communicated to the candidate by the examiners, prior to the official announcements by the Secretary.

EXAMINATIONS FOR APPLICATIONS UNDER S. 13 s.s. (a) (ii)

The examination for applicants for registration who are required to take an examination to satisfy Council as to their engineering knowledge, will consist of the following tests covering the branch of engineering in which the applicant has been engaged:

1. A paper of a general nature; and

2. A practical problem.

Note:—In considering the merit of all examinations, the results obtained and the method of presentation will be given due weight.

Although it is recommended that a study of Calculus be made by those preparing themselves for examinations, no questions will be asked in examination papers in answering which a knowledge of Calculus will be essential.

Tariff of Fees

SCHEDULE OF MINIMUM CHARGES FOR SERVICES RENDERED BY MEMBERS OF THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF THE PROVINCE OF MANITOBA IN PRIVATE PRACTICE, OR ACTING AS ARBITRATORS OR EXPERTS IN COURT

The following schedule shall apply in absence of any specific written agreement between the professional engineer and his client:

Ordinary Consultations

1. For consultations which do not necessitate a written report, the charge to the client shall be established in accordance with the time spent. The basis shall be a professional day of six hours remunerated at the rate of $50.00. Charges for fraction of a day shall be made as follows, namely, $30.00 for one-half of a day, and for shorter time $15.00 for the first hour or fraction of an hour, depending on the importance of the consultation.

Written Reports, Valuations, Arbitrations, and Expert Testimony

2. For investigations or study of a project with a preliminary report based on reconnaissance only and not involving detailed surveys and preliminary plans, or for investigations or study of a report prepared by another engineer accompanied by a report on the subject, for study and report on questions in litigations for work as valuator or as arbitrator, or for preparations and depositions before a court of justice or a board of arbitration, or for attendance or evidence in Court during an enquiry, the engineer's fees shall be $50.00 per day. The client will pay besides the above, all out-of-pocket expenses incurred by the engineer in connection with the work, and shall also pay for all salaries paid by the engineer to his assistants together with an additional sum equivalent to 100 per cent. of the said salaries to cover office and overhead expenses. The client shall deposit with the engineer before the commencement of the investigations an amount equal to the estimated out-of-pocket expenses thereon.

Written Reports with Preliminary Plans and Estimates of Cost Preparatory to the Preparation of Construction Plans and Specifications

2a. For the preparation of a written report on a project with surveys, investigations, studies and conferences, and including preliminary plans and estimates of cost, the engineer's fee shall be based upon a percentage of the estimated cost of the project, as follows: Where the estimated cost is $50,000

or less, 2 per cent, and not less than $100.00; or over $50,000 and not over $100,000, 1¾ per cent; over $100,000 but not over $500,000, 1½ per cent; over $500,000, but not over $1,000,000, 1¼ per cent; over $1,000,000, 1 per cent.

In addition to the above fees the client shall pay all out-of-pocket expenses incurred by the engineer in connection with the work, and shall also pay for all salaries paid by the engineer to his assistants together with an additional sum equivalent to 100 per cent of the said salaries to cover office and overhead expenses, the client shall deposit with the engineer before the commencement of the investigation an amount equal to the estimated out-of-pocket expenses thereon, and pay to the engineer further sums from time to time as he may request to cover the salaries of assistants actually employed in connection with the project.

Preparation of Construction Plans and Specifications and Supervision of Work and Acceptance of Complete Work

3. For the preparation of construction plans and specifications, advising on the award of construction contracts, for the supervision of construction, for the testing and acceptance of machinery or construction works, the remuneration shall be proportionate to the cost of the undertaking. Fees shall be in the first place based upon the estimated cost of the project, and in case of works proceeding to construction the actual fees shall be in accordance with the total cost of the undertaking. The following percentages shall represent the fees of a professional engineer and shall include remuneration for service of his office and overhead expenses:

Preparation of Construction Plans and Specifications

(a) For the preparation of construction drawings and specifications necessary for the receipt of tenders, the fees of the engineer shall be 3 per cent of the cost of the works, provided the estimate is for an undertaking of $50,000 or less, with a minimum remuneration of $300.00 for enterprises of a cost of $10,000 or less. The undertaking to cost over $60,000 and less than one million dollars, the fee shall be 2½ per cent on the first million dollars and 2 per cent for all expenditure in excess of one million dollars.

Supervision of Construction, Testing and Acceptance of Construction Work and Machinery

(b) Partial Supervision — Partial supervision comprising consultation at the engineer's office and occasional visits to the works during the normal duration of construction shall be remunerated at the rate of 3 per cent to 2 per cent of the cost of the undertaking, depending on the importance of the works. The remuneration of the engineer shall be 3 per cent of the cost of the works, provided the estimate is for an undertaking of $50,000 or less, with a minimum remuneration of $300.00 for enterprises of a cost of $10,000 or less. For undertakings to cost over $50,000 and less than $500,000, the fees of the engineer shall be 2½ per cent of the cost, and for all expenditure of over $500,000 the fee shall be 2 per cent of the cost.

(c) Complete Supervision—Complete supervision, comprising consultations at the engineer's office, visits to the works, and in addition, the necessary representative of the engineer on the works, the testing of supplies and

machinery and the acceptance of machinery at works, shall be remunerated at the rate of 7 per cent to 3½ per cent of the cost of the works, depending upon the importance of same. A remuneration of 3½ per cent shall apply to undertakings of more than one million dollars, 4 per cent for works costing between $500,000 and $1,000,000, 5 per cent for works costing between $200,000 and $500,000, 6 per cent for works costing between $50,000 and $200,000 and 7 per cent for works costing $50,000 or less. The minimum remuneration for complete supervision shall be $700.00 for works of $10,000 or less.

General Conditions

4. A day's work of a professional engineer shall be computed at six hours. Nevertheless, when an engineer is obliged to go out of the city where his office is situated, his fees, when working on the per diem basis, shall be computed for each calendar day at the rate fixed, and each 24 hours or fraction thereof shall be considered as a whole day without taking into consideration the time actually spent on the work each day.

5. The fees of a professional engineer in case questions of litigation are not contingent on the decisions of the court of justice, and shall be settled by the client immediately after the submission of evidence.

6. For reports, studies, plans and specifications, the client shall pay one-half of the fees of the engineer at the time the engineer will inform him that the preliminary studies have been terminated, and the other half shall be payable upon the delivery of the report or the plans and specifications.

7. All test borings, assays or analyses necessary for the complete examination of any site or foundations for the erection of any structure shall be paid for by the client in addition to any other fees or percentages.

8. If the client desires changes in accepted specifications or plans, the engineer shall be entitled to remuneration based upon the necessary delay and time required to alter such plans and specifications either by himself or by his office staff, the said remuneration to be based upon the per diem rates hereinbefore mentioned in paragraph 2.

9. In the preparation of specifications and plans or during the supervision of construction, particular problems may arise which may necessitate calling a specialist into consultation. In such case the fees of the specialist, whose engagement must be authorized by the client, shall be directly paid by the client in addition to the fees of the engineer.

10. The actual cost of all travelling expenses and other disbursements incurred by the engineer in connection with the supervision of works, except the salaries, travelling expenses and living expenses of his staff to and from and on the works, shall be paid monthly by the client in addition to the percentage mentioned above in paragraph 3.

11. The percentages named for remuneration in paragraph 3 for supervision during construction are intended to cover the services of the engineer and of his staff during the period ordinarily expected to be covered by such construction, and in the event of delays occurring in the construction, through no fault of the engineer, the engineer's remuneration shall be increased to compensate him for the extra time necessarily spent by him and his staff mentioned above in paragraph 2.

12. During the construction period the monthly payments made by the client to the engineer shall not be less than $400.00 for works costing less than $10,000; $600.00 for those over $10,000 and less than $50,000; $1,000.00 for those between $75,000 and $100,000, and $1,500.00 for works costing between $150,000 and $500,000, and proportionately for works costing over $500,000. The balance of any amount due for services during the construction period shall be paid by the client to the engineer on acceptance of the complete works by the engineer.

13. In case of bankruptcy or failure of a contractor on the construction work involving additional works on the part of the engineer over and above that contemplated in his original agreement, or in case any other work may be necessary and not directly relating to the preparation of specifications and plans and to the supervision of the work, the client shall reimburse the engineer and his staff on the per diem basis hereinabove mentioned provided in paragraph 2 for all such services.

14. All specifications and plans, and construction documents and data are the property of the engineer. The client is entitled to a copy of plans and specifications for record purposes only and he shall not use any of these for the construction of another project without remunerating the engineer therefor.



A Historical Note on the Association Scholarships

W. M. SCOTT

The Association of Professional Engineers of the Province of Manitoba was a very young organization when it began to consider what it might do toward the promotion of Engineering education in Manitoba. Its charter, "The Engineering Profession Act," was assented to March 27, 1920. The first meeting of the Provisional Council was held April 9, 1920, and as the records of the Association show, in December of that year the first move toward the establishment of an engineering scholarship in the University of Manitoba was made.

During the year which followed, such matters as the formal offering of a scholarship to the University, its acceptance and the details governing its award were consummated, and at the University Convocation in 1922 the first award was made.

A few excerpts from the records of the Secretary and Registrar relating to the establishment and maintenance of scholarships in the Faculty of Engineering and Architecture of the University of Manitoba by the Association are given herewith to recall a bit of almost ancient history.

In the minutes of a meeting held Wednesday, December 22, 1920, the following appears:

> "Letter from W. M. Scott, addressed to the President under date of December 18, suggesting that the Association offer the University of Manitoba a scholarship annually during the pleasure of the Association, and, secondly, that the Association offer the assistance of its members to the Engineering Faculty of the University in the way of providing special lectures.
>
> "It is moved by D. A. Ross, and seconded by P. Burke-Gaffney, and carried, that the Council recommend to the membership at the Annual Meeting that the matters referred to in Mr. Scott's letter be favourably considered and dealt with at the next Annual Meeting.
>
> "The Secretary was instructed to communicate with Mr. Finlayson (Professor John N. Finlayson) with refer-

ence to these matters, in order to gather sufficient material to act on the suggestions at the Annual Meeting."

The following are extracts from the minutes of the Annual Meeting of the Association held Thursday, January 20, 1921, which deal particularly with the Association's University Scholarship:

"Consideration was given to the matter of offering to the University of Manitoba a scholarship annually in some Department of the Engineering Faculty.

"As Mr. Scott had brought this matter to the attention of Council under date of December 18, 1920, he was asked to outline his proposition to the members. He then moved, that this Association offer to the Universtiy of Manitoba a scholarship to the amount of $150.00 annually or during the pleasure of the Association, in some Department of the Engineering Faculty."

Considerable discussion ensued with regard to this, and many suggestions as to the basis of award were brought forward:

"The Secretary explained to the meeting that he had interviews with President MacLean of the University, who looked with favour upon the proposed action of the Association, and suggested that the matter could best be dealt with by a Committee of the Association dealing with a Committee of the Council.

"Mr. Scott's motion, having been seconded by W. N. Smith, was put to the meeting and carried.

"It was moved by Harold Edwards and seconded by P. Burke-Gaffney and carried, that the Council appoint from this Association a Standing Committee to deal with the matter of providing a scholarship to the University, and any other matters of interest to the Association affecting the Engineering Faculty of the University of Manitoba."

The next reference to the University Scholarship is noted in the minutes of a meeting of Council held December 20, 1921:

"Three letters of reference to the Scholarship being provided by the Association from Mr. W. J. Spence, Secretary to the Board of Governors; Mr. James A. MacLean,

President of the University; and Mr. D. E. Beatty, Secretary of the Engineering Society of the University of Manitoba, were received and read and the Secretary was instructed to have these letters brought before the Annual Meeting."

The annual stipend of the Scholarship was fixed at $150.00. It was announced in the University Calendar as follows:

"An Annual Scholarship of $150.00 is offered to Engineering Students of the University of Manitoba by the Association of Professional Engineers of the Province of Manitoba and is awarded by the University under the following rules:

"(1) The Scholarship shall be awarded to the student who obtains the highest aggregate marks for the First and Second Years of the Engineering Course in the regular examination.

"(2) A student to be eligible for the Scholarship must have clear standing on all subjects at the end of the spring examinations of the Second Year.

"(3) In estimating the aggregate for a student who has had one or more conditions which have subsequently been removed, the marks obtained in the original examination will be used.

"(4) The Scholarship will be paid in two moieties at the same time as the moieties of the Isbister Scholarships.

"(5) If the student who has won the Scholarship does not return to pursue his studies at the University of Manitoba in the following session, the Scholarship shall ordinarily be forfeited and shall be awarded to the candidate who is next in order of merit. In special circumstances, however, the Scholarship may, on recommendation of the Engineering Faculty, be held over to a later session."

The Scholarship was continued in this amount and on this basis of award until 1939, when a change was made.

At the 1939 Annual Meeting it was resolved to increase the stipend of the Scholarship from $150.00 to $200.00 and a Committee was appointed to study and recommend to Council a basis of award for the increased sum. The report of this

Committee to Council which was later approved by the University Senate was that two Scholarships of $100.00 each be given. This was adopted and, effective in 1940, the change was made. Since that time the announcement in the University Calendar of the Scholarships of the Association of Professional Engineers of the Province of Manitoba reads as follows:

> "Two annual Scholarships of $100.00 each are offered to Engineering Students at the University of Manitoba under the following rules:
>
> "1. (a) A Scholarship of $100.00 based upon the examination results in English. The basis for this award shall be the highest marks obtained out of a maximum of 200 by adding together the percentage of the maximum obtained in the subject of English and the percentage of the maximum marks in all other subjects of the First Year.
>
> (b) A Scholarship of $100.00 based upon the highest percentage of the maximum marks in all subjects of the Second Year.
>
> "2. The conditions of eligibility to receive either of these Scholarships are, in general, the same as for the Isbister Scholarships.
>
> "3. The winner of either of these Scholarships will not be eligible for an Isbister Scholarship, or other, in the same year."

Maintenance of these Scholarships has no doubt been a pleasure and a satisfaction to the Association and altogether a good deed. But this is vicarious action only. There has probably seldom been a greater opportunity or a greater need for personal as well as group interest in professional education than exists today in the case of the Engineering School of the University of Manitoba. Increased endowment and additional courses of the same high standard as those now given are necessary. Until full courses in Mechanical, Mining, Metallurgical, Chemical, and Public Health Engineering are available, engineering education as offered by the University of Manitoba is but partial.

Winners of Scholarships

OF THE

ASSOCIATION OF PROFESSIONAL ENGINEERS

OF THE

PROVINCE OF MANITOBA

The following is a complete list to date of the winners of the Scholarships awarded by the Association of Professional Engineers of the Province of Manitoba:

1921-22	Wallace G. Leppard (E.E.)	
1922-23	Dudley S. A. Young (E.E.)	
1923-24	Charles William Carry (C.E.)	
1924-25	Carl Ingimundson (E.E.)	
1925-26	Herbert Lee Briggs (E.E.)	
1926-27	Edward Toporek (E.E.)	
1927-28	William D. Hurst (C.E.)	
1928-29	Llewellyn Edward Jones (C.E.)	
1929-30	Lloyd George Scott (E.E.)	
1930-31	Max Spigelman (E.E.)	
1931-32	Arthur L. Malby (E.E.)	
1932-33	Charles M. Gregory (E.E.)	
1933-34	Eliot R. Davis (E.E.)	
1934-35	Malcolm A. McNish (C.E.)	
1935-36	Robert T. Harland (E.E.)	
1936-37	Aaron Gusen (E.E.)	
1937-38	William Douglas Laird (C.E.)	
1938-39	John Emil Pauch (E.E.)	
1939-40	Baldur Franklin Guttormson	First Year
	William A. Bowman	Second Year
1940-41	Gordon Thurlow Davis	First Year
	Edward Bjorn Carlstrom	Second Year
1941-42	Robert Law Payne	First Year
	Gordon Thurlow Davis	Second Year
1942-43	Lawrence Ralph Morris	First Year
	Joseph Thompson Purvis	Second Year
1943-44	Myer Dimentberg	First Year
	Joseph Anthony D'Angelo	Second Year
1944-45	Philip John Harris	First Year
	Edward Arvid Lundman	Second Year

The Scott Gavel

P. BURKE-GAFFNEY

There is no one who has manifested a more sustained interest in the administration of the Association of Professional Engineers of the Province of Manitoba than W. M. Scott, now Commissioner of the Greater Winnipeg Water District and doyen of the Engineering Profession of Manitoba. He was instrumental in founding this Association, was its first Chairman, and has been the liaison between the University of Manitoba and the Association for the twenty-five years of its existence.

Some ten years ago he deplored the absence of some symbol of continuity, of something which could be handed down to future generations as a link with the past. He recalled that it seems inherent in the nature of men when organized successfully in society to adopt some tangible object which would serve at once as a symbol and nexus of authority, citing as examples, the coronation stone of England, the iron crown of Lombardy.

In 1938 he conceived the idea of having fabricated a gavel which would serve this dual purpose. Taking his time in the design and in the accumulation of the necessary materials, he presented what is now known as the "Scott Gavel" to the Association at its Annual Meeting in 1940.

The gavel is a buffalo horn, eminently appropriate since a buffalo is the symbol of the Province of Manitoba. The horn is equipped with a silver handle and massive silver base, enabling it to furnish as a gavel. The base is removable, giving access to the interior of the horn. Accompanying the gavel is a parchment on which is inscribed the signatures of all presidents to date in chronological order, with space for the signatures of future presidents up to one hundred years. This parchment is of size and shape that it can be rolled and lodged in the interior of the horn.

In presenting the gavel to the Association, Mr. Scott stipulated that it remain in the possession of the President of the year as a symbol of his office and that he in turn pass

it on to his successor, having first inscribed his name on the parchment, thus preserving a perpetual tangible link with the founders of the Association. Geo. E. Cole and Dean E. P. Fetherstonhaugh, M.C., devised a touching little ceremony for the transfer of the "Scott Gavel" from the retiring president to the president-elect, which has become a feature of the annual meetings of the Association.

While it was no part of the donor's plan to attach his name to the gavel, it has fortunately come to be known as the "Scott Gavel"; fortunately, because it will perpetuate in the minds of generations of Manitoba engineers, as yet unborn, the name of a modest gentleman, the first Chairman of their Association, and will keep before them the tradition of unassuming interest in its welfare which he has established.



ABBREVIATIONS OF NAMES OF VARIOUS SOCIETIES

USED IN THE FOLLOWING LIST OF MEMBERS

Mem. A.A.T.—Member, The Association of Asphalt Technologists.

Mem. A.C.I.—Member, The American Concrete Institute.

Mem. A.C.S.—Member, The American Chemical Society.

Mem. A.I.E.E.—Member, The American Institute of Electrical Engineers.

Assoc. A.I.E.E.—Associate, The American Institute of Electrical Engineers.

M.A.I.M.E.—Member, The American Institute of Mining and Metallurgical Engineers.

Mem. A.P.W.A.—Member, The American Public Works Association.

M.A.R.E.A.—Member, The American Railway Engineering Association.

M.Am.Soc.C.E.—Member, The American Society of Civil Engineers.

Mem. A.S.H.V.E.—Member, The American Society of Heating and Ventilating Engineers.

Mem. A.S.M.—Member, The American Society of Metals.

Mem. A.S.M.E.—Member, The American Society of Mechanical Engineers.

Mem. A.S.T.M.—Member, The American Society for Testing Materials.

Mem. A.W.W.A.—Member, The American Waterworks Association.

M.C.I.C.—Member, The Canadian Institute of Chemistry.

M.C.I.M.—Member, The Canadian Institute of Mining and Metallurgy.

M.C.I.S.—Member, The Canadian Institute of Sanitation and Sewage.

M.E.I.C.—Member, The Engineering Institute of Canada.

Mem. G.S.A.—Member, The Geological Society of America.

M.R.A.I.C.—Member, The Royal Architectural Institute of Canada.

M.R.I.B.A.—Member, The Royal Institution of British Architects.

Mem. S.E.G.—Member, The Society of Economic Geologists.

F.C.G.S.—Fellow of the Canadian Geographical Society.

F.C.I.C.—Fellow of the Canadian Institute of Chemistry.

F.R.S.A.—Fellow Royal Society of Arts.

Alphabetical List

of

Members of the Association of Professional Engineers entitled to engage in the practice of professional engineering in the Province of Manitoba in the year 1945.

The date given after each entry denotes the year of registration.

Adamson, F. S.—B.Sc. (C.E.) '26 (Man.); M.E.I.C.; Mem. Man. Assn. of Arch.; MEMBER OF COUNCIL '39, '40; PRESIDENT OF THE ASSOCIATION '40; Deputy City Engineer and Deputy Commissioner of Buildings, City of Winnipeg, 223 James Ave.; 285 Ash St., Winnipeg. (1936)

Affleck, Garnet—M.E.I.C.; Department of Public Works, Manitoba, 316 Legislative Bldg., Winnipeg; 674 Fisher Ave., Winnipeg. (1920)

Akins, E. J. W.—B.Sc. (C.E.) '27 (Man.); Colonel on A/S in R.C.E.; Wallace and Akins Ltd., 835 Somerset Bldg.; 84 Maryland St., Winnipeg. (1945)

Aldridge, Wm.—B.A. '09 (Man.); Mem. A.S.M.E.; MEMBER OF COUNCIL '26, '27; PRESIDENT OF THE ASSOCIATION '27; City Engineer (Retired), City of Winnipeg; 333 McGee St., Winnipeg. (1920)

Alexander, F. W.—M.E.I.C.; M.A.R.E.A.; Member, Roadway and Ballast Committee, A.R.E.A.; Assistant Chief Engineer (Retired), Canadian Pacific Railway, C.P.R. Station, Winnipeg; 70 Ethelbert St., Winnipeg. (1927)

Amos, H. E.—Canadian National Railways, Box 263, Dauphin, Man. (1939)

Anderson, H. F.—B.Sc. (E.E.) '31 (Man.); Engineer, Switchgear Section, Canadian Westinghouse Co., Ltd., Hamilton, Ont.; 19 Hawthorne Ave., St. Vital, Man. (1936)

Andrews, G. T. L.—B.Sc. (E.E.) '32 (Man.); Maintenance Engineer, Valleyfield plant, Defence Industries Ltd., Nitro, Que.; Blackdale, Man. (1945)

Andrews, R. H.—B.Sc. (E.E.) '24 (Man.); Squadron Leader on A/S in R.C.A.F.; M.E.I.C.; Cable Engineer, Canada Wire and Cable Co., Ltd., Box 340, Toronto (1), Ont. (1936)

Antenbring, C. V.—B.Sc. (C.E.) '26 (Man.); M.E.I.C.; MEMBER OF COUNCIL '40, '41, '42, '43; PRESIDENT OF THE ASSOCIATION '42; Mem. A.C.I.; Design Engineer, Cowin and Co., Ltd., 1137 Pacific Ave., Winnipeg; 357 Overdale St., St. James, Man. (1932)

Armstrong, John—B.A.Sc. '96 (Tor.); M.E.I.C.; (Retired), 350 Winchester St., St. James, Man. (1921)

Attwood, C. H.—(Queen's); D.L.S.; M.E.I.C.; MEMBER OF COUNCIL '27, '28, '29, '30; PRESIDENT OF THE ASSOCIATION '29, '30; Director of Water Resources, Department of Mines and Natural Resources, Manitoba, 43 Legislative Bldg., Winnipeg; 65 Lanark St., Winnipeg. (1920)

Baldock, J. W.—F/L on A/S in R.C.A.F.; Sales Engineer, Powell Equipment Co., Ltd., 1060 Arlington St., Winnipeg; 205 Oak St., Winnipeg. (1920)

Barritt, Nelson—MEMBER OF COUNCIL '26, '27, '42, '43; Assistant Chief Engineer (Construction), Department of Public Works, Manitoba, 316 Legislative Bldg., Winnipeg; 139 Glenwood Crescent, Winnipeg. (1921)

Battershill, J. W.—Member Manitoba Electrical Association; MEMBER OF COUNCIL '43, '44, '45, '46; Municipal Engineer, Municipality of East Kildonan, 425 Henderson Highway, East Kildonan, Man.; 149 Helmsdale Ave., East Kildonan, Man. (1920)

Bayne, H. A.—M.L.S.; Secretary, Manitoba Branch, Town Planning Institute of Canada; Bayne and Hyde, Land Surveyors and Municipal Engineers, 1302 Union Trust Bldg., Winnipeg; Irving Place, North Kildonan, Man. (1921)

Bell, J. W.—(Whitworth Exhibitioner, Rutherford Tech. College, England), Designer, Manitoba Bridge and Iron Works, Ltd., Logan Ave. West, Winnipeg; 1144 Downing St., Winnipeg. (1940)

Benditt, J. Harry—B.Sc. (E.E.) '27 (Man.); Engineer in Charge Construction and Maintenance, City of Winnipeg Hydro Electric System, 55 Princess St., Winnipeg; 572 Boyd Ave., Winnipeg. (1944)

Beresford, H. E. M.—M.B.E. (Dollar Academy, Scotland); M.L.S., D.L.S.; Mem. Can. Inst. of Surveying; Member, Land Board, Mining Board, Superannuation Board, Manitoba; Director, Travel and Publicity Bureau, Director of Surveys, Department of Mines and Natural Resources, and Comptroller of Town Planning, Manitoba, Legislative Bldg., Winnipeg; 428 Ash St., Winnipeg. (1921)

Bereskin, A. I.—B.Sc. (C.E.) '29 (Man.); D.L.S.; M.E.I.C.; Mem. Can. Inst. of Surveying; Captain on A/S in R.C.E.; 150 Machray Ave., Winnipeg. (1931)

Blair, McCrae P.—M. Am. Soc. C.E.; MEMBER OF COUNCIL '44, '45; President and Manager, Northern Engineering and Development Co., Ltd., 1054 Grosvenor Ave., Winnipeg. (1930)

Blanchard, C. H.—M.E.I.C.; District Engineer, Department of Public Works Manitoba, (Retired); Selkirk, Man. (1920)

Bodie, G. F.—B.C.E. '17 (Man.); Assistant District Engineer, Highways Branch, Department of Public Works, Manitoba, Legislative Bldg., Winnipeg; 227 Eugenie St., Norwood, Man. (1929)

Bowman, R. S.—Assistant District Engineer, Department of Public Works, Manitoba; Ashern, Man. (1931)

Brehaut, R. C.—B.Sc. (Queen's) '27; M.C.I.M.; General Superintendent, Sherritt Gordon Mines Ltd., Sherridon, Man. (1945)

Brekke, Hans—C.E. '25 (Prague); M.E.I.C.; Hydraulic Engineer, City of Winnipeg Hydro Electric System, 55 Princess St., Winnipeg; 62 Fulham Ave., Winnipeg. (1932)

Brereton, W. P.—B.A.Sc. '03 (Tor.); M.E.I.C.; Mem. C.I.S.; Member New England W.W.A.; MEMBER OF PROVISIONAL COUNCIL OF THE ASSOCIATION; MEMBER OF COUNCIL '20; ASSOCIATION DISTINGUISHED SERVICE MEDAL '40; Commissioner of Winnipeg Harbour Board; Commissioner Greater Winnipeg Sanitary District; City Engineer (Retired), City of Winnipeg; 274 Ashland Ave., Winnipeg. (1920)

Briercliffe, H. C. D.—B.Sc. '11 (McGill); M.E.I.C.; Mem. A.S.M.; General Superintendent, Vulcan Iron Works Ltd., Sutherland Ave. and Maple St.; 201 Ash St., Winnipeg. (1920)

Briggs, H. L.—B.Sc. (E.E.) '28 (Man.); M.E.I.C.; Mem. A.I.E.E.; Chief Engineer, City of Winnipeg Hydro Electric System, 55 Princess St., Winnipeg; 333 Queenston St., Winnipeg. (1932)

Broughton, W. K.—(Articled '93-'97 England); District Manager, Truscon Steel Co. of Canada, Ltd., 204 Boyd Bldg., Winnipeg; 831 Jubilee Ave., Winnipeg. (1921)

Brown, C. D.—C.E. '08 (Queen's); D.L.S.; M.L.S.; S.L.S.; A.L.S.; Surveyor and Engineer, Indian Affairs Branch, Department of Mines and Resources, Ottawa; 184 Yale Ave., Winnipeg. (1938)

Brown, E. L.—B.A.Sc. '22, M.E. '33 (Tor.); M.A.I.M.E.; M.C.I.M.; General Manager, Sherritt-Gordon Mines Ltd., 25 King St. W., Toronto, Ont. (1928)

Brownell, G. M.—B.Sc. '23; M.Sc. '25 (Man.); Ph.D. '28 (Minn.); M.C.I.M.; Mem. Walker Mineralogical Club; V.P., Manitoba Museum Association; Professor of Geology and Mineralogy, University of Manitoba; Mem. Scientific Club of Winnipeg; 819 Somerset Ave., Fort Garry, Man. (1938)

Brunel, C. G.—Superintendent Standard Gravel and Surfacing Co. Ltd., 5340 First St. S.W., Calgary, Alta. (1935)

Bubbis, N. S.—B.Sc. (C.E.) '34 (Man.); M.E.I.C.; Mem. A.W.W.A.; Engineer of Water Works and Sewage, City of Winnipeg, 223 James Ave.; 390 Borebank St., Winnipeg. (1938)

Burke-Gaffney, P.—B.A. '08; B.Sc. (Maths.) '11; B.E. '12 (Nat'l. Univ. of Ireland); MEMBER OF COUNCIL '20, '21, '24, '25, '37, '38; REGISTRAR '24, '25; DOMINION COUNCILLOR '39, '40, '41, '42, '43, '44, '45; PRESIDENT OF THE ASSOCIATION '38; PRESIDENT DOMINION COUNCIL OF PROFESSIONAL ENGINEERS, 1945; Member Building Code Advisory Committee, Nat'l. Research Council; Technical Advisor, Administrator Asphalt Products, W.P.T.B.; District Engineer, Canadian Johns-Manville Co. Ltd., 156 McPhillips St., Winnipeg; 779 Jessie Ave., Winnipeg. (1920)

Butler, E. W. R.—B.Sc. '24 (McGill); M.E.I.C.; Western Manager, Bailey Meter Co., Ltd., 906 McArthur Bldg., Winnipeg; 151 Cordova St., Winnipeg. (1942)

Cameron, Howard S.—District Engineer, Department of Public Works, Manitoba, 308 Legislative Bldg., Winnipeg; Ste. 7, Wolseley Apts., Winnipeg. (1920)

Cameron, W. J. D.—B.Sc. '34 (Man.); M.E.I.C.; Mem. A.W.W.A.; Mem. A.S.M.; MEMBER OF COUNCIL '44, '45; Superintendent Anthes Foundry Ltd., Saskatchewan Ave., Winnipeg; 4 Carpathia St., Winnipeg. (1938)

Campbell, Alex.—B.Sc. '24; M.Sc. '26 (McGill); M.E.I.C.; Contract Engineer, Dominion Bridge Co., Ltd., 720 Canada Bldg., Winnipeg; 199 Elm St., Winnipeg. (1928)

Campbell, E. L.—B.Sc. in C.E., '22 (Worcester Polytechnic Institute), Assoc. M.A.R.E.A.; Assistant General Manager, Canada Ingot Iron Co., Ltd., 37 Higgins Ave., Winnipeg; 989 McMillan Ave., Winnipeg. (1934)

Campbell, G. W.—M.E.I.C.; Assistant District Engineer, Department of Public Works, Manitoba; 27 Kennedy St., Winnipeg. (1927)

Campbell, P. C.—Resident Engineer, Drainage Branch, Department of Public Works, Manitoba; 241 Lansdowne Ave., Winnipeg. (1939)

Campbell, V. H.—M.E.I.C.; District Engineer, Department of Public Works, Manitoba, The Pas, Man.; 683 Strathcona St., Winnipeg. (1921)

Carter, H. Dyson—B.Sc. '31; M.Sc. '32 (Man.); M.C.I.C.; F.C.G.S.; Consultant and author; 184 Braemar Ave., Winnipeg. (1936)

Carrick, S. M.—B.Sc. (C.E.) '44 (Man.); M.E.I.C.; Design Engineer, Post-War Projects, Canadian Pacific Railway, Winnipeg; 365 Selkirk Ave., Winnipeg. (1945)

Caton, E. V.—(Arts and Guilds of London '04); M.E.I.C.; MEMBER OF COUNCIL '22, '23, '37, '38; PRESIDENT OF THE ASSOCIATION '37; Manager of Production, Winnipeg Electric Co., Electric Rly. Chbrs., Winnipeg; 71 Brock St., Winnipeg. (1920)

Caulfield, J. P.—B.S. (Mining); B.S. (Mech.), '22; E.M. '26 (Utah); M.A.I.M.E.; General Superintendent, Hudson Bay Mining and Smelting Company, Ltd., Flin Flon, Man. (1939)

Cavanagh, A. L., M.C.—B.Sc. (E.E.), '11 (Man.); M.E.I.C.; MEMBER OF COUNCIL '34, '35, '36, '37, '38, '39; PRESIDENT OF THE ASSOCIATION '36; Superintendent of Construction, City of Winnipeg Engineering Department (Retired); 331 Baltimore Road, Winnipeg. (1920)

Charles, J. L., D.S.O.—(Articled '08-'10, England); Major on A/S in R.C.E.; M.E.I.C.; Chief Engineer, Western Lines, Canadian National Railways; 879 Grosvenor Ave., Winnipeg. (1921)

Clarkson, A. G.—B.A.Sc. '38 (Tor.); M.E.I.C.; Mem. A.S.M.E.; Aeronautical Engineer in charge of Engineering Department, Canadian Pacific Airlines Ltd.; 292 Sackville St., St. James, Man. (1944)

Clendening, C. A.—(S.P.S. Tor.); MEMBER OF COUNCIL '29, '30; Member, Veterans Rehabilitation Council, Industrial Mobilization Survey, Manitoba Game and Fisheries Association, Winnipeg Board of Trade; President and General Manager, National Utilities Corporation, Ltd., 302 New Hargrave Bldg., Winnipeg; 81 Queenston St., Winnipeg. (1920)

Cole, George E.—B.A. '02; B.Sc. '06 (McGill); M.C.I.M.; M.E.I.C.; MEMBER OF COUNCIL '32, '33, '35, '36, '40, '41, '43, '44, '45, '46; PRESIDENT OF THE ASSOCIATION '41, '45; Supt., V.R.M. Division, St. John Ambulance Brigade; Member executive Valour Road Memorial Branch, Canadian Legion, B.E.S.L.; Mem. Scientific Club of Winnipeg; Director of Mines (Retired), Department of Mines and Natural Resources, Manitoba; Ste. 10, Amulet Apts., Winnipeg. (1930)

Collins, Geo. E.—B.Sc. (C.E.) '28 (Man.); Member Rural Rehabilitation Board; Assistant Deputy Minister of Public Works, Manitoba, 213 Legislative Bldg., Winnipeg; 454 Waterloo St., Winnipeg. (1930)

Collinson, F. E.—M.I. Mech. E. (Great Britain); Member Canadian Advisory Committee, Institution of Mechanical Engineers (Great Britain); Mechanical Engineer, Canadian National Railways, Western Region; 333 Yale Ave., Winnipeg. (1921)

Connell, A. G.—(Diploma, Glasgow and West of Scotland Technical College); District Engineer, Department of Public Works, Manitoba; 230 Ashland Ave., Winnipeg. (1920)

Constantini, D. E.—B.Sc. (C.E.) '34 (Man.); Resident Engineer, Bridge Div., Department of Public Works, Manitoba; 222 Horace St., Norwood, Man. (1944)

Cooil, T. R.—B.E. '26 (Sask.); M.E.I.C.; Wing Commander on A/S; Commanding Officer, No. 8, C.M.U., R.C.A.F., Tufts Cove, N.S. (1936)

Cooke, E. F.—M.E.I.C.; District Airway Engineer, Department of Transport, 803 Confederation Life Bldg., Winnipeg; 40 Marlhurst Apts., Winnipeg. (1940)

Corbett, A. H.—District Engineer, Department of Public Works, Manitoba; 316 Legislative Bldg., Winnipeg; 507 Camden Place, Winnipeg. (1921)

Cowan, E. C.—B.A.Sc. '19 (Tor.); M.E.I.C.; Construction Engineer, Powell Equipment Co., Ltd., 1060 Arlington St., Winnipeg; 1480 Wellington Cres., Winnipeg. (1920)

Crease, Frederick — Development Engineer, Manitoba Telephone System, 166 Portage Ave. E., Winnipeg; 304 Atlantic Ave., Winnipeg. (1945)

Crosbie, A. J.—Superintendent Electrical Distribution, City of Winnipeg Hydro Electric System, 55 Princess St., Winnipeg; 1199 Wolseley Ave., Winnipeg. (1941)

Cunningham, J. F.—M.E.I.C.; Mem. A.S.M.; Superintendent of Dredges, Department of Public Works, Canada; Box 173, Selkirk, Man. (1936)

Dagg, F. A.—B.Sc. (C.E.) '29 (Man.); Superintendent Aluminum Atomizing Plant, Aluminum Co. of Canada, Ltd., Isle Maligne, Que. (1936)

Davis, G. C.—B.Sc. (C.E.) '32 (Man.); M.E.I.C.; Mem. A.S.H.V.E. and Mem. Committee on Research, A.S.H.V.E.; Vice-President Northern Public Service Corporation and Vice-President Winnipeg Heating Co., Ltd., 307 Power Bldg., Winnipeg; 366 Ash St., Winnipeg. (1945)

Davis, J. C.—B.L., B.A. '07 (Laval); B.Sc. (Mech. Eng.) '12 (McGill); Mem. A.S.H.V.E.; Member National Fire Protection Association; Advisory Board, Department of National War Services; Executive, Greater Winnipeg Co-ordinating Board; Greater Winnipeg Town Planning Committee; President, J. C. Davis Ltd., 408 New Hargrave Bldg., Winnipeg; 152 LaVerandrye St., St. Boniface, Man. (1920)

Davison, J. E.—B.A.Sc. '01 (Tor. S.P.S.); District Engineer (Retired), Canadian National Railways; 191 Chestnut St., Winnipeg. (1920)

Dawson, C. B.—B.Sc. '20 (Queen's); M.C.I.M.; Consulting Mining Engineer, Ste. 6, Wardlaw Apts., Winnipeg. (1935)

Dillabough, J. V.—B.Sc. '04 (Queen's); D.L.S.; M.A.R.E.A.; Member, Town Planning Commission, St Boniface; Transportation Engineer, Canadian National Railways; 206 Eugenie St., Norwood, Man. (1920)

Dines, W. W.—B.C.E. '11 (Man.); M.C.I.C.; Assistant Manager, Chipman Chemicals Ltd., 1040 Lynn St., Winnipeg; 200 Beaverbrook St., Winnipeg. (1920)

Doidge, H. G.—B.Sc. (C.E.) '22 (Man.); Concrete Designer, Dominion Bridge Co., Ltd., 720 Canada Bldg., Winnipeg; 17 Greysolon Apts., 136 Spence St., Winnipeg. (1936)

Dorsey, J. W.—E.E. '08 (Lehigh); Capt. on active service U.S. Army; Associate Professor Electrical Engineering, University of Manitoba; Martinique Hotel, Broadway and 32nd St., New York City, N.Y. (1923)

Drybrough, John—B.A.Sc. '22 (Tor.); M.C.I.M.; M.A.I.M.E.; Consulting Mining Engineer, 806 Great West Permanent Bldg., Winnipeg; 220 Grenfell Blvd., Tuxedo, Man. (1928)

Duncan, J. E.—B.Sc. (E.E.) '23 (Man.); Examiner, Inspection Board U.K. and Canada, Mechanical Engineering Division; 970 McMillan Ave., Winnipeg. (1944)

Dupuy, H. E. G.—B. Eng. (Mech.) '38 (McGill); M.E.I.C.; Manager, Western Branch, Babcock-Wilcox and Goldie-McCulloch Ltd., 805 Electric Rly. Chbrs., Winnipeg; 212 Bannatyne Ave., Winnipeg. (1945)

Echols, H. Vance—M.E. '25 (New Mexico School of Mines); M.C.I.M.; Demerara Bauxite Co., MacKenzie, British Guiana, S.A. (1937)

Fanset, G. R.—B.Sc. (C.E.) '31 (Man.); M.E.I.C.; Chief Engineer, Ducks Unlimited, 201 Bank of Commerce Bldg., Winnipeg; Lot 83, Charleswood, Man. (1943)

Ferguson, H. S.—B.S. '89 (Dartmouth); C.E. '91 (Thayer); M. Am. Soc. C.E.; Mem. A.S.M.E.; M.E.I.C.; Senior partner, Hardy S. Ferguson and Co., Consulting Engineers, 200 Fifth Ave., New York, 10, N.Y. (1923)

Fetherstonhaugh, E. P., M.C.—B.Sc. '99 (McGill); D.Sc. '45 (McGill); M.E.I.C.; Mem. A.I.E.E.; F.R.S.A.; MEMBER OF COUNCIL '22, '23, '28, '29, '39, '40; Member Main Committee, Canadian Standards Association; Member National Research Council; Member of Senate, University of Manitoba; President (1945) Engineering Institute of Canada; Dean, Faculty of Engineering and Architecture, University of Manitoba; Mem. Scientific Club of Winnipeg; 801 Dorchester Ave., Winnipeg. (1920)

Findlay, Allan—B.Sc. '08 (Queen's); Property and Right-of-way Engineer, Department of Public Works, Manitoba, 311 Legislative Bldg., Winnipeg; 987 McMillan Ave., Winnipeg. (1920)

Fingland, W. C.—B.C.E. '12 (Man.); 657 Cote St. Antoine Road, Westmount, Que. (1939)

Finlayson, J. N.—B.Sc. '08; M.Sc. (McGill); LL.D. '40 (Man.); M.E.I.C.; M. Am. Soc. C.E.; MEMBER OF COUNCIL '31, 32, '33, '34, '35, '36; PRESIDENT OF THE ASSOCIATION '35; Chairman B.C. War Metals Research Board; Dean of the Faculty of Applied Science, University of British Columbia, Vancouver, B.C. (1920)

Fisher, C. L.—B.Sc. (C.E.) '30 (Man.); Canada Ingot Iron Co., Ltd., 37 Higgins Ave., Winnipeg; 67 Claremont Ave., Norwood, Man. (1932)

Ford, E. A.—B.Sc. (C.E.) '27 (Man.); M.E.I.C.; Assistant Contract Engineer, Dominion Bridge Co. Ltd., 702 Canada Bldg., Winnipeg; 80 Niagara St., Winnipeg. (1940)

Fosness, A. W.—E.M., '11 (Minn.); Vice-President and Chief Engineer, Commonwealth Construction Co. Ltd., 300 Royal Bank Bldg., Winnipeg; 100 Oak St., Winnipeg. (1920)

Fowler, F. S.—B.Sc. '10 (McGill); Vice-President and Manager, Nelson River Construction Ltd., 607 Union Trust Bldg., Winnipeg; 296 Yale Ave., Winnipeg. (1920)

Fox, C. Harry—B.Sc. '09; M.Sc. '10 (McGill); M.E.I.C.; M.A.R.E.A.; MEMBER OF COUNCIL '23, '24, '25, '26; PRESIDENT OF THE ASSOCIATION '25; Special Engineer, Canadian Pacific Railway, Winnipeg; 146 Wilton St., Winnipeg. (1920)

Fuller, H. P.—Practising Civil Engineer; 1331 William St., North Battleford, Sask. (1920)

Gemmel, H. W. R., M.C.—M.L.S.; A.L.S.; District Engineer, Department of Public Works, Manitoba; Dauphin, Man. (1920)

Gordon, John—(Armstrong College, England); M.E.I.C.; Electrical Engineer, Canadian National Railways; 252 Niagara St., Winnipeg. (1920)

Gow, D. B.—B.Sc. '12 (Queen's); District Hydraulic Engineer, Dominion Water and Power Bureau, 532 Dominion Public Bldg., Winnipeg; 313 Kingston Cres., St. Vital, Man. (1921)

Gran, Conrad—C.E. (Polytechnische Lehranstalt Friedberg, Hesse, Germany) '20; Division Engineer, Canadian National Railways; Box 180, The Pas, Man. (1945)

Green, W. A.—A.B. '16 (Leland Stanford, Jr.); M.A.I.M.E.; M.C.I.M.; General Manager, Hudson Bay Mining and Smelting Company, Ltd., Flin Flon, Man. (1939)

Greenlaw, J. W.—B.Sc. (E.E.) '29 (Man.); Member Illuminating Engineering Society; Consulting Engineer, Greenlaw and Trott, 301 Electric Rly. Chbrs., Winnipeg; 68 Riverside Drive, Winnipeg. (1944)

Grescoe, G. H.—Senior Assistant in Charge of Construction, No. 7, A.O.S., Portage la Prairie, Man.; 63 Lansdowne Ave., Winnipeg. (1935)

Griffin, F. F.—B.Sc. '07 (McGill); Engineer, Winnipeg Electric Co., Electric Rly. Chbrs., Winnipeg; 212 Cordova St., Winnipeg. (1938)

Griffiths, J. A.—B.Sc. (C.E.) '35 (Man.); Assistant District Engineer, Department of Public Works, Manitoba; 241 Waverley St., Winnipeg. (1941)

Hall, N. M., O.B.E.—B.Sc. '07 (McGill); M.E.I.C.; Mem. A.S.M.E.; MEMBER OF COUNCIL '24, '25; Professor of Mechanical Engineering, Universtiy of Manitoba; Consulting Engineer; Member, Scientific Club of Winnipeg; 22 Dundurn Place, Winnipeg. (1920)

Hansen, C. A.—B.Sc. '23 (Queen's): Secretary-Treasurer, Smith and Hansen Ltd., 84 Lizzie St., Winnipeg; 297 Oakwood Ave., Winnipeg. (1940)

Harding, W. K.—B.Sc. '08 (McGill); M.C.I.M.; Consulting Mining Engineer; Technical Supervisor, Military Explosives Department, P.O. Box 216, Nobel, Ont. (1927)

Hardy, G. F.—B.S. '88 (Dartmouth); M. Am. Soc. C.E.; Mem. A.S.M.E.; M.E.I.C.; Consulting and Designing Engineer for the Pulp and Paper Industry, 305-309 Broadway, New York City, 7, N.Y. (1926)

Harris, A. H., Jr.—Mech. Eng. '11 (Stevens Inst. of Tech.); Member, Canadian Gas Association; American Gas Association; By-product Coke Institute; U. S. Blast Furnace and Coke Association; Member Executive Winnipeg Industrial Development Board; Manager, Gas Utility, Winnipeg Electric Co., Electric Rly. Chbrs., Winnipeg; Ste. 8, Alverstone Apts., Winnipeg. (1939)

Harrison, Geo.—Assistant Engineer, Canadian National Railways, Engineering Dept., Winnipeg; 71 Renfrew St., Winnipeg. (1920)

Haskin, J. A.—E.M. '22 (Colorado School of Mines); Chief Engineer, Hudson Bay Mining and Smelting Company, Ltd.; P.O. Box 339, Flin Flon, Man. (1939)

Hazel, F. B.—B.Sc. '11 (St. Andrews); Engineer and Construction Superintendent, Superintendent of Buildings Department, Manitoba; 130 Baltimore Road, Winnipeg. (1920)

Henderson, H. B.—B.S. '92; M.E. '94; M.M.E. '95 (Cornell); M. Am. Soc. C.E.; M.E.I.C.; President, Cowin and Co., Ltd., 1137 Pacific Ave., Winnipeg; The Lodge, 125 Hargrave St., Winnipeg. (1920)

Henderson, R. P.—B.Sc. (C.E.) '30 (Man.); Assistant Engineer, Department of Public Works, Canada, P.O. Box 40, New Westminster, B.C. (1940)

Herriot, Geo. H.—B.Sc. '07 (Queen's); M.L.S.; A.L.S.; D.L.S.; M.E.I.C.; Professor of Civil Engineering, University of Manitoba; 325 Waverley St., Winnipeg. (1931)

Hill, G. R.—M.E.I.C.; District Airway Engineer, Department of Transport, Canada, 303 Customs Bldg., Port Arthur, Ont. (1921)

Hogarth, B. B.—B.A. Sc. '14 (Tor.); M.E.I.C.; Chief Engineer, Water Resources Branch, Department of Mines and Natural Resources, Manitoba; Ste. "B" Brunswick Apts., Winnipeg. (1931)

Holden, J. C.—R.M.C. '96; M.E.I.C.; M.A.R.E.A.; District Engineer (Retired), Canadian Pacific Railway; Royal Alexandra Hotel, Winnipeg. (1920)

Houston, J. C.—B.Sc. '30 (Queen's); M.C.I.M.; Mine Manager, Senator-Rouyn Ltd., P.O. Box 780, Noranda, Que. (1937)

Hovey, C. M.—M.E.I.C.; Technical Consultant, S and S Aircraft Ltd., 215 Watt St., Winnipeg; 28 Parkleigh Apts., Winnipeg. (1942)

Hovey, L. M.—B.Sc. '25 (McGill); M.E.I.C.; Mem. A.I.E.E.; Member Canadian Standards Association; Electrical Engineer, Winnipeg Electric Co., Electric Rly. Chbrs., Winnipeg; 208 Niagara St., Winnipeg. (1937)

Hrudka, G. E.—Chem. Eng. '25 (State Polytech. Inst., Reichenberg, Bohemia); General Superintendent, Beet Division, Canada and Dominion Sugar Co., Ltd., Chatham, Ont. (1940)

Hugo, Reg.—B.C.E. '17 (Man.); Member Winnipeg Council R. and P.W.R.; Director, University of Manitoba Alumni Association; President, Winnipeg Lawn Tennis Club; Executive Manitoba Musical Festival; Bridge Engineer's Department, Canadian National Railways; 191 Niagara St., Winnipeg. (1942)

Humphreys, C. V.—(Chicago); Assistant General Manager, Abasand Oils Ltd., Credit Foncier Bldg., Edmonton, Alta. (1936)

Hunt, W. H.—B.Sc. (C.E.) '13 (Man.); Major on A/S with R.C.E.; M.E.I.C.; District Engineer, Highways Branch, Department of Public Works, Manitoba; 336 Maplewood Ave., Winnipeg. (1920)

Hunter, Herbert—Insurance Superintendent, Manitoba Government; 255 Aubrey St., Winnipeg. (1931)

Hurst, W. D.—B.Sc. (C.E.) '30 (Man.); C.E. '31 (Virginia Polytech. Inst.); M.E.I.C.: Mem. Man. Assn. of Arch.; Mem. A.W.W.A.; Mem. A.P.W.A.; Mem. Scientific Club of Winnipeg; Trustee, Minnesota Section American Waterworks Association; City Engineer and Commissioner of Buildings, City of Winnipeg, 223 James Ave., Winnipeg; 78 Queenston St., Winnipeg. (1931)

Ingimundson, B.—Manitoba Power Commission, 6th Floor Canada Bldg., Winnipeg; 920 Windermere Ave., Fort Garry, Man. (1927)

Jackson, C. B.—B.Sc. (C.E.) '31 (Sask.); M.E.I.C.; District Engineer, Aluminate Chemicals Ltd.; 953 Dominion St., Winnipeg. (1945)

James, E. W. M.—B.A. Sc. '09 (Tor.); MEMBER OF COUNCIL AND REGISTRAR '28, '29, '30, '31, '32, '33; MEMBER OF COUNCIL '34, '35; Bridge Engineer, Department of Public Works, Manitoba; 255 Balfour Ave., Winnipeg. (1921)

Johnson, E. E.—B.Sc. (C.E.) '21 (Man.); c/o Fraser Brace Ltd., 1910 Royal Bank Bldg., Montreal, Que. (1922)

Johnston, B. A.—B.Sc. (C.E.) '15 (Man.); District Construction Supervisor, Veterans Land Act, 636 Dominion Public Bldg., Winnipeg; Ste. 2, 412 Wellington Cres., Winnipeg. (1920)

Johnston, G. C. S., M.C.—Municipal Engineer, Municipal District of Flin Flon, Flin Flon, Man. (1945)

Keeping, C. A.—B.Sc. (C.E.) '30 (Man.); Mem. A.W.W.A.; Engineer of Roads and Streets, City of Winnipeg; 258 Ottawa Ave., Winnipeg. (1939)

Kelly, P.—Engineer, Works and Buildings, R.C.A.F., Moose Jaw, Sask.; Box 1021, Winnipeg. (1933)

Kennedy, S. S.—Mech Eng. '03 (Armor Inst. of Tech.); Consulting Engineer, 1307 Union Trust Bldg., Winnipeg; 38 Guelph St., Winnipeg. (1921)

Kent, E. S.—B.Sc. '10 (Dalhousie); Major on A/S in R.C.E.; M.E.I.C.; Cowin and Co., Ltd., 1137 Pacific Ave., Winnipeg; 321 Overdale St., St. James, Man. (1920)

Kirby, T. H.—B.Sc. '13 (McGill); M.E.I.C.; Vice-President, Filer-Smith Machinery Co., Ltd., 703 Confederation Life Bldg., Winnipeg; 250 Waverley St., Winnipeg. (1920)

Klempner, Harold—B.Sc. (C.E.) '30 (Man.); F/L on A/S in R.C.A.F.; Canadian International Paper Co., Hawkesbury, Ont. (1944)

Landon, C. S.—B.Sc. (C.E.) '11; M.C.E. '14 (Man.); MEMBER OF COUNCIL AND REGISTRAR, '34, '35, '36, '37, '38, '39, '40, '41, '42, '43, '44, '45; Department of Labour, Canada; Ste. 1A Pasadena Court, Winnipeg. (1920)

Lea, W. S.—B.Sc. '08 (McGill); M.E.I.C.; M.C.I.S.; M. Am. Soc. C.E.; Mem. A.W.W.A.; Mem. New England W.W.A.; Consulting Engineer, 1226 University St., Montreal, Que. (1936)

Lemoine, T.—Resident Engineer, District No. 12, Department of Public Works, Manitoba; Winnipeg Beach, Man. (1939)

Lill, C. D.—(Woolwich Arsenal); Inspection Board of U. K. and Canada, 96 National Steel Car Corporation, Hamilton, Ont. (1921)

Linton, J. G.—B.Sc. (E.E.) '28 (Man.); Municipal Engineer, Municipality of St. Vital, St. Vital, Man. (1934)

Love, E. R.—B.Sc. (E.E.) '34 (Man.); Captain on A/S, R.C.C.S.; M.E.I.C.; Assoc. A.I.E.E.; Acting Assistant Professor of Electrical Engineering, University of Manitoba; 903 Palmerston Ave., Winnipeg. (1939)

Lyons, M. A.—B.Sc. '10 (Mass. Inst. Tech); MEMBER OF COUNCIL '20, '21; PRESIDENT OF THE ASSOCIATION '20, '21; Member of St. James Town Planning Commission; Greater Winnipeg Town Planning Commission; Motor Carrier Board; Deputy Minister, Department of Public Works, Manitoba; 322 Linwood St., St. James, Man. (1920)

Lys, C. R.—District Engineer, Department of Public Works, Manitoba; 246 Conway St., Winnipeg. (1920)

Macdonald, A. E.—B.Sc. '20 (Dalhousie, Nova Scotia Tech. Coll.); M.Sc. '22 (McGill); M.E.I.C.; Mem. A.S.T.M.; Mem. A.S.M.: Mem. A.C.I.; Consulting Engineer; Member Canadian Institute of International Affairs; Mem. Scientific Club of Winnipeg; MEMBER OF COUNCIL '41, '42; Professor of Civil Engineering, University of Manitoba; 331 Cambridge St., Winnipeg. (1924)

MacGillivray, J. A.—M.E.I.C.; Assistant Superintendent, Greater Winnipeg Sanitary District, 185 King St., Winnipeg; 240 Niagara St., Winnipeg. (1920)

Mackay, H. A.—B.Sc. (C.E.) '03 (Glasgow); Member, Winnipeg Airport Commission, Manitoba Chamber of Mines; Manager, Manitoba Bridge and Iron Works, Ltd., Logan Ave. W., Winnipeg; 325 Overdale St., St. James, Man. (1920)

Mackay, L. B.—B.Sc. (C.E.) '27 (Man.); M.E.I.C.; General Superintendent and Acting General Manager, Manitoba Power Commission, 6th Floor, Canada Bldg., Winnipeg; 841 Somerset Ave., Fort Garry, Man. (1931)

MacKay, T. W.—MacKay Morton Ltd., Winnipeg and Vancouver; 1369 Richards St., Vancouver, B.C. (1921)

MacKenzie, A. K.—(Toronto Tech. '11); Member, Manitoba Electrical Contractors Association; Illuminating Engineering Society; Member, Manitoba Electricians' Examining Board; Manitoba Apprenticeship Board; President, Schumacher-Mackenzie Ltd., 334 Main St., Winnipeg; 419 Kingston Cres., St. Vital, Man. (1936)

MacKenzie, W. D.—C.E. '07 (Tor.); Superintendent, Michipicoten Iron Mines Ltd., Josephine, Ont.; via Sault Ste. Marie, Ont. (1920)

MacLean, F. A. W.—District Engineer (Retired), Reclamation Branch, Department of Public Works, Manitoba; 306 Campbell St., Winnipeg. (1920)

Main, T. C.—M.E.I.C.; General Manager, Ducks Unlimited, Bank of Commerce Bldg., Winnipeg; 253 Niagara St., Winnipeg. (1921)

McColl, G. B.—B.A. '02 (Man.); M.L.S.; D.T.S.; Private Practice, 319 Somerset Block, Winnipeg; 167 Lanark St., Winnipeg. (1920)

McCormick, A. T.—B.Sc. (E.E.) '30 (Man.); M.E.I.C.; Member, Acoustic Society of America; Society of Motion Picture Engineers; District Manager, Dominion Sound Equipments Ltd., 65 Rorie St., Winnipeg; 596 Ingersoll St., Winnipeg. (1944)

McDermid, G.—B.Sc. (E.E.) '27 (Man.); M.E.I.C.; Engineer, Winnipeg Electric Co., Electric Rly. Chbrs., Winnipeg; 190 Niagara St, Winnipeg. (1935)

McDonald, J. M.—Assistant District Engineer, Department of Public Works, Manitoba, Minnedosa, Man. (1921)

McDonald, N. G.—B.A.Sc. '18 (Tor.); M.E.I.C.; M.A.W.W.A.; M.C.I.S.; Partner, Gore and Storrie, Consulting Engineers, 1130 Bay St., Toronto, Ont. (1939)

McGibbon, W. S.—Engineer, Winnipeg Electric Co., Electric Rly. Chbrs., Winnipeg; 426 Brandon Ave., Winnipeg. (1921)

McKenzie, R. J.—District Engineer, Department of Public Works, Manitoba, 312 Legislative Bldg., Winnipeg; 65 Riverside Drive, Winnipeg. (1923)

McKillop, D. B.—B.Sc. '29 (Queen's); Assistant Engineer, Bridge Engineer's Department, Canadian National Railways; 30 Claremont Ave., Norwood, Man. (1944)

McLaren, A. J.—B.A. '08 (McMaster); B.A.Sc. '12 (Tor.); M.C.I.M.; Managing Engineer, Transcona Investors Ltd., 45 Richmond St. W., Toronto, Ont. (1936)

McLean, D. L.—B.Sc. '09 (McGill); M.E.I.C.; M.C.I.S.; MEMBER OF COUNCIL '25, '26, '27, '28; PRESIDENT OF THE ASSOCIATION '26; Superintendent, Greater Winnipeg Sanitary District; 701 McMillan Ave., Winnipeg. (1921)

McLean, J. N.—B.Sc. (C.E.) '32 (Tor.); M.E.I.C.; Captain on A/S, Maintenance and Construction, R.C.E., M.D. 10; 12 Cove Apts., Winnipeg. (1945)

McLeod, H. W.—B.C.E. '05 (N.B.); M.E.I.C.; M.A.R.E.A.; MEMBER OF COUNCIL '26; Principal Assistant Engineer, Western Lines, Canadian Pacific Railway, C.P.R. Station, Winnipeg; Ste. 3, Alcalde Apts., Winnipeg. (1920)

Meindl, J. A.—MEMBER OF COUNCIL '33, '34, '35, '36, '37, '38, '39, '40; Department of Labour, Canada; 126 Ferndale Ave., Norwood, Man. (1920)

Melsted, V. J.—E.M. '08 (N.D.); M.E.I.C.; Superintendent, Mechanical Department, Aluminum Co. of Canada, Ltd., Isle Maligne, Que. (1920)

Merrett, J. S.—B.Sc. (C.E.) '26 (Man.); Major, W.L.I. on A/S; 65 Luxton Ave., Winnipeg. (1934)

Michie, Victor—(Articled, John Aird Co., England); M.E.I.C.; MEMBER OF COUNCIL '37, '38; War Assets Corporation, Montreal, Que. (1921)

Miles, Geo. E.—(United Service College, England '05); Mem. A.I.E.E.; Member, Industrial Development Board of Manitoba; President, Western Elevator and Motor Co., Ltd.; Power and Mine Supply Co., Ltd., 123 Princess St., Winnipeg; 252 Cordova St., Winnipeg. (1924)

Miller, C. A.—B.A.Sc. '36 (Tor.); Jr. E.I.C.; Superintendent, Nitrocellulose Department, Defence Industries Ltd., Nobel, Ont. (1943)

Millidge, L.—Assistant District Airways Engineer, Department of Transport, Canada; 56 Elm Park Road, St. Vital, Man. (1929)

Moffatt, R. W.—B.A.Sc. '06 (Tor.); M.E.I.C.; Associate Professor of Civil Engineering, University of Manitoba (Retired); 1183 Dorchester Ave., Winnipeg. (1920)

Moffat, W. J.—R.M.C. '07; Engineer and Superintendent, Bird Construction Co., Ltd., 708 Confederation Life Bldg., Winnipeg; 24A Debary Apts., Winnipeg. (1945)

Monkman, G. H. N.—M.E.I.C.; M. Am. Soc. C.E.; Chairman, Highway Traffic Board, Alberta; Town Planning Board, Alberta; Deputy Minister, Department of Public Works, Alberta; 10304 133rd St., Edmonton, Alta. (1921)

Moore, G. N.—B.Sc. (Geol. Eng.) '38 (Sask.); Jr. M.C.I.M.; Field Engineer and Pilot, Consolidated Mining and Smelting Co., Ltd., Channing, Man. (1945)

Morris, A. J.—(Herriot Watt, Scotland); Assistant Engineer, Canadian National Railways; 125 Lawndale Ave., Norwood, Man. (1920)

Morse, G. P.—B.A. '03; B.Sc. '13 (Acadia); Senior Assistant Engineer, Department of Public Works, Canada (Retired); Consulting Engineer; 339 Dubuc St., Norwood, Man. (1920)

Morton, J. M.—B.Sc. '12 (Glasgow); Manager, MacKay Morton Ltd., 138 Portage Ave. E., Winnipeg; 266 Kingsway, Winnipeg. (1922)

Muller, C. G.—B.A. '20; B.Sc. (C.E.) '24 (Man.); Engineering Inspector, City of St. Boniface; 526 Ritchot St., St. Boniface, Man. (1930)

Murphy, J. H.—(West of Scotland Tech. College); Right of Way Agent, Canadian National Railways; 9 Kingston Row, St. Vital, Man. (1921)

Murray, A.—Mechanical Superintendent, T. Eaton Co., Ltd., Portage Ave. and Donald St., Winnipeg; 380 Waverley St., Winnipeg. (1945)

Neufeld, J. C.—B.Sc. (C.E.) '31 (Man.); Junior Engineer, Engineering Department, City of Winnipeg, 223 James Ave., Winnipeg; 809 Spruce St., Winnipeg. (1945)

Norton, A. H.—B.A. (Queen's) '36; Consulting Geologist, Lot 50, Charleswood P.O., Man. (1945)

Ogden, James A.—Chief Engineer, Manitoba Bridge and Iron Works Ltd., Logan Ave. W., Winnipeg; 727 Goulding St., Winnipeg. (1939)

Oliver, Jas.—B.Sc. (C.E.) '37 (Alta.); Jr. M.E.I.C.; Resident Engineer, Charge Maintenance and Construction, Defence Industries Ltd., Box 2914, Winnipeg; 16 Chelsea Court, Winnipeg. (1945)

Orr, W. A. C.—Engineer in Charge Maintenance, Engineering Department, City of Winnipeg, 223 James Ave., Winnipeg; 32 Knappen St., Winnipeg. (1945)

Ostrander, L. E.—(S.P.S. Toronto); M.C.I.M.; Member Norwood School Board; V.P. Norwood Amateur Athletic Association; Industrial Engineer, Canadian National Railways, Union Station, Winnipeg; 171 Lawndale Ave., Norwood Grove, Man. (1935)

Paoli, A. A.—B.A. '15 B.Sc. '22 (Queen's); M.C.I.M.; Midwest District Manager, John Inglis Co., Ltd., 1106 McArthur Bldg., Winnipeg; Ste. 4, Lonsdale Apts., Winnipeg. (1935)

Parker, B. W.—President, Northern Public Service Corporation, 307 Power Bldg., Winnipeg; 708 Dorchester Ave., Winnipeg. (1920)

Paton, W. B.—(Royal Tech. Coll., Glasgow); M.C.I.M.; Cert. British Mines Manager; Dominion Inspector of Explosives; 305 Federal Bldg., Vancouver, B.C. (1944)

Patterson, E. B.—M.E.I.C.; Office Engineer, Lands Branch, Department of Mines and Natural Resources, Manitoba; 318 Law Courts Bldg., Winnipeg; 337 Brock St., Winnipeg. (1921)

Pearce, L. F., D.S.O., M.C.—Superintendent of Buildings, Hudson's Bay Company, 79 Main St., Winnipeg; 99 Harvard Ave., Winnipeg. (1938)

Pearson, F. W.—Municipal Engineer, Municipal Office, St. James, Man.; 256 Winchester St., St. James, Man. (1920)

Pearson, G. P.—B.A.Sc. '18 (Tor.); District Engineer, Highway Branch, Department of Public Works, Manitoba; Boissevain, Man. (1920)

Peart, J. D.—B.A.Sc. '14 (Tor.); M.E.I.C.; Sales Engineer, Northern Electric Co. Ltd., 65 Rorie St., Winnipeg; 381 Campbell St, Winnipeg. (1926)

Penrose, J. A. M.—B.Sc. (C.E.) '22 (Man.); Acting Assistant District Engineer, Highways Branch, Department of Public Works, Manitoba; 332 Overdale St., St. James, Man. (1928)

Pepper, A. M.—B.Sc. (C.E.) '26 (Man.); Bridge Engineer's Department, Canadian National Railways, Union Station, Winnipeg; 1136 Spence St., Winnipeg. (1945)

Peters, H. F.—B.Sc. (C.E.) '30 (Man.); M.E.I.C.; Works and Buildings Engineer; Flight Lt. on A/S; Box 255, Winkler, Man. (1940)

Peterson, P. C.—Architect '03 (Eckernfoerde, Schleswig-Holstein); Contractor, 196 Johnson Ave., Winnipeg. (1931)

Phillips, A. G.—East London College (London); F.C.I.C.; Mem. A.C.S.; Mem. A.S.M.; Mem. A.C.I.; Mem. A.S.T.M.; Mem. A.A.T.; Consulting Chemist, City of Winnipeg; President National Testing Laboratories Ltd., 223 James Ave., Winnipeg; 333 Campbell St., Winnipeg. (1938)

Porter, J. W.—(Apprenticeship, North of Scotland Rly.; Tech. Coll. Aberdeen '02); M.E.I.C.; M.A.R.E.A.; MEMBER OF COUNCIL '24, '25; Member Am. B. and B. Assoc.; Chief Engineer (Retired), Western Lines, Canadian National Railways; 339 Academy Road, Winnipeg. (1920)

Porter, Thos. H.—(Birmingham Tech. Coll. '96); Civil and Sanitary Engineer, Box 38, Portage la Prairie, Man. (1920)

Pratt, G. R.—Engineer, Kipp-Kelly Ltd., 68 Higgins Ave., Winnipeg; 126 Cauchon St., St. Boniface, Man. (1920)

Price, T. E.—B.A. '07; B.Sc. '10 (McGill); M.E.I.C.; M.A.R.E.A.; Engineer, Maintenance of Way, Canadian Pacific Railway, 332 C.P.R. Station, Winnipeg; 587 Stradbrooke Ave., Winnipeg. (1941)

Prince, Paul—B.A. '22 (Man.); Private Practice; La Broquerie, Man. (1935)

Proudfoot, C. A.—B.Sc. (C.E.) '34 (Man.); M.E.I.C.; Airways Engineering Supervisor, Trans-Canada Air Lines, Winnipeg; 307 Montrose St., Winnipeg. (1945)

Raidel, I. S.—B.Sc. (C.E.) '35 (Man.); M.E.I.C.; Consulting Aeronautical Engineer, 76 Lusted St., Winnipeg. (1944)

Ramsay, W. W.—B.Sc. (C.E.) '33 (Man.); Lieut. on A/S, Works Officer, No. 10 E.S. & W. Coy., R.C.E., Fort Osborne Barracks; 4 Lovat Apts., 87 Smith St., Winnipeg. (1939)

Riddell, W. F.—B.Sc. (C.E.) '24; M.Sc. '31 (Man.); M.E.I.C.; Associate Professor of Civil Engineering, University of Manitoba; 46 Dundurn Place, Winnipeg. (1939)

Rimmington, Harry S.—B.C.E. '11 (Man.); MEMBER OF COUNCIL '41, '42, '43, '44, '45, '46; PRESIDENT OF THE ASSOCIATION '43, '44; Bridge Engineer, Canadian National Railways, Union Station, Winnipeg; 325 Brock St., Winnipeg. (1920)

Ritchie, G. M.—B.Sc. (Arch.) '35 (Man.); Assoc. M.R.I.B.A.; M.R.A.I.C.; Group Captain, R.C.A.F. on A/S; Seaforth, Ont. (1943)

Robinson, R. C.—(S.P.S. Tor.) '08; M.E.I.C.; Division Engineer, Canadian National Railways; P.O. Box 501, Dauphin, Man. (1920)

Roche, M. A. E.—B.Sc., C.E., M.E. '19 (Utah); M.C.I.M.; Assistant to General Manager, Hudson Bay Mining and Smelting Company Ltd., Flin Flon, Man. (1939)

Roden, B.—B.Sc. (Aero.) '43 M.Sc. (Mich.); Technical Member Institute of Aeronautical Sciences; Engineer of Design, Candair Ltd., Montreal, Que.; 275 Oriel Parkway, Toronto, Ont. (1944)

Rogers, A. H.—B.Sc. (C.E.) '35 (Man.); Assistant Engineer, Department of Public Works, Manitoba; 105 Wellington Crescent, Winnipeg. (1936)

Ross, D. S. G.—B.Sc. (E.E.) (Man.) '37; Supervising Aircraft Inspector, Aeronautical Inspection Directorate, R.C.A.F.; 751 Sherburn St., Winnipeg. (1945)

Runge, G. A.—B.Sc. '29 (Alta.); M.C.I.M.; Chief Engineer, McKenzie Red Lake Gold Mines Ltd., Box 73, McKenzie Island, Ont. (1942)

Ruttan, J. D.—M.E.I.C.; Manager, Chipman Chemicals Ltd., 1040 Lynn Ave., Winnipeg; 587 Stradbrooke Ave., Winnipeg. (1920)

Sanger, J. W.—(Faraday House '06); M.E.I.C.; Mem. A.I.E.E.; MEMBER OF COUNCIL '24, '25, '31, '32, '33, '34, '35, '36; PRESIDENT OF THE ASSOCIATION '32, '33; National President, Navy League of Canada; General Manager, City of Winnipeg Hydro Electric System, 55 Princess St., Winnipeg; 62 Harvard Ave., Winnipeg. (1921)

Scott, H. D. H.—(Articled '04-'07 England); Chief Draftsman, Department of Public Works, Manitoba, Legislative Bldgs., Winnipeg; Lot 58, Oakwood Cres., St. James, Man. (1920)

Scott, L. G.—B.Sc. (E.E.) '32 (Man.); M.E.I.C.; Greenlaw and Trott, Consulting Engineers, 301 Electric Rly. Chbrs., Winnipeg; 109 Kingston Row, St. Vital, Man. (1945)

Scott, W. M.—B.A.Sc. '95 (McGill); M.E.I.C.; Mem. A.W.W.A.; Mem. New Eng. W.W.A.; M.C.I.S.; CHAIRMAN OF THE PROVISIONAL COUNCIL OF THE ASSOCIATION '20; MEMBER OF COUNCIL '21, '22; ASSOCIATION DISTINGUISHED SERVICE MEDAL, 1940; DONOR OF THE "SCOTT GAVEL"; Lecturer in Civil Engineering, University of Manitoba; Chairman of Commissioners, Greater Winnipeg Water District; Chairman of Commissioners, Greater Winnipeg Sanitary District; 188 Montrose St., Winnipeg. (1920)

Seibert, F. V.—B.A.Sc. '12 (Tor.); D.L.S.; O.L.S.; S.L.S.; A.L.S.; M.C.I.M.; M.E.I.C.; President, Manitoba Chamber of Mines; Director, Manitoba Industrial Development Board; Industrial Commissioner, Canadian National Railways, Union Station, Winnipeg; Ste. 19, "B" Locarno Apts., Winnipeg. (1939)

Shand, Harold—(Articled, England); Design Engineer, Greater Winnipeg Water District; 7 Neil Place, East Kildonan, Man. (1921)

Sharpe, D. N.—(S.P.S. Tor.) '10; D.L.S.; M.L.S.; M.E.I.C.; Surveyor, Department of Mines and Natural Resources, Manitoba; 121 Sherburn St, Winnipeg. (1920)

Shepherd, F. D.—B.Sc. '29 (Man.); M.C.I.M.; Secretary Mid-West Metal Mining Association, Room 306 Great West Permanent Bldg., Winnipeg; 67 Polson Ave., Winnipeg. (1945)

Shuttleworth, W. I.—M.E.I.C.; F/L on A/S in R.C.A.F., Works and Buildings Section; 935 McMillan Ave., Winnipeg. (1945)

Sill, Joseph—Assoc. M.C.I.C.; Vice-President and Chief Chemist, National Testing Laboratories Ltd., 223 James Ave., Winnipeg; 155 Lawndale Ave., Norwood, Man. (1944)

Smerchanski, M. G.—B.Sc. (Hons.) '37 (Man.); M.Sc. (Virginia Polytech. Inst.); M.A.I.M.E.; M.C.I.M.; Mining Geologist; Ste. 2 Elenora Apts., Winnipeg. (1943)

Smith, David—District Engineer (Retired), Highways Branch, Department of Public Works, Manitoba; 173 Talbot Ave., Winnipeg. (1926)

Smith, F. M.—B.Sc. '21 (Queen's); M.C.I.M.; Manager, Bright Red Lakes Mines, Ltd.; R.R. 2, Pickering, Ont. (1937)

Spigelman, Max—B.Sc. (E.E.) '33 (Man.); Aeronautical Engineering, R.C.A.F.; F/L on A/S; Engineer Street Lighting Department, City of Winnipeg Hydro Electric System, 55 Princess St., Winnipeg; 141 Polson Ave., Winnipeg. (1937)

Stanley, H. P.—B.Sc. (C.E.) '26 (Man.); District Engineer, Department of Public Works, Manitoba; Brandon, Man. (1928)

Stephens, D. M.—B.Sc. (C.E.) '31 (Man.); M.E.I.C.; M.C.I.M.; Deputy Minister, Department of Mines and Natural Resources, Manitoba; 229 Overdale St, St. James, Man. (1938)

Stevenson, L. M.—B.Sc. (C.E.) '32 (Man.); Airway Engineer, Department of Transport, Canada, Fort Smith, N.W.T. (1939)

Stoller, S.—B.Sc. (C.E.) '30 (Man.); Structural Designer, Truscon Steel Co. of Canada Ltd., 204 Boyd Bldg., Winnipeg; 361 Aberdeen Ave., Winnipeg. (1945)

Storey, T. E.—B.Sc. (E.E.) '28 (Man.); M.E.I.C.; Superintendent in Charge of Production, City of Winnipeg Hydro Electric System, 55 Princess St., Winnipeg; 491 Ash St., Winnipeg. (1943)

Striowski, J. B.—B.Sc. (C.E.) '29 (Man.); M.E.I.C.; Engineer of Design, Engineering Department, City of Winnipeg, 223 James Ave., Winnipeg; 84 Lenore St., Winnipeg. (1937) (1937)

Sutherland, R. L.—E.M. '11 (N.D.); M.A.I.M.E.; 310 South Michigan Ave., Chicago, Ill. (1931)

Swain, D. S.—B.Sc. (E.E.) '37 (Man.); Assoc. Mem. A.S.H.V.E.; Engineer, Trane Company of Canada, Ltd., 303 New Hargrave Bldg., Winnipeg; 1186 Downing St., Winnipeg. (1945)

Talbot, F. M.—Resident Engineer, Highways Branch, Department of Public Works, Manitoba; Varsity View, Man. (1945)

Tate, N. S.—(S.P.S. Tor.); District Engineer, Department of Public Works, Manitoba; 718 Fisher St., Winnipeg. (1920)

Taylor, Andrew—B.Sc. (C.E.) '31 (Man.); M.E.I.C.; M.L.S.; D.L.S.; Captain on A/S R.C.E.; Dauphin, Man. (1936)

Taylor, J. C. D.—C.E. '12 (Temple, Pa.); F/L on A/S in R.C.A.F., No. 2 Command, Winnipeg; 604 Jubilee Ave., Winnipeg. (1920)

Taylor, R. E.—(Sunderland Tech. Coll. Eng.); Engineer of Buildings, Western Region, Canadian National Railways, Winnipeg; 182 Borebank St., Winnipeg. (1920)

Trott, Alfred—(Apprenticeship, John Walker and Sons, Cardiff, Wales); I.C.S. (E.E.); M.A.I.E.E.; Defence Industrial Ltd., Nitro, Que. (1921)

Trott, W. A.—B.Sc. (E.E.) '33 (Man.); M.E.I.C.; Assoc. Mem. Am. Electro-plater's Society; Consulting Engineer, Greenlaw and Trott, 301 Electric Rly. Chbrs., Winnipeg; 115 Middlegate, Winnipeg. (1944)

Trueman, J. C.—B.Sc. (C.E.) '23 (Man.); M.Sc. (McGill); M.E.I.C.; Designing Engineer, Dominion Bridge Co. Ltd., 702 Canada Bldg., Winnipeg; 33 Fulham Ave., Winnipeg. (1928)

Umphrey, F. E.—Chairman, Drainage Maintenance Board, Manitoba; 182 Niagara St., Winnipeg. (1920)

Urie, H. R.—B.Sc. (C.E.) '13; MEMBER OF COUNCIL '41, '42, '43, '44, '45, '46; District Engineer, Highways Branch, Department of Public Works, Manitoba; Minnedosa, Man. (1921)

van Allen, F. L.—(West Ham. Tech. Inst. Eng.); Private Practice, van Allen Engineering Co., 418 Avenue Bldg., Winnipeg; 600 Jessie Ave., Winnipeg. (1941)

Veitch, Jas.—M.E.I.C.; Mem. A.I.E.E.; Engineer, Western Canada Insurance Underwriters' Association, Paris Bldg., Winnipeg; 7 Rochester Apts., Edmonton St., Winnipeg. (1920)

Waddell, N. M.—(Glasgow and West of Scotland Tech. Inst.) '10; District Engineer, Manitoba District, Canadian National Railways, Dominion Public Bldg., Winnipeg; 914 Somerset Ave., Fort Garry, Man. (1921)

Wakefield, J. A.—District Engineer, Department of Public Works, Manitoba, 315 Legislative Bldg., Winnipeg; 504 Camden Place, Winnipeg. (1920)

Waldron, J.—Dipl. S.P.S. (Tor.); D.L.S.; M.L.S.; A.L.S.; Private Practice, Flin Flon, Man (1928)

Walkden, Wm. — (Indenture, Stockport, England); M.E.I.C.; M.A.R.E.A.; Bridge Engineer (Retired), Western Region, Canadian National Railways; 91 Ferndale Ave., Norwood, Man. (1920)

Walker, D. R.—Lieut. on A/S in R.C.E.; Assistant District Engineer, Highways Branch, Department of Public Works, Manitoba; Dauphin, Man. (1936)

Walker, J. D.—Engineering Clerk, Manitoba Power Commission, Canada Bldg., Winnipeg; 489 Rathgar Ave., Winnipeg. (1929)

Wallace, Geo.—District Engineer, Department of Public Works, Manitoba; 1034 Palmerston Ave., Winnipeg. (1927)

Walley, C. S.—B.E. '10 (Liverpool); F/L on A/S in R.C.A.F.; Field Representative, Wartime Housing, Balmoral P.O., Man. (1920)

Weber, A. M.—B.A. '29 (Sask.); M.E.I.C.; Electrical Engineer (Aviation), Trans-Canada Air Lines; 261 Balmoral St., Winnipeg. (1944)

White, H. M.—M.E. '10 (Tor.); M.E.I.C.; Mem. A.S.M.; MEMBER OF COUNCIL '31, '32, '33, '34; PRESIDENT OF THE ASSOCIATION '34; Member Building Code Advisory Committee, Nat'l Research Council; Member C.E.S.A. Sectional Committee on Steel Construction; Chief Engineer, Western Division, Dominion Bridge Co., Ltd., 702 Canada Bldg., Winnipeg; 981 Grosvenor Ave., Winnipeg. (1920)

Whitmore, D. R. E.—B.A. (Geol.) '39 (Queen's); Ph.D. '43 (Princeton); Jr. A.I.M.E.; Jr. M.C.I.M.; Field Geologist, Consolidated Mining and Smelting Co. of Canada Ltd., Channing, Man. (1945)

Wildman, K. E. B.—B.Sc. (C.E.) '26 (Man.); Major on A/S in R.C.E. (1929)

Wilkinson, K. W.—B.Sc. '34 (Sask.); In Charge twin-engine trainer development and maintenance, Directorate of Aeronautical Engineering, R.C.A.F.; A.F.H.Q., Ottawa, Ont.; 146 20th St. West, Prince Albert, Sask. (1937)

Williams, G. A.—Superintendent of Utilities, Town of The Pas, Drawer 400, The Pas, Man. (1922)

Williams, G. B.—B.Sc. (C.E.) '35 (Man.); M.E.I.C.; Associate Highway Research Board; Materials Engineer, Highways Branch, Department of Public Works, Manitoba, 315 Legislative Bldg., Winnipeg; 374 Campbell St., Winnipeg. (1939)

Williams, R. S.—Diesel Supervisor, Canadian National Railways, Western Division; 1061 McMillan Ave., Winnipeg. (1944)

Wilson, T. T.—(Herriot Watt, Scotland) '06; Member Motor Carrier Board; Chief Engineer, Highways Branch, Department of Public Works, Manitoba, 309 Legislative Bldg., Winnipeg; 353 Overdale St., St. James, Man. (1920)

Woodhall, T. L.—B.Sc. (E.E.) '30; M.Sc. '34 (Man.); M.E.I.C.; Electrical and Designing Engineer, Manitoba Power Commission, Canada Bldg., Winnipeg; 121 Baltimore Road, Winnipeg. (1935)

Young, M. D.—B.Sc. (E.E.) '25 (Man.); Assistant General Superintendent, City of Winnipeg Hydro Electric System, 55 Princess St., Winnipeg; 1404 Wellington Cres., (South) Winnipeg. (1930)

Youngman, Walter—MEMBER OF COUNCIL '27, '36, '37, '38, '39; PRESIDENT OF THE ASSOCIATION '39; Assistant Chief Engineer, Highways Branch, Department of Public Works, Manitoba; 315 Legislative Bldg., Winnipeg; 341 Maplewood Ave., Winnipeg. (1920)

Zenzinger, A. C.—M.E. '22 (Brno, Czechoslovakia); Superintendent, Manitoba Sugar Co., Ltd., Fort Garry, Man.; c/o McLaren Hotel, Winnipeg. (1940)

Names of Persons Who Have Been Registered as Professional Engineers in Manitoba

List, arranged in chronological sequence, of all who have been registered as members of the Association of Professional Engineers of the Province of Manitoba since its inception.

The names of those who are no longer on the register, because of decease, retirement or transfer, are shown in light face type.

G. B. McColl
*S. E. McColl
E. P. Fetherstonhaugh
G. P. Morse
G. W. Burbidge
E. V. Caton
D. M. Mawhinney
G. R. Wright
E. Brydone-Jack
*J. G. LeGrand
*B. S. McKenzie
A. W. Lamont
R. H. Cooper
N. M. Hall
W. M. Scott
L. R. Brereton
*H. Stainton
John Young
*J. Rochetti
J. Forsyth
Geo. Harrison
A. A. Young
*J. G. Sullivan
*W. A. James
Wm. Burns
R. W. Moffatt
Guy C. Dunn
L. J. Street
D. A. Ross
*H. A. Bowman
H. M. White

A. V. Polson
C. H. Attwood
W. E. Hobbs
G. J. Brown
W. W. Dines
L. W. Lester
*John Woodman
W. P. Brereton
*J. M. Leamy
J. A. Hesketh
W. R. Shepherd
Allan Findlay
Sidney Wilkins
James Veitch
R. B. Pratt
J. A. MacGillivray
F. S. Fowler
J. W. Battershill
*H. E. Brockwell
J. V. Dillabough
E. W. Robison
J. F. Lester
W. D. MacKenzie
J. M. Davidson
J. Turnbull
*A. McGillivray
F. W. B. Scholefield
W. R. Davis
D. N. Sharpe
J. H. Cormick
C. S. Walley

G. L. Guy
W. C. Taylor
H. C. Carter
H. B. Henderson
A. W. Barker
C. R. Lys
*R. W. McKinnon
C. S. Landon
F. B. Hazel
J. B. Lawrence
*B. Hagarty
S. Schofield
W. G. Mawhinney
H. R. Gemmel
R. E. Taylor
T. R. Deacon
W. N. Smith
*G. W. Rogers
G. H. Herriot
F. B. Mason
*W. A. Ducker
A. G. Connell
F. A. W. MacLean
C. H. Fox
E. L. Holmgren
W. H. Hunt
P. Burke-Gaffney
H. C. D. Briercliffe
Wm. Aldridge
F. E. Umphrey
C. A. Clendening

*Deceased.

Garnet Affleck
*E. M. M. Hill
T. H. Porter
G. A. Warrington
E. C. Cowan
*Theodore Kipp
D. G. Sutherland

100

J. M. Campbell
L. B. Copeland
A. W. Fosness
J. N. Finlayson
W. F. Oldham
J. W. Baldock
B. A. Johnston
H. A. Dixon
N. B. MacTaggart
N. J. Wallis
C. H. Blanchard
H. D. H. Scott
John Lee
Walter Youngman
*J. B. Phillips
A. J. Sutherland
M. C. Garroni
M. A. Lyons
H. G. Welsford
Harold Edwards
M. T. Cantell
F. deC. Davies
*W. A. Robinson
C. F. Gray
R. J. Swain
V. J. Melsted
E. J. Buckingham
F. E. Matthews
*R. A. Hazelwood
H. Lorimer
G. W. Ledger
R. F. Weekes
H. S. Cameron
A. W. Smith
L. E. Silcox
*J. A. Douglas

J. C. D. Taylor
*F. T. Bagshawe
T. T. Wilson
D. L. McLean
*S. E. Junkins
John Schofield
B. W. Parker
J. A. Meindl
A. H. Legge
F. G. Haven
G. P. Pearson
*D. Morrison
W. H. Shillinglaw
H. W. McLeod
Frank Lee
*C. F. Cameron
G. R. Hill
*Wm. Fulton
W. Walkden
H. S. Rimmington
L. I. Easton
G. R. Pratt
L. Johnston
H. E. Berg
*G. H. Robinson
*W. D. Pender
T. W. Clarke
W. H. Richardson
*D. M. Bright
T. B. Campbell
A. L. Cavanagh
R. C. Robinson
J. E. Davison
*A. V. Redmond
T. L. Roberts
G. F. Irving
T. Lees
J. D. Ruttan
H. P. Fuller
T. H. Kirby
N. S. Tate
H. A. Mackay
A. J. Morris
*John Reid

W. A. Lewis
W. S. McGibbon
A. J. Sill
H. Shand
F. S. Corley
J. E. Buerk
B. T. Rodd
C. W. Lowman
A. H. Corbett
A. C. Turtle
*J. C. Irving
N. M. Waddell
N. F. Harrison
P. W. Mullins
F. L. Lloyd
Chas. Flint
C. V. Stout
H. S. Walin
Victor Michie
N. I. Ritchie

200

E. N. Johnson
F. W. Pearson
H. Lloyd
J. C. Holden
E. S. Kent
J. W. Porter
A. J. S. Taunton
John Gordon
J. F. Hyde
P. F. Baker
G. S. Roxburgh
*H. Penfold-Blake
*J. H. Alexander
H. E. M. Beresford
H. A. Bayne
John Craig
*A. Duncan
J. P. Gordon
*C. H. Gunn
D. K. Lewis
D. A. MacDougall
G. A. McPhillips
T. W. MacKay

*Deceased.

E. B. Patterson
A. Trott
H. R. Urie
A. F. Walker
T. H. Wilson
K. E. Whitman
John Armstrong
E. H. Morse
E. A. Childerhouse
H. L. Johnston
Chas. Taylor
Wm. McPhillips
T. C. Main
G. A. Knowlton
E. P. Gibson
E. G. Waller
C. H. Larson
F. E. Collinson
V. H. Campbell
H. S. Cooper
D. B. Gow
E. W. M. James
*F. H. Martin
J. M. McDonald
D. E. McPherson
J. W. Sanger
H. Sprenger
J. B. Scott
*W. E. Harry
*Hugh McNair
*G. S. McKay
J. F. Carmichael
Nelson Barritt
H. S. Beetham
G. H. N. Monkman
G. M. Lang
J. K. Yorston
A. P. Smith
J. L. Charles
S. S. Kennedy
*C. A. Millican
A. D. Ferguson
S. F. Ricketts
*C. W. Agnew

H. B. Bower
R. D. Harper
L. J. Johnstone
C. T. Lount
J. H. Murphy
James Quail
H. M. Smith
H. L. Vercoe
Geo. E. Miles
L. B. Weatherbee
J. C. Davis
*J. J. P. Bowler
J. M. Burke
H. R. O. Wandall
D. J. Miller
J. M. Begg
J. E. St. Laurent
W. K. Broughton
*J. P. Mooney
R. B. Fry
L. A. Guthrie
W. H. Jones
J. B. Ferguson
*A. Taylor
E. E. Johnson
J. B. D'Aith
J. M. Morton
H. G. Michell
*C. A. P. Turner
A. K. Primeau
A. B. Waterman
P. R. Phillips
G. A. Williams
300
E. W. Stedman
J. Riddell
J. Fourneaux
D. R. Stratton
*Julian C. Smith
J. A. Wakefield
W. Radcliffe
D. G. Sutherland
T. H. Boyd
A. Melville

R. F. Allen
R. A. Davidson
J. W. Dorsey
*M. W. Wales
G. W. Coburne
H. S. Ferguson
R. J. McKenzie
J. A. Heaman
S. S. Vineberg
*D. J. Kennedy
W. L. McLaren
J. P. Howard
J. W. G. Paterson
N. W. Calvert
T. Martin
*R. Thomson
A. E. Macdonald
J. A. P. Marion
W. L. Codington
F. G. Goodspeed
H. P. Montizambert
C. D. Lill
H. L. Watson
G. F. Hardy
*W. G. Chace
D. Smith
W. P. Bickle
J. A. Burrows
G. W. Campbell
J. D. Peart
*G. W. Anderson
C. P. Warkentin
A. J. Merrill
*J. G. MacGregor
G. Wallace
*J. Watson
S. C. Bemister
M. W. Turner
W. K. Harding
G. Coutts
G. B. Webster
H. D. Booker
B. Ingimundson
J. A. Penrose

*Deceased.

F. W. Alexander
C. E. Chaffin
N. E. Willett
*E. R. Millidge
*N. J. Stocker
H. P. Stanley
Alex. Campbell
K. G. Ross
J. L. Lang
J. C. Trueman
F. L. Smith
E. F. Elliott
J. Waldron
J. E. Underwood
*A. J. MacFadyen
J. E. Kellett
W. J. Bull
H. L. Donaldson
E. L. Brown
John Drybrough
T. K. Dawson
L. J. Walden
L. Millidge
F. Wynstra
Jules Labarthe
J. D. Walker
G. F. Bodie
J. T. Rose
W. P. Cheney
T. J. Pounder
K. E. B. Wildman
L. J. Kennedy
L. D. Hopkins
J. P. Fraser
E. L. Burgess
J. C. Krumm
Geo. E. Cole
R. A. McLennan
*J. R. Guilford
G. V. Roney
M. P. Blair
H. A. Parr
Geo. E. Collins
M. D. Young

H. G. Cochrane
R. S. Bowman

400

H. Hunter
W. D. Hurst
B. B. Hogarth
C. G. Muller
T. B. Borgford
R. L. Sutherland
E. A. Dowman
L. Mackay
P. C. Peterson
A. W. Hanks
*J. L. Tully
R. H. Andrews
H. Brekke
W. Gruber
R. O. Paulsen
C. L. Fisher
G. W. Oliver
H. L. Briggs
N. W. Pace
W. L. Bunting
P. Kelly
J. S. Merrett
E. L. Campbell
A. A. Lee
J. G. Linton
L. E. Ostrander
T. L. Woodhall
J. C. Aitkins
G. A. Moody
A. A. Paoli
C. B. Dawson
G. W. O'Neill
C. G. Brunel
P. Prince
Geo. McDermid
*F. L. Evans
R. E. Phelan
C. V. Humphreys
J. F. Muir
F. S. Adamson
H. F. Anderson

D. R. Walker
A. K. MacKenzie
A. J. McLaren
C. A. Rigby
J. F. Cunningham
A. H. Rogers
H. C. Doidge
G. G. Beddome
E. S. Magill
H. D. Carter
G. H. Grescoe
W. R. C. Taylor
W. A. Campbell
T. R. Cooil
W. S. Lea
Andrew Taylor
J. K. Palmason
N. P. Robinson
F. A. Dagg
J. Houston
*G. G. Howard
R. A. Young
H. V. Echols
L. M. Hovey
J. C. Houston
H. A. Gray
J. B. Striowski
J. D. Shannon
A. I. Bereskin
J. F. Wright
F. M. Smith
D. W. Miller
K. W. Wilkinson
*A. M. Kirkpatrick
M. Spigelman
C. V. Antenbring
J. P. Hague
F. F. Griffin
A. G. Phillips
L. F. Pearce
W. J. D. Cameron
G. M. Brownell
D. M. Stephens
C. D. Brown

*Deceased.

N. S. Bubbis
W. W. Ramsay
F. V. Seibert
N. G. McDonald
A. H. Harris, Jr.
T. Lemoine
E. R. Love
L. M. Stevenson
J. A. Haskin
W. F. Riddell
J. P. Caulfield
M. A. E. Roche
W. A. Green
W. Alvord
W. C. Fingland

500

P. C. Campbell
G. B. Williams
J. A. Ogden
C. A. Keeping
H. E. Amos
S. C. Ellison
J. W. Bell
G. P. Duncan
H. F. Peters
G. E. Hrudka
A. Zenzinger.
C. A. Hansen
E. F. Cooke
R. P. Henderson
E. A. Ford

W. E. Adkins
A. J. Crosbie
T. E. Price
F. L. van Allen
J. A. Griffiths
E. W. R. Butler
K. K. Paget
G. A. Runge
C. M. Hovey
T. E. Storey
G. M. Ritchie
Reg. Hugo
G. R. Fanset
M. G. Smerchanski
P. J. Kelly
C. A. Miller
E. W. Martin
D. B. McKillop
I. S. Raidel
H. Klempner
J. Sill
J. Harry Benditt
A. G. Clarkson
A. M. Weber
R. S. Williams
A. T. McCormick
D. E. Constantini
B. Roden
J. E. Duncan
W. A. Trott
J. W. Greenlaw

W. B. Paton
Geo. C. S. Johnston
C. A. Proudfoot
D. S. Swain
C. B. Jackson
H. E. G. Dupuy
E. J. W. Akins
F. D. Shepherd
W. I. Shuttleworth
A. H. Norton
Conrad Gran
G. T. L. Andrews
F. Crease
F. M. Talbot
A. Murray
S. Stoller
R. C. Brehaut
D. S. G. Ross
W. J. Moffat
A. M. Pepper
G. Neely Moore
Stanley M. Carrick
James Oliver
J. N. McLean
Geo. C. Davis
W. A. C. Orr
J. C. Neufeld
D. R. E. Whitmore
Lloyd G. Scott

*Deceased.

The Dominion Council of Professional Engineers

Members of Council, 1945-46

P. Burke-Gaffney (President)	Manitoba
M. J. Aykroyd (Vice-President)	Ontario
G. G. Murdoch	New Brunswick
H. Doane	Nova Scotia
P. E. Poitras	Quebec
N. B. Hutcheon	Saskatchewan
J. B. deHart	Alberta
F. M. Knapp	British Columbia
W. P. Dobson (Past President)	Ex Officio

Major M. Barry Watson, 119 St. George Street, Toronto, Ont., is Secretary-Treasurer of Council.

A History of the Dominion Council

C. C. KIRBY
Honorary President, Dominion Council of Professional Engineers

The Dominion Council of the Associations (and Corporation) of Professional Engineers of Canada was formed at Hamilton on February 8, 1936. It stemmed from a previously existing "Committee of Eight" representing the eight provinces with registration laws governing engineers.

The first steps towards conferring a legal status upon the profession of engineering had occurred some fifty years before with the enactment in Manitoba in 1896 of an Act† which restricted the practice of engineering to certain persons, then members of the Canadian Society of Civil Engineers. A similar Act was passed in Quebec in 1898. Because these Acts contained no administrative machinery, they could not be enforced and fell into disuse. The Quebec Act, however, was

†An Act Respecting the Profession of Civil Engineering S.M. 1896, Chap. 2, and R.S.M. 1913, Chap. 32.

revised in 1918 and again in 1920 and 1922. In the latter two years it was made to conform to the pattern of Acts then in effect in other provinces, by the creation of an administrative council and other necessary provisions.

The question of giving the practice of engineering a legal standing had been revived in the Western Provinces in 1917. F. H. Peters,* then Commissioner of Irrigation for the Department of the Interior, at Calgary, did the pioneer work in revival of interest. The Quebec Branch of the Canadian Society of Civil Engineers had passed resolutions in 1912 advocating enactments to raise the standards of education of Engineers. The Ottawa Branch had discussed legislation for the profession in 1917, in a paper read by Mr. Peters. Similar discussions were held in Edmonton, Saskatoon and Vancouver in 1918.

In April, 1918, the Canadian Society of Civil Engineers became the Engineering Institute of Canada and began publication of its "Engineering Journal" soon after. It also created new branches in many cities. These steps made it possible for the idea of legislation to be discussed in all provinces, at meetings and in print.

Council of the Institute considered the matter in October, 1918, in the light of representations made by the Western Branches and asked them to send a delegation to the next Annual Meeting to be held in Ottawa. Mr. Peters, however, sent out a call to all branches then existing to join in the proposed delegation, to which they responded. The delegates met in the evening before the Annual Meeting and prepared a resolution to be presented at that meeting. This resolution was moved by J. M. Leamy and seconded by C. C. Kirby. It called for the setting up of a special committee, consisting of one delegate from each of the thirteen branches then existing, which should meet with plenary powers, before the fifteenth of April. The purpose of this Committee was to draw up legislation in the form of a "Model Act," to be submitted to all members of the Institute for approval, by letter ballot before the first of June. Although the resolution received some opposition, because of the plenary powers conveyed to the Committee, it carried with a large majority.

*Now Surveyor General and Chief, Hydrographic Service, Department of Mines and Resources, Ottawa, Ontario.

The Plenary Committee met on April 7, 1919, in Montreal at the offices of the Institute, sat for five days and produced the required "Model Act."

The outstanding feature proposed in this Act was the creation of Provincial Associations of Professional Engineers, to be quite independent of the Engineering Institute of Canada. This was a radical departure from the principle of State licensing as developed in the United States. In the Canadian system the act of registration conveyed membership in a corporate body, with a voice in the conduct of affairs in supervision of the profession, whereas the American system does not.

The opinion of the Institute members, as recorded by the ballot, was 478 FOR and 138 AGAINST.

Following the acceptance by ballot, Council of the Institute requested its members to seek enactment of the necessary legislation in their several provinces, in co-operation with other engineering organizations in such provinces.

The following Acts have been passed in Provincial Legislatures:

1898 Quebec—Civil Engineers' Act. Amended 1918, 1920, 1922, 1933.
1920 Alberta—The Engineering Profession Act. Amended 1930, 1936.
1920 British Columbia—The Engineering Profession Act. Amended 1938.
1920 Manitoba—The Engineering Profession Act. Repealed, re-drawn and re-enacted 1935.
1920 New Brunswick—The Engineering Profession Act. Amended 1924, 1937.
1920 Nova Scotia—The Nova Scotia Engineering Profession Act.
1922 Ontario—The Professional Engineers' Act. Amended 1937.
1930 Saskatchewan—The Engineering Profession Act.

Throughout the earlier considerations given to the subject of ideal legislation for the Engineering Profession, hope was held that eventually Dominion legislation, similar to that enjoyed by the Medical Profession, would be obtained. It was with that in view that so great importance was attached to a "Model Act."

The results of the several provincial enactments varied so much from the "Model Act" that, after a few years, the impression was created, particularly in Institute circles, that there was much to be done to bring them into greater harmony.

The first meeting of representatives of the provincial bodies, called at the instance of Professor H. E. Haultain, of Toronto, Chairman of a Committee of the Engineering Institute of Canada, was held at Montreal, February, 1926. No other representatives of the Institute were present, but two delegates attended from each of the Provinces except Saskatchewan, which had no Act at the time. This Committee sat for three days and discussed the way the several Acts had worked out up to that time and the reasons for many of their distinctive features. The minutes of this meeting cover 85 pages of foolscap and constitute an exhaustive study of the subject.

The Institute formed a Committee in 1929 under the Chairmanship of S. C. Porter of Calgary, and one in 1930 under H. H. Vaughan of Montreal.

As an outcome of Mr. Vaughan's activities the Associations formed in 1931 a "Committee of Four" which met in Montreal on August thirtieth. This Committee affirmed its belief that a Dominion-wide body, embracing the entire engineering profession and all its activities, is a practical ultimate possibility. The Committee also recommended the formation of an "Interim Dominion Council." The reactions of the several associations to this report were so varied that the Committee, after considering them, recommended the formation of a "Committee of Eight" to carry on the work. This "Committee of Eight" was duly authorized and formed. It met in Montreal in February, 1933, and its report contained the following resolution:

> "In view of the expressed views of the Provincial Associations it is felt that any attempt to create a new national organization embracing technical and social activities as well as the registrative powers of the Provincial Associations is inadvisable at the present time as it would tend to bring the new body into conflict with existing engineering societies, associations and organizations."

It also recommended the formation of a Dominion Council as the first logical step towards the complete co-ordination of engineering activities at a future and more propitious time.

The reactions of the several associations were unanimous in accepting the report in full and representatives on the proposed Dominion Council were appointed by the eight provincial bodies.

This particular group never met, but throughout 1934 and 1935 it carried on by correspondence under the secretaryship of Dean R. S. L. Wilson, of Edmonton, in an effort to solve some of the more outstanding differences of constitution and procedure between the respective associations, by examining them before meeting together.

The Montreal Branch of the Institute in the meantime gave consideration to these problems as they concerned the Institute with the result that at the Annual Meeting of the Institute in Toronto in February, 1935, an Institute Committee was formed under the chairmanship of G. McL. Pitts. This Committee had as its object "To develop the possibilities of Consolidation of the Engineering Profession in Canada." It became known as the "Committee on Consolidation."

The activities of this Committee resulted in the withdrawal of active support to the Dominion Council idea by Council of the Corporation of Professional Engineers of Quebec, which was opposed to holding a meeting of the Dominion Council until the report of the Institute's Committee was available. The Manitoba Association did not favour a meeting in 1935, preferring first to continue on its own provincial plan of co-ordination with the Institute on which it had been working for some time.

The other six Associations, having decided that a meeting should be held to arrive at a basis for financing a Dominion Council, were invited by the Association of Professional Engineers of the Province of Ontario to meet at Toronto in February, 1936, but at the instance of the New Brunswick and Nova Scotia delegates the meeting was held at Hamilton concurrent with the Annual Meeting of the Institute.

Manitoba and Quebec asked that they should be represented by delegates with watching briefs only, which request was acceded to. Other members who were particularly inter-

ested and who were attending the Institute meetings were also invited to attend the Dominion Council meeting.

Prior to this meeting all had attended the business session of the Institute's meeting, at which the progress report of its Committee on Consolidation had been discussed. The Annual Meeting of the Institute had invited the Dominion Council to appoint two representatives to act on its Consolidation Committee. The Dominion Council went into session on the following day and decided to draw up a full constitution, after discussion as to whether it should be on a permanent basis or not. The decision was to do so until Council could be superseded by something else, subject of course to endorsement by constituent associations. It was also decided to invite the Institute's Committee on Consolidation to a joint conference on the following day.

The Joint Conference held on February 7, 1936, resulted in the unanimous acceptance of the terms of a "Joint Memorandum," the preamble of which read:

> "We record with satisfaction and appreciation the opportunity afforded in Hamilton this day for the first time for accredited representatives of all Provincial Professional Associations of Canada (The Associations' Dominion Council) and also of the Engineering Institute of Canada (The Committee on Consolidation) to confer for the common good of the Engineering Profession.
>
> "We feel the opportunity thus afforded to be of such great moment to the Engineering Profession in Canada that it must be taken full advantage of. Therefore, we desire to place on record the following preliminary conclusions as a basis for definite progress: " (for the details of the conclusions thus recorded see Appendix "B", page 100).

The Dominion Council met again on the following day and adopted a full constitution. C. C. Kirby, President, and A. B. Crealock, Vice-President, were appointed to represent Council on the Institute's Committee on Consolidation. The Report of the Dominion Council and its revised constitution were later adopted and confirmed by the six associations officially participating at this meeting.

In December of that year, 1936, the Corporation of Quebec decided to support the Dominion Council and appointed a

representative upon it, but the Manitoba Association did not take similar action until December, 1938.

The two representatives from the Dominion Council attended the meetings of the Committee on Consolidation and took an active part in its deliberations. They also attended a plenary meeting of Council of the Institute at which the Committee's report was adopted except for one sub-clause, for which the Institute's Council submitted an alternative, both of which were to be submitted to the membership, independently of the main report, for their decision. This difference of opinion was on the point as to whether the Institute should confine its acceptance of future members to such men as would be acceptable to the associations concerned. This clause as submitted by the Committee was in line with section 5 (e) of the Memorandum of the Hamilton Conference.

The Annual Meeting of the Institute in February, 1937, adopted the Committee's report on the understanding that the alternative clauses were to be submitted to the membership by ballot. The rejection of either or both would not constitute a rejection of the proposed new By-laws in the remainder of the ballot.

Amendment of the Institute's By-laws required to implement the scheme contained in the Committee's report was submitted to ballot vote of Institute members and was rejected on all counts by a vote of 780 AGAINST to 677 FOR, a total of 1,457 voted out of a possible 2,600.

In June, 1937, the Institute held a plenary meeting of its Council at which a "Committee on Professional Interests" was formed. This is the Committee which has since negotiated co-operative agreements with the Associations of Nova Scotia, New Brunswick, Saskatchewan, Alberta and Quebec. The Dominion Council has never expressed any opinion about these individual agreements.

A meeting of the Executive of the Dominion Council, together with such other councillors or representatives of other associations who were available, was held in Montreal at the time of the Institute's celebration of its semi-centennial. This gathering decided to recommend that the Dominion Council should continue to function but that it should not become too large or too expensive. Also that it should no longer aim to hold its meetings concurrently with the Institute's Annual Meeting. Nova Scotia was the only Province not represented at this gathering.

Subsequent meetings were held in Montreal in 1938 and 1939, Winnipeg 1940, Toronto 1941, Saint John 1942, Vancouver 1943, Quebec 1944, and Calgary 1945.

The Dominion Council consists of eight members, one appointed by each of the Provincial Associations, together with the Immediate Past President of Council. In Quebec the Provincial body is termed "Corporation" instead of "Association" as in the other Provinces. Meetings of Council are held each year.

The findings of the Dominion Council are not binding on the constituent associations but are merely recommendations. No resolution of Council is passed without the unanimous consent of the members present. Changes in constitution require the unanimous consent of the Councils of the constituent associations.

Duties of the Council are outlined in the Constitution of the Dominion Council. (See page 103.) The revenue of the Council is obtained by voluntary contributions on a per capita basis of the Associations (and Corporation).

The number of Registered Professional Engineers in all of the constituent associations was 7,068 at December 31, 1944, while at the same date 4,068 engineers in training and students were enrolled. Reports received during 1945 show that the membership has increased greatly in Ontario, Quebec and British Columbia.

APPENDIX "A"

Lists of Personnel

1919 Committee of the Engineering Institute of Canada to frame "Model Act":

Halifax Branch, C. E. W. Dowdell, Chairman; St. John Branch, C. C. Kirby; Quebec Branch, A. R. Decary; Montreal Branch, Arthur Surveyer, Secretary; Sault Ste. Marie Branch, Newton L. Somers; Hamilton Branch, E. R. Gray; Toronto Branch, Willis Chipman; Ottawa Branch, R. F. Uniacke; Winnipeg Branch, E. E. Brydone-Jack; Regina Branch, H. R. MacKenzie; Edmonton Branch, R. J. Gibbs; Calgary Branch, F. H. Peters; Vancouver Branch, A. G. Dalzell; Victoria Branch, A. E. Foreman.—"The Fathers of Registration."

1931 "Committee of Four" of the Associations.

C. C. Kirby, for Nova Scotia and New Brunswick.
J. M. Robertson, for Ontario and Quebec.
C. J. MacKenzie, for Manitoba, Saskatchewan and Alberta.
A. S. Gentles, for British Columbia.

1933 "Committee of Eight" of the Associations.

F. R. Faulkner, for Nova Scotia.
C. C. Kirby, for New Brunswick.
J. M. Robertson, for Quebec.
Ibbotson Leonard, for Ontario.
E. V. Caton, for Manitoba.
D. A. R. McCannel, for Saskatchewan.
R. S. L. Wilson, for Alberta.
A. S. Gentles, for British Columbia.

1936 Dominion Council.

F. R. Faulkner, Nova Scotia; C. C. Kirby, New Brunswick, President; A. B. Crealock, Ontario, Vice-President; D. A. R. McCannel, Saskatchewan; P. M. Sauder, Alberta; H. F. C. Letson, British Columbia.
Observers: T. C. Main, Manitoba; H. Cimon, Quebec; E. A. Wheatley, Temporary Secretary.

1936 Joint Conference Committee at Hamilton.

Dominion Councillors, as above.
E. I. C. Committee: G. McL. Pitts, R. E. Jamieson, O. Lefebvre, J. B. Challies.
Chairman of Meeting, C. C. Kirby; Secretary, E. A. Wheatley.
Observers: F. A. Gaby, E. A. Cleveland, A. B. Normandin, R. W. Angus, F. S. Griffin, H. J. Johnston, G. Stead, S. F. Rutherford.

Other Members who have served on Dominion Council, at Meetings.

P. Burke-Gaffney, Manitoba; F. W. W. Doane, Nova Scotia; H. Cimon, Quebec; P. L. Lyford, British Columbia; G. G. Murdoch, New Brunswick; E. Muntz, Ontario; J. J. White, Saskatchewan; J. B. deHart, Alberta; H. R. Well, Alberta;

E. Redpath, F. W. MacNeill, W. H. Hill, British Columbia; C. L. Dufort, Quebec; J. O. Martineau, Quebec; A. M. Macgillivray, Saskatchewan; W. P. Dobson, Ontario; Alan E. Cameron, Nova Scotia; C. C. Lindsay, Quebec; R. A. Spencer, Saskatchewan; and H. C. Anderson, British Columbia.

Dominion Council, 1936-1944.

The following were Presidents of the Dominion Council of Professional Engineers from 1936 - 1944:

C. C. Kirby, St. John, N.B., 1936 - October, 1940.
D. A R. McCannel, Regina, Sask., 1940 - May, 1942.
W. P. Dobson, Toronto, Ont., 1942 - 1944.

APPENDIX "B"

Hamilton Joint Conference

February 7, 1936.

CONCLUSIONS

1. General principles only should now be asserted. Constitutional details and precise methods of procedure to accomplish the general principles could be left in abeyance for the time being.

2. The Provincial Professional Associations must continue to function in their respective capacities and for the purposes set out in their respective Acts, and the Engineering Institute of Canada should continue to function.

3. There should be a national engineering body for Canada, comprising within its membership all the qualified engineers of Canada.

4. The Engineering Institute of Canada can be the basis for such a national engineering body, and it is desirable that it should be.

5. To accomplish the purpose set out herein, we suggest for the consideration of the Provincial Professional Associations and of the Engineering Institute of Canada the following specific recommendations:

(a) That the Institute agree to consolidate its two classes of corporate membership into one class.

(b) That the Institute agree to admit to corporate membership only those applicants who are members of a Provincial Professional Association.

(c) That the Institute agree to grant a special non-voting membership, without payment of either entrance fee or annual dues and without right to hold office, to those members of the Provincial Professional Associations who may not for the time being desire to apply for corporate membership in the Institute.

(d) That the Institute agree to enlarge its Council to permit each Provincial Professional Association to be represented directly by an accredited representative.

(e) That the Provincial Professional Associations continue their Dominion Council until such time as the purposes of the negotiations connoted by this memorandum are accomplished.

(f) That the Provincial Professional Associations consider an acceptable plan by which the non-voting members referred to in paragraph (c) shall be encouraged to become corporate members of the National Body.

Constitution of the Dominion Council of the Associations

(AND CORPORATION)

OF PROFESSIONAL ENGINEERS OF CANADA

1. FULL TITLE—Dominion Council of the Associations (and Corporation) of Professional Engineers of Canada.

SHORT TITLE—The Dominion Council of Professional Engineers.

ABBREVIATIONS—D.C. of P.E.

MEMBERSHIP

2. The Council shall consist of one accredited representative of each of the following Associations (and Corporation) appointed annually:

The Association of Professional Engineers of the Province of New Brunswick.
The Association of Professional Engineers of the Province of Nova Scotia.
The Corporation of Professional Engineers of the Province of Quebec.
The Association of Professional Engineers of the Province of Ontario.
The Association of Professional Engineers of the Province of Manitoba.
The Association of Professional Engineers of the Province of Saskatchewan.
The Association of Professional Engineers of the Province of Alberta.
The Association of Professional Engineers of the Province of British Columbia.

3. NOTE—Such accredited representative should, where possible, be the President, Vice-President, Immediate Past President or active Councillor of the respective Provincial Associations, but where necessary such accredited representative may be selected from outside the Council bodies.

4. In the event of any representative so appointed being unable to act, Council of his Association (or Corporation) shall have full power to delegate his office to an alternate for a specific occasion.

OBJECTIVES AND PURPOSES OF THE DOMINION COUNCIL

5. (1) The creation of a body representative of all the Provincial Associations of Professional Engineers.

(2) The recognition of Provincial Autonomy.

(3) The co-ordination of all activities of the Provincial Associations (and Corporation) of Professional Engineers throughout the Dominion and by active co-operation with other bodies work towards the confederation, consolidation or co-ordination of the Engineering Profession in Canada.

DUTIES OF COUNCIL

6. (1) To assist the Provincial Associations (and Corporation) in securing improved legislation for the better protection and regulation of local professional interests.

(2) To secure the adoption by Provincial Associations (and Corporation) of uniform standards of examination and membership.

(3) To arrange for reciprocal privileges between Provincial Associations (and Corporation) for the benefit of their members.

(4) To secure harmony of action in all matters affecting common interest, and generally to act in an advisory co-ordinating capacity to the Provincial Associations (and Corporation).

(5) To negotiate with other organizations whereby the common interests of the engineering profession would be advanced.

HEAD OFFICE

7. The head office of the Council shall be at the office of the President for the time being.

MEETING

8. A meeting of the Dominion Council shall be held each year. The Province in which the meeting shall be held shall be decided at the preceding meeting, and it shall be so arranged that each third meeting is held either in one of the four Western Provinces or in the Maritimes, the intervening meetings being held in Quebec or Ontario.

The time of each meeting should preferably be convenient to an annual or general meeting of the Association or Corporation of the Province concerned.

The date of each meeting shall be set by the President.

9. NOTE—As far as practicable the business of the Council shall be transacted at that meeting. But if, in the interim, matters of business arise the consideration of which, in the opinion of the President, cannot be deferred, it shall be competent for the President to transmit particulars of the same together with any resolution contemplated thereon to members

of Council by post, and if all Councillors indicate their approval to the President then the resolution or other matter shall have the same force and value as if passed at a regular meeting of Council.

OFFICERS

President

10. The Council shall elect a President who shall preside at all meetings and hold office for one year or until his successor shall have been duly appointed.

Duties

11. It shall be the duty of the President to call meetings, to initiate business, and generally to perform all duties usual to his office.

12. The President shall be ex-officio a member of all Committees.

Vice-President

13. The Council shall also elect a Vice-President who, in the absence of the President, shall exercise all the duties of the President; and who shall hold office for one year or until his successor shall have been duly appointed.

14. In the absence of the President and Vice-President, a Chairman shall be elected by the majority of those present, who for the time being shall be invested with the powers of the President.

Secretary-Treasurer

15. There shall be a Secretary-Treasurer who shall be chosen by the Council and shall hold office during the pleasure of the Council. He shall not be a member of the Council, but shall be a paid official. He shall be registered as a Professional Engineer in one of the Associations or Corporation.

16. His duties shall be performed under the direction of the Council, or failing same, under the direction of the President.

17. The Registrar of each Provincial Association (and Corporation) shall be a sub-secretary of the Secretary of the Dominion Council.

AUDITORS

18. A chartered accountant shall be appointed as auditor by each Annual Meeting.

EXECUTIVE COMMITTEE

19. An Executive Committee shall be appointed annually consisting of the President and two other members of the Dominion Council, two of these three to constitute a quorum.

COMMITTEES

20. Committees appointed by the Council or by the President during the interval of Annual Meetings shall consider the matters referred to them by holding meetings or by correspondence as may be found most convenient, and shall report thereon to Council before the date fixed for the next Annual Meeting, or as the President may otherwise require.

REVENUE

21. The revenue of the Council shall be obtained by voluntary contributions on a per capita basis of the Associations (and Corporation) of Professional Engineers throughout Canada. The Registrars of the respective Associations (and Corporation) shall be asked to forward during January each year to the Secretary-Treasurer of the Dominion Council the number of active registered members as of the first of January in each Association (or Corporation). The Council at each Annual Meeting, on these figures received, shall budget in detail their commitments for the following year and arrive at a per capita basis. The Council shall thereupon supply to the Registrar of each Association (and Corporation) the Budget in detail with the estimated per capita assessment.

DEPOSIT OF FUNDS AND SIGNING OFFICERS

22. The revenue of the Council shall be deposited to the credit of "The Dominion Council of the Associations (and Corporation) of Professional Engineers of Canada" in some chartered bank convenient of access by the Secretary-Treasurer for the time being, and shall be withdrawn therefrom only by cheque which shall be signed by any two of the President, the Vice-President and the Secretary-Treasurer.

OFFICIAL JOURNAL OF DOMINION COUNCIL

23. The Council, with the consent of the Association in question, may use any Bulletin issued by that Association (or Corporation) as the official publication medium of the Council, such Bulletin to be used solely for legislative and welfare purposes.

PUBLICITY

24. The members of the Dominion Council and the Registrars of all Provincial Associations (and Corporation) shall be correspondents of the official publication.

DISPUTES

25. In the event of any dispute as to the intent or meaning of any of this Constitution or any additional clauses which may be annexed thereto thereafter, the interpretation of the Council shall be final and conclusive.

CHANGE OF CONSTITUTION

26. This Constitution may be amended or added to by the vote of the members either at an Annual Meeting or by correspondence, but such amendment or addition shall require the approval of the Councils of all the (subscribing) Associations (and Corporation) of Professional Engineers in Canada.

The Canadian Council of Professional Engineers and Scientists

W. P. DOBSON
Chairman of the Council

The Canadian Council of Professional Engineers and Scientists has been set up as a body representative of national engineering and scientific organizations in Canada. Its establishment followed several years of discussion and while agreement on all matters was not reached by the societies interested a beginning has been made by eight of the national bodies in the field of architecture, engineering, surveying and chemistry.

The events immediately preceding its formation date from 1941 when the Dominion Council of Professional Engineers invited several voluntary societies to discuss the question of closer co-operation among the engineering and allied professions. During 1942 and 1943 the proposal was discussed at several meetings. At one of these meetings held in Montreal December 11, 1943, a resolution was adopted to the effect that the Dominion Council of Professional Engineers and the voluntary engineering and allied societies represented be asked to consider as promptly as possible the setting up for Canada an organization similarly constituted to the Engineers' Council for Professional Development, and a committee was appointed to prepare a constitution for submission to the Dominion Council and the voluntary societies. This was done in July, 1944.

About this time the issuing by the Dominion Government of its Wartime Labour Relations Regulations (P.C. 1003) presented a problem to professional and scientific workers which called for prompt co-operative action and the so-called Committee of Fourteen Societies was hastily formed to deal with the problem. At several of its meetings the group discussed the proposal which emanated from the December, 1943, meeting and on October 3, 1944, adopted a series of resolutions providing for the establishment of the Canadian Council of Professional Engineers and Scientists. Its responsibilities were stated to be:

1. To lead the thinking of those concerned so that the

professions of Applied Science and Engineering may best serve the national interest; to promote and safeguard by all lawful and honourable means the welfare of Canadian scientists and engineers and their professions; and to effect and maintain, among the participating bodies, co-operation to that end.

2. The Council shall respect and not impair the present autonomy, authority and functions in its own field, of any participating body.

3. The Council shall be composed of one representative of each of the voluntary national professional societies and of the Dominion Council of Professional Engineers.

Each national society was asked to name its representative (preferably the chief officer or his nominee) before the end of 1944, and the President of the Dominion Council was asked to convene the first meeting as early as possible in 1945.

The following organizations appointed representatives as requested:

Canadian Institute of Mining and Metallurgy, A. A. MacKay.

Royal Architectural Institute of Canada, Forsey Page (alternate, A. J. Hazelgrove).

Canadian Institute of Chemistry, L. E. Westman*.

Canadian Society of Forest Engineers, J. D. B. Harrison.

Canadian Institute of Surveying, W. L. MacIlquham.

Canadian District, American Institute of Electrical Engineers, W. J. Gilson.

Canadian Council, Institute of Radio Engineers, R. A. Hackbusch.

A majority of the Provincial Professional Engineers Associations requested the Dominion Council to represent them, or approved the principles stated in the resolutions.

At its first meeting held in Ottawa January 10, 1945, previous discussions were reviewed and it was decided that a

*Deceased, 1945.

formal constitution would not be prepared; the following memorandum of constitution and policy was unanimously agreed to:

1. The Council will consist of one representative appointed by each of the participating societies, these representatives being the chief officers of the participating societies and/or alternates appointed by them.

2. The Council welcomes the participation of other national professional engineering and scientific societies.

3. The field of activity of the Council will be as follows:

(a) The Council will deal with matters which are national in scope and which affect the interests of professional engineers and scientists.

(b) The Council may interest itself in matters of national importance to specific groups of engineers and scientists only on their direct request.

4. The method of Procedure shall be:

(a) The Council will meet in Ottawa at the call of the Chairman but in any case at intervals of not more than three months.

(b) No action shall be taken by Council unless agreed upon by two-thirds of the members of the Council.

5. In order to finance the activities of the Council for the year 1945, the participating societies are asked to contribute ten cents (10c) per member.

6. Travelling and living expenses of representatives attending Council meetings shall not be borne by the Council.

Commenting on the above statement, the Council is conceived of as consisting of national bodies only; provincial or local bodies may be represented through national bodies. Each member body will have equal voting power in the Council without regard to its numerical size. It has no administrative functions, nor can it bind its participating bodies to any course of action. It may however express opinions and make reports, recommendations and/or announcements to its member bodies, to other organizations, to the Government or to the public.

It is envisaged as a committee of Presidents whose pronouncements will carry the prestige of their respective organizations. It will consider itself competent to make such statements without reference to the participating bodies if two-thirds of its members agree on such action.

It may also receive and act upon suggestions from its member bodies or from other organizations, and places on the Council are open to other national scientific societies.

Its members, being responsible officers, will be in continuous touch with their respective executive committees and membership; this is sufficient assurance that the Council can express a national consensus of opinion on questions which it may consider. Matters requiring detailed study before national action is warranted will naturally be referred to the participating bodies for consideration.

This conception, in the opinion of the members of Council, appears to satisfy the basic requirements of the professions concerned, as expressed in the discussions of the matter.

It was thought necessary to maintain an Ottawa office, and also to appoint an officer who would be continually available to the Council to implement its purposes and co-ordinate its activities and relationships with its members. H. W. Lea, Ottawa, consented to devote a portion of his time to the work of the Council for the year 1945 and he will direct the office which has been established at 18 Rideau Street, Ottawa.

The second regular meeting of the Council was held in Ottawa on March 23 and steps were taken to carry into effect the decisions previously reached. It was agreed that its activities should at the present time follow the following general lines:

1. A continuous contact with the Government at Ottawa and elsewhere, particularly dealing with legislation which affects professional workers and their functions.

2. Contacts with Governments, trade unions, employers' organizations on a national level with the object of bringing employers and professional workers together in providing good relations on economic and other levels. Collective bargaining is only one aspect of this problem.

3. Efforts to secure recognition of the professions by Governments in reconstruction and other postwar plans to

the end that engineers and scientists may make the most effective contributions to the solution of national problems.

4. Surveys and public pronouncements on matters of common interest to engineers and scientists, having in mind the public interest.

The Dominion Government departments will be informed of the existence of the Council and of its representation and its services will be offered to them.

Following this meeting the Council issued a statement on Collective Bargaining calling attention to the decision of the Minister of Labour regarding the representations of engineers and scientists to the Wartime Labour Relations Board (National) on January 10, 1945. This decision was to the effect that P.C. 1003 would apply to professional workers for a period of six months with the Board subdividing bargaining units so that those engaged in a professional capacity may name their own bargaining units. At the end of the period it is proposed to review the application of the code to professional workers. In the announcement it was pointed out that in the present code it is difficult to interpret the distinction between employer and employee and that this has been a source of friction. It was suggested that the line should be drawn where the actual responsibility for hiring and discharging rests. Other suggestions are contained in the statement which has been published in several technical journals.

The Council also addressed a letter to the Minister of Labour prompted by a news release announcing the plans of the department for the postwar placement of executive and professional personnel. It is proposed to establish regional offices throughout the country under the Unemployment Insurance Commission, which will be responsible for placing professional persons. The Minister stated that the plan adopted followed the pattern of the British system resulting from Lord Hankey's report. It was pointed out to the Minister that the news release indicated no parallel with the British plan, and that no particular consideration appeared to have been given to the recommendation in this connection which the Advisory Board of the Wartime Bureau of Technical Personnel had made to him last year. On the contrary the British plan was evolved after consultation with engineering and scientific bodies.

Information about the further activities will be made available from time to time by means of reports and by articles and news releases in the technical and daily press.

The success of the new endeavour will depend upon the soundness of its foundations, upon the services it renders and upon the support it receives. The last two conditions are interdependent. As to the first, the present members of the Council believe that its foundations are sound, and that the principles embodied in the statement of procedure quoted earlier in this article are not contradictory to the affirmed policies of all the national bodies, of whole-hearted co-operation in matters of common interest. The widest publicity and the fullest discussion should be given to its proceedings and it is hoped to accomplish this both by the means already indicated and by discussions during this year at meetings of the national societies and at joint meetings of local and national bodies.