

# THE ENGINEERING ASSOCIATION OF N. S. WALES.

ESTABLISHED 1870.

INCORPORATED 1884.

SESSION 1918—1919.

## PART I.

### MINUTES OF PROCEEDINGS

OF THE ANNUAL GENERAL MEETING, HELD AT THE  
ROYAL SOCIETY'S ROOMS, 5 ELIZABETH STREET, SYDNEY,  
ON THURSDAY, 10TH OCTOBER, 1918.

Present.—The President, Mr. D. F. J. Harricks, in the chair, and about 100 members.

Notice.—The notice convening the meeting was taken as read.

Minutes.—The minutes of the previous meeting were read and confirmed.

Report for the Year.—The Hon. Secretary read the report of the Council for the year.

Accounts.—After the Hon. Treasurer had presented his statement, it was resolved that the report and balance sheet be adopted.

Election of Officers and Members of Council for Session 1918-1919.—The President read the certificate of the scrutineers appointed to conduct the ballot, which resulted as follows:—President, Mr. D. F. J. Harricks; Vice-Presidents, Mr. Jas. Vicars, Mr. J. G. McEwin; Hon. Treasurer, Mr. H. L. Thompson; Hon. Secretary and Editor, Mr. J. McNamara; Councillors, Mr. W. Poole, Mr. W. Reeks, Mr. Russell Sinclair, Mr. W. E. Adams, Mr. J. J. King-Salter, Mr. H. J. Swain, Mr. E. E. Lucy, Mr. A. J. Hart, Mr. J. G. Lancaster.

Voluntary Subscriptions.—On the motion of the Hon. Treasurer, it was decided that a voluntary contribution of 10/6 be asked for from members and 5/3 from students to cover the loss of revenue caused by the remission of subscriptions of members on active service.

Presidential Address.—The President, Mr. Harricks, then delivered his address, at the conclusion of which a hearty vote of thanks was accorded him.

(Signed) D. F. J. HARRICKS.

Minutes of Special General Meeting held at the Royal Society's House, 5 Elizabeth Street, Sydney, November 14th, 1918.

Present.—The President, Mr. D. F. J. Harricks, in the chair, and about 100 members and visitors, including many ladies.

Notice.—The notice convening the meeting was taken as read.

Minutes.—The minutes of the previous meeting were read and confirmed.

Students' Meeting.—The next meeting of this section would take place on 28th instant, when a paper would be read by Mr. E. S. Maclean, entitled "Automobile Cylinder Lubrication."

Ballot for New Members.—As member, Mr. E. M. Dixon. Assoc. member, Mr. F. N. M. Nance. Students, Mr. W. Macauley, Mr. J. W. Tucker.

Librarian.—The President announced that Mr. H. Orams had been appointed Librarian.

Paper.—The President then called upon Mr. Russell Sinclair to read his paper, entitled "The development of women's work during war time in England." This was received with very great pleasure by all those present.

(Signed) D. F. J. HARRICKS.

Minutes of General Meeting held at the Royal Society's House, 5 Elizabeth Street, on 13th March, 1919.

Present.—The President, Mr. D. F. J. Harricks, in the chair, and about 80 members and visitors.

Apology received from Mr. Wm. Corin.

Notice.—The notice convening the meeting was taken as read.

Minutes.—The minutes of the previous meeting were read and confirmed.

Students' Meeting.—The next meeting would be held on the 28th instant, when a paper would be read by Mr. A. M. Brown, entitled "Iron and Steel Foundry Practice."

Ballot for New Members.—As members, Mr. A. J. Yates, Mr. P. G. Didsbury, Mr. S. C. Theobald, Mr. A. G. Nesfield, Mr. M. MacTaggart, Mr. J. Ewart, Mr. W. C. Smiles, Mr. N. C. Petrie. As student, Mr. J. A. McComb.

Paper.—The President called upon Mr. S. J. McAuliffe to read his paper on "Modern Coking and By-products Recovery."

The discussion was opened by Mr. Wm. Poole, followed by Mr. Tindale and others.

The vote of thanks to the author was carried with acclamation.

(Signed) D. F. J. HARRICKS.

Minutes of General Meeting held at the Royal Society House, 5 Elizabeth Street, on 12th June, 1919.

Present.—The President, Mr. D. F. J. Harricks, in the chair, and about 35 members.

Notice.—The notice convening the meeting was taken as read.

Minutes.—The minutes of the previous meeting were read and confirmed.

Amalgamation of Engineering Institutions.—The President announced that a special general meeting would be held on the 24th instant to discuss the question as to whether the Engineering Association of N.S.W. would become a foundation society of the proposed Institution of Engineers of Australia.

Ballot for New Members.—As members, Mr. D. J. Malone, Mr. A. Wilson; Mr. H. H. Newell. Assoc. member, Mr. W. D. Wilson. Associate, Mr. J. Ventris Jenkins. Students, Messrs. F. Peterson, A. F. Julius, E. R. Harris, E. M. Edwards.

Paper.—The President called upon Mr. J. W. Bell to read his paper, entitled "Some Notes on Wool Dumping."

Mr. A. W. Tournay-Hinde opened the discussion, followed by Messrs. Wm. Sinclair, Connie (visitor), Morse, and the President (Mr. Harricks).

Mr. Bell suitably replied to the various points raised, and the meeting ended by a vote of thanks to the author.

(Signed) D. F. J. HARRICKS.

Minutes of Special Meeting held on Tuesday, 24th June, 1919, in the Royal Society's House, 5 Elizabeth Street, Sydney.

Present.—The President, Mr. D. F. J. Harricks, in the chair, and about 40 members.

Notice.—The notice convening the meeting was read by the Hon. Secretary.

The President then read the following resolutions, which were put to the meeting in the order given:—

Objects.—(1) “That the corporate members of the Engineering Association of N.S.W. are of the opinion that the objects of the Association are included in those of the proposed Institution of Engineers of Australia, and that those objects can be more effectively carried out and the interests and professional status of the engineering profession of Australia more effectively cared for by a national body, and they therefore desire that the Association should become a Foundation Society of the new Institution.”

Funds.—(2) “That the Council of the Association be entrusted to arrange all matters in connection with the transfer of the Association’s property and funds to the new Institution in the manner thought most desirable in the interests of the whole of our members, it being understood that, in accordance with the special provision in the Constitution, the retention of the control of such property and funds shall remain in the hands of that branch of the Institution in New South Wales of which the Engineering Association of N.S.W. becomes a part, and to take such action in respect of any other matters in connection with the Constitution as it may deem necessary.”

Becoming a Foundation Society.—(3) “That the Chairman of the Provisional Council of the proposed Institution of Engineers of Australia be notified not later than the 1st of August next that the Engineering Association of N.S.W. will become a Foundation Society of the new Institution; subject to Parliament’s approval of the Association either being dissolved or changing its title so as to conform with that of the new Institution, should the latter course be feasible and in the best interests of the new Institution.”

The President pointed out with regard to the above resolutions that the first had been formed after discussion and unanimous agreement by the Council.

With reference to the second resolution, he explained that the bulk of the Association’s funds consist of the interest in the P. N. Russell bequest, and are therefore conserved in the Library, which is already open to kindred Associations.

The President explained with reference to the third resolution that the Act of Incorporation could be annulled, or we could change the title of our Association to the Institution of Engineers of Australia.

Discussion.—Mr. Vicars said that, as one of the delegates from this Association to the conference and meetings in connection with the movement, he could heartily recommend the new Constitution. He moved that it be adopted.

Mr. McEwin seconded the motion that the Constitution be adopted.

Mr. Stowe asked if it were correct that existing "members" were to become "associate members." Is the Association legally able to turn over members into something different? Should not the members of this Association be entitled to the same rank in another Society?

Mr. G. A. Julius, in reply to Mr. Stowe, referred to the number of Institutions combining with various standards, some low, and some having only one grade. Obviously we could not ask one Society to have its members regraded. The present system was thought to be the fairest way to treat the proposition. Mr. Julius strongly supported the resolution.

Mr. Russell Sinclair said that by joining up we are following the line of the big institutions of Great Britain, and establishing an Institution to which it would be an honor to belong. He hoped that the meeting would pass the resolution unanimously.

Mr. Fraser asked how the Association could transfer to the new body, and yet keep control of money matters.

Mr. Vicars, in reply to Mr. Fraser, said that there would be no difficulty, actually or legally, re the control of the Eng. Association funds, whilst with regard to Mr. Stowe's remarks re membership, the standard set by this Association at present was so high that members generally would have no difficulty in being transferred. Associations with a lower standard would prefer being associate members of an Institution of a much higher standard.

Mr. McEwin referred gratefully to those members who had drafted the Constitution.

The President said that after going carefully through the Constitutions of all the well-known Engineering Associations in the world, that the qualifications necessary here approach nearly all of those he had perused. In endeavoring to meet the views of and frame a constitution to suit fourteen different societies great difficulty had been encountered. He then put the three foregoing resolutions to the meeting. They were carried unanimously.

The President referred in terms of appreciation to the work of the representatives of those Associations and the assistance they had received from the Council, and mentioned the work done by Messrs. McEwin and Tournay-Hinde at the Melbourne Conference.

After deciding that the next meeting to ratify the adoption of the resolutions passed be held on July 16th, at 2.30, the meeting terminated.

(Signed) D. F. J. HARRICKS.

Minutes of Special General Meeting held at the Royal Society's House, 5 Elizabeth Street, Sydney, on 16th July, 1919, at 2.30 p.m.

Present.—The President, Mr. D. F. J. Harricks, in the chair, and about 25 members.

Notice.—The notice convening the meeting was read by the President.

The meeting had been called to ratify the resolutions passed at the special general meeting held on June 24th, with regard to the Association becoming a Foundation Society of the Institution of Engineers of Australia.

The resolutions passed at the meeting held on June 24th, 1919, were then read to the meeting.

Mr. Julius moved that the resolutions be adopted. Seconded by Mr. Russell Sinclair. The President put the motion to the meeting, and it was carried unanimously.

Motion.—Mr. Julius moved that the President, Mr. D. F. J. Harricks, and Vice-President, Mr. Jas. Vicars, be appointed as representatives of the Engineering Association of N.S.W. on the first Council of the new Institution.

Mr. Russell Sinclair seconded the motion, which was carried unanimously.

(Signed) D. F. J. HARRICKS.

11th September, 1919.

Minutes of General Meeting held in the Royal Society's House, 5 Elizabeth Street, Sydney on September 11th, 1919.

(Joint Meeting of Engineering Associations.)

Present.—Mr. D. F. J. Harricks, President of Engineering Association of N.S.W., in the chair, and about 140 members and visitors.

Notice.—The notice convening the meeting was taken as read.

Minutes.—The minutes of the previous meeting were read and confirmed.

Ballot for New Members.—The following gentlemen were balloted for and elected to membership to the several grades:—As members, Messrs. T. Groom, C. D. Handley, R. Vowell, J. A. Smith, G. R. Cockburn, A. F. McAskill. Associate members, Messrs. A. H. Swan, G. M. Ritchie, S. Ritchie, B. I. Hooper.

Bureau of Science and Industry.—The President announced that an invitation had been received to attend a meeting at the Education Department on 29th instant, and urged that all members be present, as the importance of the engineering profession being properly represented at the Bureau was very great.

Institution of Engineers of Australia.—The President announced that the first meeting of the Council would be held in Sydney on the 20th and 21st October.

Library.—The president urged that the library be used to a greater extent than at present.

Appointment of Auditors.—Mr. C. Foxall was appointed professional auditor and Mr. H. A. Mitchell hon. auditor.

Appointment of Scrutineers.—Mr. A. R. Williams and Mr. R. J. Burn were appointed scrutineers in connection with the ballot for officers and members of Council for 1919-1920 session.

Paper.—The President then called upon Mr. King-Salter to read his paper, entitled "The Dynamic Balancing of Rotating Masses."

Discussion.—At the conclusion of the paper the discussion was opened by Mr. J. J. C. Bradfield (Sydney University Eng. Society), who proposed a hearty vote of thanks to the author.

Mr. F. P. Kneeshaw (Electrical Assoc. N.S.W. Section) seconded the vote of thanks.

An interesting discussion was entered into by several members and visitors, at the conclusion of which Mr. King-Salter suitably responded.

(Signed) D. F. J. HARRICKS.

9th October, 1919.

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Minutes of the Annual General Meeting held at the Royal Society's House, Sydney, Thursday, October 9th, 1919.

Present.—Mr. D. F. J. Harricks, chairman, and about 80 members. Apologies were received from Messrs. Hart and McEwin.

Notice.—The notice convening the meeting was taken as read.

Minutes.—The minutes of the previous meeting were read and confirmed.

Ballot for New Members.—The following gentlemen were balloted for and elected to membership in the several grades:—As members, Messrs. J. Wilson, V. W. Mahoney, S. J. Berry, W. F. Messenger, J. Key, R. T. Ball. As associate members, Messrs. R. H. Patterson, F. A. Spencer. As graduate, Mr. R. A. Johnston. As students, Messrs. F. A. Relf, C. A. Lonsdale, L. H. Hart, L. E. Phillips, J. D. Martin.

Honor Roll.—The President intimated that it had been the intention of this Association to go into the question of erecting a suitable Honor Roll to record those members who had enlisted for active service, but it was now considered that at the inception of the Institution of Engineers of Australia a movement be made to include the members of the whole Institution.

Students' Section.—To those members who had contributed papers, and upon whose efforts this section had largely depended, he offered the sincere thanks of members.

Library.—The President referred to the additional text books in the library, and hoped to see them availed of by members and others.

Election of Office-bearers and Council for 1919.—The result of the ballot was as follows:—President, Mr. Jas.

Vicars; Vice-Presidents, Mr. J. G. McEwin, Mr. A. J. Hart; Hon. Treas., Mr. H. L. Thompson; Hon. Secretary and Editor, Mr. J. McNamara; Members of Council, Mr. J. J. King-Salter, Mr. W. E. Adams, Mr. Walter Reeks, Mr. P. B. Hamilton, Mr. Russell Sinclair, Mr. A. W. Tournay-Hinde, Mr. R. Sykes, Mr. Wm. Poole, Mr. H. J. Swain; Ex-officio Member, Mr. D. F. J. Harricks.

New President.—Mr. Jas. Vicars, the newly elected President, thanked the members for the honor conferred upon him by his election. He hoped they would find in him a worthy successor to the retiring President, Mr. Harricks.

Engineering Association and Institution of Engineers of Australia.—Mr. Vicars moved and Mr. Julius seconded the motion, "That pending the amendment of the Act of Incorporation of the Engineering Association of N.S.W., this meeting appoints the members of the incoming Council to act as the trustees of the funds and property of the Association, and that a letter be forwarded to the Institute of Engineers of Australia notifying them of this resolution." Carried.

President's Address.—Mr. D. F. J. Harricks then delivered his presidential address, at the conclusion of which he said it was now his duty to vacate the chair in favor of Mr. Jas. Vicars. He felt sure they would appreciate the presence of the newly-elected chairman at their future gatherings.

Mr. Vicars, in reply, thanked them for the hearty reception accorded him, and trusted he would retain the confidence of the members during his term of office. In asking the members to convey a vote of thanks to Mr. Harricks, he would point out that the untiring efforts of Mr. Harricks would never be forgotten during his term of office, particularly his work in connection with the inauguration of the Institute of Engineers of Australia. This, the speaker thought, would stand as a monument to the late President's labors.

Mr. Harricks thanked them for the way they had received his address, and felt sure that any service he had rendered the Association was for the good of the engineering profession generally.

(Signed) JAS. VICARS.

November 13th, 1919.

Minutes of the General Meeting held at the Royal Society's House, 5 Elizabeth Street, Sydney, November 13th, 1919.

Present.—Mr. Jas. Vicars (President), in the chair, and about 70 members and visitors from kindred Associations.

Notice.—The notice convening the meeting was taken as read.

Minutes.—The minutes of the previous meeting were read and confirmed.

Correspondence.—Apologies for non-attendance were received from Mr. Jas. Fraser, Mr. H. Fox, and Colonel Wilkinson.

An invitation was extended to the members of this Association to be present at the next meeting of the Society of Chemical Industry, to be held on the 19th instant in the Royal Society's Hall.

Paper.—The President then called upon Lt.-Colonel Fewtrell to read his paper, entitled "The Organisation of the Transportation Services of the British Armies on the Western Front."

After the rendering of the paper Major Kneeshaw proposed a hearty vote of thanks, which was seconded by Lieutenant Norfolk, M.C., also supported by Messrs. Vicars, Harricks, Hart, and others.

Lt.-Col. Fewtrell, in acknowledging the vote of thanks, said he was gratified at the interest displayed in his paper by those present.

(Signed) JAS. VICARS.

