

# THE ENGINEERING ASSOCIATION

OF

NEW SOUTH WALES.

*(Established 1870.*

*Incorporated 1884.)*

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SESSION, 1892-3.

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PART I.

## MINUTES OF PROCEEDINGS.

ANNUAL GENERAL MEETING,

13TH OCTOBER, 1892.

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MR. R. POLLOCK, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected :—

MEMBERS

R. D. MCPHERSON.

H. HUDSON.

A. KEITH.

\*ANNUAL REPORT AND BALANCE SHEET.—On the motion of the President, seconded by Mr. Briggs, the Report and Balance Sheet were unanimously adopted.

ELECTION OF OFFICERS AND COUNCIL.—The President announced that the next business was the election of Officers and Council for the ensuing year, and requested the members to

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\*This Report, with Balance Sheet, was published in Vol. VII.—Ed.

appoint two scrutineers. On the motion of Mr. Fischer, seconded by Mr. Nelson, Messrs. J. I. Haycroft and H. Kidd were appointed scrutineers. The ballot was then taken, and resulted in the following named gentlemen being elected to fill the various offices, viz. :—

PRESIDENT .

R. POLLOCK.

VICE-PRESIDENTS :

A. D. NELSON.

G. MASSEY.

HON. SECRETARY AND EDITOR :

HENRY V. AHRBECKER (*re-elected*).

HON. TREASURER :

JOHN SANDS (*re-elected*).

COUNCIL :

W. D. CRUICKSHANK

G. FISCHER.

L. HARGRAVE.

L. C. AULDJO.

A. CHRISTIE.

W. E. H. NICOLLE.

The President (Mr. R. Pollock) and Vice-President (Mr. A. D. Nelson) returned thanks for their election.

PAPER.—“Some Notes on Dynamo Driving by Compound Engines,” by Mr. P. Diamond. The paper, which was very brief, dealt with the unsuitability of the compound engine as a source of power for dynamo driving in consequence of the great variations of load, the duration of maximum load being very short under ordinary circumstances, hence this type of engine did not show the efficiency that would otherwise be expected from it. A number of examples were cited by the author in support of his statement.

A vote of thanks was accorded Mr. Diamond for his paper, and the discussion was adjourned until the 10th of November.

The meeting then terminated.

10TH NOVEMBER, 1892.

MR. R. POLLOCK, PRESIDENT, in the Chair.

OPENING THE LIBRARY.—The President announced that the Council had decided for the benefit of members to open the Library on two nights in each week, due notice of which would be given.

NEW ROOMS.—The President also announced that the Association had received notice to vacate the rooms they now occupied, but other rooms had been leased, and would, he hoped, be ready for the opening of the next session.

PROCEEDINGS VOLUME VII.—By request of the Hon. Editor, the President stated that Volume VII was now ready and could be obtained by all members whose subscriptions were not twelve months in arrears.

VOTE OF THANKS TO THE EDITOR.—Mr. G. Fischer moved,—“That the best thanks of the Association be tendered to our Editor, Mr. H. V. Ahrbecker, for the thorough and satisfactory manner in which he has brought out the last volume of proceedings.” In seconding the motion, Mr. W. D. Cruickshank said that the volume was very creditable in every respect, and another feature in connection with it, was that it was published up to date, and their best thanks were due to Mr. Ahrbecker. The motion was carried by acclamation.

DISCUSSION ON MR. DIAMOND'S PAPER, “SOME NOTES ON DYNAMO DRIVING BY COMPOUND ENGINES.—A brief discussion ensued on this paper, after which the meeting terminated.

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9th MARCH, 1893.

MR. R. POLLOCK, PRESIDENT, in the chair.

The following candidates were balloted for and duly elected :—

MEMBER:

A. STOBO.

STUDENT:

J. H. BRENNAND.

**NEW ROOMS**—The President stated that considerable difficulty had been experienced in obtaining suitable rooms, but he was pleased to be able to inform the members that they now had better accommodation in a more central position and at a lower rent than formerly.

**THE LIBRARY**.—The President announced that the Council had made arrangements whereby those desirous of having access to the Association's Library would be enabled to do so on the evenings of Monday and Wednesday in each week, holidays excepted, between the hours of 8 and 9 o'clock.

**ELECTRIC CLUB**.—A cordial invitation was received from the Electric Club of N.S.W., inviting the Members of the Association to be present at their next meeting.

**PRESIDENTIAL ADDRESS**.—The President, Mr. R. POLLOCK, then proceeded to read his address, and said, that in spite of financial crisis and depression existing at present, which pressed severely on the members of our profession, it was a matter for congratulation that the Association maintained its number of members. After referring in feeling terms to the death of one of our honorary members, the late Lieut. Col. Cracknell, and to the services rendered by the deceased gentleman to the country, he then dealt at length with the progress made in engineering in its various branches, and in referring to the advancement made in refrigerating appliances and the frozen meat trade, said, that in connection with this industry we should bear in mind that its development in this country was due in a great measure to the untiring energy and zeal of our fellow colonist, the late Thos. S. Mort, who spent many years of his life and a fortune in the solution of the problem of shipping frozen meat and died on the eve of success.

In concluding his remarks, the President urged the necessity of the younger members of the Association assisting the Council by reading papers and taking a more active part in the discussions.

The address was attentively listened to by all present and at its close Mr. A. D. Nelson proposed a vote of thanks to Mr. Pollock, and said, that he heartily agreed with the President that it would be a very great benefit and advantage to the Association if some of the younger members would come forward during the present session and give their ideas on certain questions to the profession.

The vote of thanks was carried by acclamation, after which the President returned thanks.

The meeting then terminated.

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13TH APRIL, 1893.

MR. R. POLLOCK, PRESIDENT, in the Chair.

The following candidate was balloted for and duly elected:—

MEMBER:

THOMAS FERGUSON, JUNR.

PAPER "Some Notes on the Design of Railway Fish Plates," by Mr. A. M. Howarth—The paper was read by the author and was followed by a discussion in which the following gentlemen took part:—Messrs. Hargrave, Auldjo, Sands, Haycroft, Cruickshank, Pollock, and Fitzmaurice, after which Mr. Howarth replied to the various comments and was accorded a vote of thanks on the motion of Mr. G. Fischer, seconded by Mr. J. Sands.

The proceedings then terminated.

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11TH MAY, 1893.

MR. R. POLLOCK, PRESIDENT, in the Chair.

DONATION TO THE LIBRARY.—The President announced that Professor W. H. Warren had presented the Association with a

volume on "Australian Timbers," and said he felt sure that the work would form a useful addition to the Society's Library.

PAPER "Some Notes on the Ornamental Treatment of Bricks and Iron in New South Wales," by Mr. J. Nangle.—Mr. Nangle then read his paper after which a discussion ensued in which the following gentlemen took part, viz., Messrs. G. A. Mansfield, Horbury Hunt, G. Fisher, Barlow W. Dauncey, and the President (Mr. R. Pollock). On the motion of Mr. Hunt, seconded by Mr. Fisher, a hearty vote of thanks was accorded Mr. Nangle for his valuable paper.

Mr. Nangle responded in suitable terms and then dealt with the various comments made on his paper.

The meeting then terminated.

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8TH JUNE, 1893.

MR. R. POLLOCK, PRESIDENT, in the Chair.

PAPER "The Relative Position of the Architect, Engineer, and Builder in Modern Works," by Mr. Norman Selfe.—The President called on Mr. Selfe to read his paper and at its conclusion the author cited a number of cases and questions bearing on the subject and asked those present to answer them fully in order that a general concensus of opinion might be obtained for future guidance. A discussion then ensued in which the following gentlemen took part, viz.:—Messrs. G. A. Mansfield, Horbury Hunt, Oakshott, and Dauncey. On the motion of Mr. Oakshott a hearty vote of thanks was accorded Mr. Selfe for his interesting paper. On the motion of Mr. A. D. Nelson, seconded by Mr. J. J. Stone, the further discussion of the paper was adjourned to the 22nd inst.

The meeting then terminated.

22ND JUNE, 1893.

MR. R. POLLOCK, PRESIDENT, in the Chair.

DONATION.—The President announced that Mr. George Higgins, of Melbourne, had presented the Association with a framed photo of the Von Schmidt Dredge “Groper,” the latest addition to the dredging plant of the N.S.W. Harbours and Rivers Department. On the motion of Mr. N. Selfe, seconded by Mr. W. D. Cruickshank, a hearty vote of thanks was accorded Mr. Higgins for his donation.

DISCUSSION ON MR. NORMAN SELFE’S PAPER ON “THE RELATIVE POSITION OF THE ARCHITECT, ENGINEER, AND BUILDER IN MODERN WORKS.”—The further discussion of this paper was continued by the following gentlemen, viz., Messrs. A. D. Nelson, J. J. Stone, G. A. Mansfield, — Jones, W. W. Carpenter, J. Nangle, Horbury Hunt, W. D. Cruickshank, W. Dauncey, J. Thompson, J. S. Fitzmaurice, and the President (Mr. R. Pollock). Mr. Selfe having expressed a wish that his reply might be allowed to stand over until the next meeting Mr. A. D. Nelson moved the adjournment.

The meeting then terminated.

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13TH JULY, 1893.

MR. R. POLLOCK, PRESIDENT, in the Chair.

COMMUNICATION FROM THE COUNCIL.—The President announced that the Council had transferred Mr. Thomas Goodall (a student), to the members’ register

MR. NORMAN SELFE’S REPLY TO THE DISCUSSION ON HIS PAPER, “THE RELATIVE POSITION OF THE ARCHITECT, ENGINEER, AND BUILDER IN MODERN WORKS.”—The President regretted the small attendance of members and the absence of the author, due to the Masonic Installation of the Governor (Sir R. Duff), that evening, but Mr. Selfe had sent a written reply to the criticisms on his paper which the Secretary would read. The

reply which was of a lengthy nature was then read, after which the President invited an opinion as to the desirability of asking Mr. Morse to postpone the reading of his paper in view of the small attendance.

Mr. A. D. Nelson considered that it would be hardly fair to ask Mr. Morse to read his paper before such a small gathering.

Mr. Morse said he would prefer that the reading of his paper be postponed as it had been somewhat hurriedly prepared.

The President decided that Mr. Morse's paper on "Railway Brakes" be read at the next General Meeting.

The meeting then terminated.

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10th AUGUST, 1893.

MR. R. POLLOCK, PRESIDENT, in the Chair.

The following candidate was balloted for and duly elected:—

MEMBER:

EDWARD NOYES.

NEW SPARK ARRESTER.—The President announced that a letter had been received from Messrs. J. W. Jaffray & Co., inviting the members attention to a new Spark Arrester on view at their store.

PAPER "Railway Brakes," by Mr. R. Morse.—The President called on Mr. Morse to read his paper, which was of great length. At its conclusion, Mr. W. D. Cruickshank in moving a vote of thanks, pointed out that it was not desirable for papers to have a greater length than would require three quarters of an hour for their reading. Mr. H. Vale seconded the motion, which was carried by acclamation. On the motion of Mr.

Cruickshank, seconded by Mr. Vale, the discussion on Mr. Morse's paper, and the reading of Mr. T. Irons' paper, on "Cable Tramway Machinery," was adjourned until the next General Meeting. Mr. Iron's paper to take precedence.

The meeting then terminated.

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14th SEPTEMBER, 1893.

MR. R. POLLOCK, PRESIDENT, in the Chair.

DONATIONS TO THE LIBRARY.—The President announced that the following volumes had been received, "Report on Water Supply," by Mr. J. B. Henderson, Hydraulic Engineer for Queensland, and ex-member of this Association, also "The Channel Bridge," by Monsieur L. Violette, Member of the Society of Civil Engineers, Paris.

APPOINTMENT OF AUDITORS.—On the motion of Mr. T. Irons, seconded by Mr. A. L. McCredie, Messrs. James Elder and Jas. O. Callender were appointed to audit the books of the Association for the past year.

SUBSCRIPTIONS.—The President directed attention to it being the last meeting of the session and urged the members to pay up their subscriptions.

PAPER "Cable Tramway Machinery," by Mr. Thomas Irons. The President then called on Mr. Irons to read his paper. At its conclusion, the author intimated that Mr. Henry Hudson purposed inviting the members to inspect the new cable machinery at North Sydney, which had been lately completed by Messrs. Hudson Bros., Ltd.

On the motion of Mr. G. Boulton, seconded by Mr. J. R. Thomson, Mr. Irons was accorded a vote of thanks for his interesting paper.

DISCUSSION ON MR. R. MORSE'S PAPER "RAILWAY BRAKES.—  
Mr. W. D. Cruickshank opened the discussion and criticised at length the latter portion of the paper which dealt on the merits of the various brakes, Mr. Willcock (a visitor) and the President, (Mr. R. Pollock,) also took part in the discussion, which was then adjourned until the next General Meeting.

The meeting then terminated.

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