

# ENGINEERING ASSOCIATION

OF

NEW SOUTH WALES.

*Established 1876.*

*Incorporated 1884.*

---

---

SESSION 1902-3.

---

---

PART I.

## MINUTES OF PROCEEDINGS.

ANNUAL GENERAL MEETING,

9TH OCTOBER, 1902.

---

---

MR. NORMAN SELFE (PAST-PRESIDENT) in the Chair.

ANNUAL REPORT AND BALANCE-SHEET.—The Chairman (Mr. Norman Selfe) proposed the adoption of the Annual Report and Balance-sheet. Mr. J. S. Fitzmaurice, seconded the resolution, which was carried.

The following candidate was balloted for and duly elected:—

**MEMBER.**

MR. FRANCIS E. STOWE.

APPOINTMENT OF SCRUTINEERS.—On the motion of Mr. R. Scott, seconded by Mr. C. McAllister, Messrs. J. S. Fitzmaurice and E. J. Erskine were appointed Scrutineers.

ELECTION OF OFFICERS AND COUNCIL—SESSION, 1902-3.—  
Ballot resulted as follows :—

PRESIDENT :

J. L. C. RAE.

VICE-PRESIDENTS :

A. CHRISTIE. E. J. CLARKSON.

HON. SECRETARY AND EDITOR :

H. V. AHRBECKER.

HON. TREASURER :

JOHN SANDS.

MEMBERS OF COUNCIL :

G. BOULTON.	R. W. FINLAYSON.	W. H. GERMAN.
H. B. HOWE.	HECTOR KIDD.	J. MACARTNEY.
J. SHIRRA.	J. SCOULAR.	R. SINCLAIR.

The Chairman, in announcing the result of the ballot, said he had much pleasure in asking Mr. J. L. C. Rae to take the chair, and he felt sure he would fill it with credit to himself and the members.

Mr. J. L. C. Rae thanked the members for the honor conferred upon him in electing him President, and announced his intention of doing all in his power to further the interests of the Association and its members during the coming Session.

DISCUSSION ON MR. NORMAN SELFE'S PAPER, "AN AUSTRALIAN MARBLE CUTTING MACHINE."—Mr. R. Sinclair, in discussing the merit of the machine, which they all had the opportunity of viewing at work, said that Mr. Selfe had carried out every point that he had brought forward, and he trusted the advance in the system of cutting marble would lead to the more extensive use of Australian marble.

Mr. Norman Selfe suitably responded.

DISCUSSION ON MR. C. McALLISTER'S PAPER.—"OBSERVATIONS ON THE PRESENT PRACTICE OF SHIPBUILDING AND ENGINEERING ON THE CLYDE." The discussion was commenced by Mr. J. Shirra, followed by Messrs. E. Thomas, E. J. Clarkson, Norman Selfe and J. L. C. Rae. Mr. C. McAllister suitably replied to the points raised.

ANNUAL DINNER.—The President announced that the Annual Dinner would take place at the end of the month, and he hoped to see the majority of the members at the function.

The meeting then terminated.

12TH MARCH, 1903.

MR. J. L. C. RAE, PRESIDENT, in the Chair.

PRESIDENTIAL ADDRESS.—The President then delivered his address, which proved to be of a most interesting character, and was listened to with marked attention. He referred to the loss sustained by the Association through the death of Messrs. W. T. Poole, H. Broderick and George McCredie. He made reference to the long continued drought and its effects upon the Sydney Water Supply, the mineral resources of the State, and many other highly interesting matters.

At the conclusion, Mr. W. D. Cruickshank proposed a hearty vote of thanks to the President for his very able address, which was a masterly one, and to which he had listened to with great pleasure. The statistical information was indeed of a very instructive nature, and to him particularly of the greatest interest.

Mr. R. Pollock seconded the vote of thanks.

The President in responding, referred amongst other matters to coal mining machinery, and the difficulty of working at a depth of 4000 ft., and compared the coal resources of Australia with those of Great Britain.

The meeting then terminated.

23RD APRIL, 1903.

MR. J. L. C. RAE, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected :—

**MEMBERS.**

MR. J. L. MARSHALL

MR. LUDOVIC BLACKWOOD, SNR.

MR. JOHN TODER

PAPER BY MR. R. S. VINCENT ON "THE ABSENCE OF ECONOMY IN MANUFACTURES IN AUSTRALASIA, ESPECIALLY DEALING WITH THE MOTIVE POWER END."

After the paper was read, the discussion was opened by Mr. R. Sinclair. Mr. E. J. Erskine then moved that the discussion be adjourned until the next General Meeting, which was seconded by Mr. J. Scoular.

The meeting then terminated.

14TH MAY, 1903.

MR. J. L. C. RAE, PRESIDENT, in the Chair.

DISCUSSION ON MR. R. S. VINCENT'S PAPER ON "THE ABSENCE OF ECONOMY IN MANUFACTURES IN AUSTRALASIA, ESPECIALLY

DEALING WITH THE MOTIVE POWER END." This was opened by Mr. R. Sinclair, who was followed by Messrs. E. J. Erskine, J. Sconlar, J. Shirra, A. Christie, R. W. Finlayson, Hector Kidd, O. W. Brain, and the President. The discussion proved to be one of the most interesting for some considerable time.

Mr. R. S. Vincent replied to the various points raised. A vote of thanks to the author, conveyed on behalf of the Association by the President, was carried by acclamation.

The meeting then terminated.

11TH JUNE, 1903.

MR. J. L. C. RAE, PRESIDENT, in the Chair.

The following Candidates were balloted for and duly elected:—

**MEMBERS.**

MR. ARTHUR JAMES ARNOT.  
 „ JAMES WOOD BRAGG.  
 „ JAMES HEWATT.  
 „ JAMES MUIR.  
 „ JAMES SWAIN ONSLOW ROBERTS.

PROPOSED AMENDMENTS TO RULES AND BY-LAWS.

On the motion of Mr. R. Sinclair, seconded by Mr. E. J. Erskine, the proposed amendments as follow were agreed to.

SECTION II.

6. The Officers of the Association shall be a President, two Vice-Presidents, Honorary Secretary, Honorary Treasurer, and six other Members of Council, being eleven persons, who shall constitute the Council to direct and manage the concerns of the Association; also two Auditors of Accounts, a Librarian and Secretary. Such Officers shall be elected or appointed annually in manner hereinafter directed.

That this be amended to read as follows:—

6. The Officers of the Association shall be a President, two Vice-Presidents, Honorary Secretary, Honorary Treasurer, and *nine ordinary Members* of Council. *A retiring President shall be an ex-officio Member of the Council for the next ensuing Session. These shall constitute the Council to direct and manage the concerns of the Association; also two Auditors of Accounts, a Librarian and Secretary. Such Officers shall be elected or appointed annually in manner hereinafter directed.*

## SECTION IV.

1. The President, two Vice-Presidents, Honorary Treasurer, Honorary Secretary, and six other Members of Council, shall be elected annually by ballot at the Annual General Meeting to be called in October.

That this be amended to read as follows :—

The President, two Vice-Presidents, Honorary Treasurer, Honorary Secretary, and *nine ordinary* Members of Council shall be elected annually by ballot at the Annual General Meeting to be called in October.

4 It shall be the duty of the Council each year to prepare a list containing the names of Members whom they recommend for election to the respective offices of President, Vice-Presidents, Honorary Treasurer and Honorary Secretary, together with the names of eight other Members whom they recommend for election as ordinary Members of Council.

That this be amended to read as follows :—

4. *It shall be the duty of the Council each year to prepare a list containing the names of Members whom they recommend for election to the respective offices of President, Vice-Presidents, Honorary Treasurer, and Honorary Secretary, together with the names of at least eleven other Members whom they recommend for election as ordinary Members of Council.*

*The Council are to omit the names of at least three Members of the retiring Council from the new list, so as to ensure a circulation of representatives in the governing body amongst the Members.*

*The Council may nominate any Member of the Association to an official position. The three senior ordinary Members of the retiring Council are not to be renominated for membership thereof in the Council's list, nor shall either of the Vice-Presidents who is not prepared to be nominated for higher office. Seniority will be determined by the length of previous continuous service on the Council at the date of nomination, and if there be more than three of the same seniority, the Council shall determine which of them retire, by ballot.*

*This rule applies only to nomination in the Council's list.*



5. Each Member present at the Annual General Meeting shall have the power to alter the list of names recommended by the Council, but if more than eleven names are left in the last two columns of the ballot list, including the President, Vice-Presidents, Honorary Secretary, and Honorary Treasurer, such list shall be rejected as informal.

That this be amended to read as follows :—

5. Each Member shall have the power to alter the list of names recommended by the Council, but if more than *fourteen* names are left in the last two columns of the ballot list, including the President, Vice-Presidents, Honorary Secretary, and Honorary Treasurer, such list shall be rejected as informal.

## SECTION VII.

1. The Council, to be elected according to the provisions of Section IV., shall consist of the President, two Vice-Presidents, Honorary Treasurer, Honorary Secretary, and six other Members of Council.

That this be amended to read as follows :—

1. The Council, to be elected according to the provisions of Section IV. shall consist of the President, two Vice-Presidents, Honorary Treasurer, Honorary Secretary, and *nine ordinary* Members of Council,

## FORM No. 5.

### BALLOT LIST FOR THE ELECTION OF OFFICES AND COUNCIL

Each Member present at the Annual General Meeting shall have the power to alter the list of Members recommended by the Council ; but if more than eleven names are left in the two last columns of the ballot lists, including the President, Vice-Presidents, Honorary Secretary and Honorary Treasurer, such list shall be rejected as informal.

That this be amended to read as follows :—

Each Member shall have the power to alter the list of Members recommended by the Council ; but, if more than *fourteen* names are left in the last two columns of the ballot lists, including the President, Vice-Presidents, Honorary Secretary and Honorary Treasurer, such list shall be rejected as informal.

NEW ARRANGEMENTS RE PUBLICATION OF PROCEEDINGS.—These were explained by the President and approved of.

PAPER BY MR. A. E. LEA ON "Some Notes on Water Tube Boilers." The paper was read and plans and model explained by the author at its conclusion. Mr. J. Shirra moved that the discussion be adjourned until the next General Meeting, which was seconded by Mr. R. S. Vincent. The meeting then terminated.

---

9TH JULY, 1903.

MR. J. L. C. RAE, PRESIDENT, in the Chair.

The following Candidate was balloted for and duly elected :—

**MEMBER :**

MR. WILLIAM WALLACE TURNER.

PROPOSED AMENDMENTS TO RULES AND BYLAWS.—The proposed amendments agreed to at the previous meeting were confirmed.

DISCUSSION ON MR. A. E. LEA'S PAPER ON "Some Notes on Water Tube Boilers."—This was opened by Mr. J. Shirra, who was followed by Messrs. German, Grant, Toder, Fyvie, and A. J. Arnott.

On the motion of Mr. J. Scoular, seconded by Mr. Hector Kidd, it was decided to further adjourn the discussion until the 23rd July. The meeting then terminated.

---

23rd JULY, 1903.

MR. J. L. C. RAE, PRESIDENT, in the Chair.

ADJOURNED DISCUSSION ON MR. A. E. LEA'S PAPER ON "Some Notes on Water Tube Boilers."—This was re-opened by Mr. J. Scoular, who was followed by Messrs. Hector Kidd, Norman Selve, E. J. Clarkson, O. W. Brain, R. R. Ferrier, J. R. Bawden, and A. J. Arnot.

The President then called on Mr. Lea, who suitably replied, and was accorded a vote of thanks. The meeting then terminated.

---

13TH AUGUST, 1903.

MR. J. L. C. RAE, PRESIDENT, in the Chair.

The following Candidates were balloted and duly elected :—

**MEMBERS :**

MR. JAMES BARNETT BAWDEN.  
 " JOHN DAVID HANDLEY.  
 " CHARLES JAMES HOLROYDE.

TOPICAL DISCUSSION ON "FEED WATER HEATERS."—Subject introduced by Mr. James Shirra. The discussion was opened by Mr. J. Shirra, who was followed by Mr. Hector Kidd, John Toder, R. S. Vincent, James Kidd, J. S. O. Roberts, R. Sinclair, and George Stowe.

Mr. J. Scoular then moved that the further discussion be adjourned until the next General Meeting, which was seconded by Mr. J. B. Bawden, and carried.

The meeting then terminated.

---

10TH SEPTEMBER, 1903.

MR. J. L. C. RAE, PRESIDENT, in the Chair.

INTRODUCTION OF NEW MEMBERS.—Mr. J. C. Holroyde was welcomed by the President and introduced.

The following Candidates were balloted for and duly elected :—

**MEMBERS :**

MR. DAVID BORTHWICK.  
 „ JAMES FAIRWEATHER.  
 „ JAMES FAULKNER.  
 „ PETER CONNIE.  
 „ WILLIAM MARR.  
 „ ROBERT STEEL.

APPOINTMENT OF SCRUTINEERS FOR THE BALLOT OF COUNCIL AND OFFICERS FOR THE ENSUING SESSION.—On the motion of Mr. R. R. Ferrier, seconded by Mr. A. E. Lea, Messrs. A. Christie and R. S. Vincent were appointed Scrutineers for the ensuing Session.

APPOINTMENT OF AUDITORS.—On the motion of Mr. R. R. Ferrier, seconded by Mr. J. Scoular, Messrs. R. R. King and H. J. Vale were appointed Auditors for the ensuing Session.

CONTINUATION OF DISCUSSION ON "FEED WATER HEATERS."—

This was re-opened by Mr. J. Scoular, followed by Messrs. J. S. Fitzmaurice and A. E. Lea, and closed by remarks from the President.

PAPER BY MR. O. GRANOWSKI, ON THE PROCESS OF THERMIT WELDING.—Paper read by Mr. Granowski, who, on the initiation of Mr. W. H. German and Mr. Hargrave, was accorded a hearty vote of thanks.

The meeting then terminated.