

THE ENGINEERING ASSOCIATION

OF

NEW SOUTH WALES.

Established 1870.

Incorporated 1884.

SESSION 1911-1912.

PART I

MINUTES OF PROCEEDINGS

OF THE ANNUAL GENERAL MEETING, HELD AT THE
SOCIETY'S ROOMS, 5 ELIZABETH-STREET, SYDNEY,
ON THURSDAY, THE 12TH OCTOBER, 1911.

Present.—The President, Mr. G. A. Julius, in the chair, and about 70 members.

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

Ballot for New Members.—Students—Mr. Trevor Langwill, engineering draftsman, Government Dockyard, Biloela; Mr. Thomas Adams Witten, student, Technical College, Ultimo; having been duly nominated and approved by Council, were balloted for and unanimously elected.

Announcement of result of ballot for election of officers and Council for the ensuing session.

The President, Mr. Julius, announced the result of the ballot as follows :—

President : Mr. G. A. Julius (re-elected).

Vice-Presidents : Mr. James Macartney (re-elected),
Mr. Walter Reeks (re-elected).

Hon. Treasurer : Mr. John Sands (re-elected).

Hon. Secretary and Editor : Mr. D. F. J. Harricks.

Members of Council : Professor S. H. Barraclough, Mr. J. W. Bragg, Mr. H. H. B. Deane, Mr. Thomas Ferguson, Mr. R. R. Ferrier, Mr. W. H. Grieve, Mr. Hector Kidd, Mr. James Shirra, Mr. Robert Steel.

The President, Mr. G. A. Julius, and the Vice-Presidents, Messrs. James Macartney and Walter Reeks, thanked the Association for the honor conferred on them by their re-election, and assured members they would do everything in their power to further the Association's work.

ANNUAL REPORT OF COUNCIL AND BALANCE SHEET

On the motion of the President, Mr. G. A. Julius, seconded by Mr. Walter Reeks, the annual report of Council and balance sheet were adopted.

STUDENTS' PRIZE PAPERS.

The President, Mr. G. A. Julius, announced that only one paper had been received, and said that he regretted that the student members did not take more interest in the competition, and forward more papers, and hoped that by the end of the next session, sufficient interest would be stirred up, and more would compete for the prizes. After a study of the paper the second prize had been awarded by the Council to Mr. G. N. Tregarthen for his paper on "The Use of Cylinder Oil."

ANNUAL DINNER.

The President, Mr. G. A. Julius said that last year the Council decided not to hold the annual dinner, because of the lack of support they had met with in preceding years.

It had been suggested that this year the dinner be held again, and he would be glad to hear any suggestions by members before putting it to the meeting.

Mr. T. L. Kenway proposed that a smoke concert be held instead of the dinner. In years past there had been a feeling amongst members that the annual dinner was perhaps rather too formal an affair, and if a smoke concert was held, an enjoyable evening would be spent, which was seconded by Mr. W. H. Grieve and supported by Messrs. James Macartney, J. J. C. Brand, and Walter Reeks.

Before putting the amendment, the President said he thoroughly agreed with the proposal put forward by Mr. Kenway. The smoke social was the more enjoyable and better gathering. He had much pleasure in putting to the meeting, as moved by Mr. Kenway and seconded by Mr. Grieve, that the Association hold a smoke concert shortly, which was carried unanimously.

Paper on "Refuse Destructors," illustrated with lantern slides, by Mr. T. L. Kenway.—Paper read, diagrams and lantern slides explained by Mr. T. L. Kenway.

Mr. J. J. C. Brand proposed that a very hearty vote of thanks be accorded Mr. Kenway for his instructive paper, which was seconded by Mr. W. H. Bale and carried by acclamation.

Mr. Kenway acknowledged the vote of thanks.

The meeting then terminated.

Signed G. A. JULIUS, President.

Minutes of the opening General Meeting of the 42nd session, held at the Society's rooms, 5 Elizabeth Street, Sydney, on Thursday, the 14th March, 1912.

Present.—The President, Mr. G. A. Julius, in the chair, and about 60 members.

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

Ballot for New Members.—Members—Mr. Charles Joseph Bates, engineer, C/o Messrs. Lane & Peters, Barren Jack, N.S.W. ; Mr. Charles Sydney Fairclough, engineer, Sunlight Works, Balmain ; Mr. Thomas Gurney, consulting engineer, Equitable Building, George Street, Sydney ; Mr. John Gill Lancaster, engineer, C/o Mr. G. A. Julius, consulting engineer, Norwich Chambers, Hunter Street, Sydney ; Mr. Neil William Macintosh, engineer, C/o Messrs. Chapman & Co., Limited, Druitt Street, Sydney ; Mr. Andrew Maclachlan, major 5th R.S. Fusiliers, quantity surveyor, Government workshops, King Street, Sydney ; Mr. James Edward Mawdesley, engineer, C/o Messrs. Gibson, Battle & Co., Limited, 535 Kent Street, Sydney ; Mr. John Baker Rumford, engineer, 118 Pitt Street, Sydney ; Mr. Harold Tindale, engineer, gas works, Mortlake.

Student—Mr. Ralph Granville Irons, engineering apprentice, Clyde Engineering Co., Limited, Granville.

The above having been duly nominated and approved by Council, were balloted for and unanimously elected.

Honorary Member.—The President, Mr. G. A. Julius, announced that Mr. Robert Pollock, a corporate member, had intimated his intention of severing his connection with the Association, but the Council had, in consideration of his long and honourable connection with the Society, extending over a period of 34 years, nominated him for an honorary membership of the Association, and resolved that the nomination be submitted to this general meeting for confirmation.

It was unanimously resolved that the nomination be confirmed.

Presidential Address by Mr. G. A. Julius, B.Ss., M.E.—The President, Mr. G. A. Julius, then delivered his presidential address, which proved to be of a highly interesting character. He referred to the shipping accommodation of the port of Sydney, and pointed out that the larger portion of the wharves were without railway accommodation; to the ferry services, water supply, sewerage and drainage, roads and thoroughfares, tramway service, and other important

matters, and said it was time that the public as a body, and we particularly as engineers, should wake up to the sense of our responsibilities, and work unitedly to ensure the early start and completion of the many great city works now so urgently required.

On the motion of Mr. W. H. German, seconded by Mr. Edward J. Erskine, a hearty vote of thanks was accorded Mr. Julius for his able address and carried by acclamation.

The meeting then terminated.

Signed G. A. JULIUS,
President.

Minutes of the General Meeting held at the Society's rooms, 5 Elizabeth Street, Sydney, on Thursday, the 18th April, 1912.

Present.—The President, Mr. G. A. Julius, in the chair, and about 100 members.

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

Death of Mr. John Sands and Mr. H. B. Howe.—The President, Mr. G. A. Julius, said : There is one thing I would like to refer to, and that is the loss the Association has sustained in the death of Mr. John Sands, who was Treasurer continuously since 1873, and recently of Mr. Howe, who was President for two years. Members, I think, will join in wishing that a vote of sympathy be forwarded to the widow in each case, and will join with me in expressing the sorrow and regret of the Association in losing two such old and valued members as Mr. Sands and Mr. Howe.

Lecture on "The Gyroscope and some of its Technical Applications," illustrated with lantern slides and models, by Professor S. H. Barraclough, M.M.E., Assoc. M. Inst. C.E.

Mr. James Shirra proposed a vote of thanks be accorded Professor Barraclough for his most interesting paper, which was seconded by Mr. Walter Reeks and carried by acclamation.

Professor Barraclough replied.

The meeting then terminated.

Signed J. MACARTNEY,
Vice-President.

Minutes of the General Meeting held at the Society's rooms, 5 Elizabeth Street, Sydney, on Thursday, the 9th May, 1912.

Present.—The senior Vice-President, Mr. James Macartney, in the chair, and about 65 members.

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

Ballot for New Members.—Member—Mr. Edward Lancelot Eastgate, electrical engineer, British General Electric Co., 257 Clarence Street, Sydney.

Students—Mr. Geoffrey C. A. Bernays, engineering apprentice, Colonial Sugar Refining Co., Limited, O'Connell Street, Sydney. Mr. Elliston Fauna Campbell, engineering school, The University, Sydney; Mr. John Whitehead Lees, engineering draftsman, C/o Messrs. Ritchie Bros., Auburn; Mr. John Lawrence Wright, engineering school, The University, Sydney.

The above having been duly nominated and approved by Council, were balloted for and unanimously elected.

Paper on "Nominal Horse Power of Steam Engines," by Mr. James Shirra. "The R.A.C. Rating of Oil Engines," by Mr. Eric F. Boulton.

Paper read by Mr. James Shirra.

Paper read by Mr. Eric F. Boulton.

The discussion was opened by Mr. William Sinclair, who proposed that a very hearty vote of thanks be accorded Messrs. James Shirra and Eric F. Boulton for their very interesting papers, followed by Mr. A. J. Arnot, who seconded the vote of thanks, followed by Mr. R. R. Ferrier, Mr. Walter Reeks, Mr. Trevor M. Baylis.

The Chairman, Mr. James Macartney, put the motion to the meeting, which was carried by acclamation.

Messrs. James Shirra and Eric F. Boulton replied to the various points raised.

The meeting then terminated.

Signed G. A. JULIUS,

President.

Minutes of the General Meeting held at the Society's rooms, 5 Elizabeth Street, Sydney, on Thursday, the 13th June, 1912.

Present.—The President, Mr. G. A. Julius, in the chair, and about 70 members.

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

Ballot for New Members.—Member—Mr. Percy Frederick Allan, electrical engineer, 42 Bridge Street, Sydney; Mr. John Carruthers, engineer, C/o Messrs. Babcock, Wilcox, Limited, 427 Sussex Street, Sydney; Mr. George Duncan Moffat, electrical engineer, 109 Pitt Street, Sydney; Mr. James Herbert Pocock, engineer, 39 Pitt Street, Sydney.

Student—Mr. Raymond Francis Galloway, engineering student, The University, Sydney.

The above having been duly nominated and approved by Council, were balloted for and unanimously elected.

Paper on "The Use of the Spiling Staff," by Mr. Walter Reeks. Mr. Reeks gave an explanation and demonstration of the spiling staff and spiling board.

The discussion was opened by the President, Mr. G. A. Julius, followed by Mr. R. R. King, who proposed a vote of thanks be accorded Mr. Reeks for the very interesting demonstration, Mr. D. T. Drake, who seconded the vote of thanks, and Mr. Young, Mr. D. F. J. Harricks, Mr. J. B. Rumford.

The motion was put to the meeting by the President and carried by acclamation.

Mr. Reeks replied to the various points raised. The meeting then terminated.

Signed G. A. JULIUS,
President.

Minutes of the General Meeting held at the Society's rooms, 5 Elizabeth Street, Sydney, on Thursday, the 11th July, 1912.

Present.—The President, Mr. G. A. Julius, in the chair, and about 70 members.

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

Ballot for New Members.—Member—Mr. William Berry Holland, engineer, C/o Messrs. Arthur Leplastrier & Co., Sydney; Mr. James Guthrie McEwen, superintendent of installation, The British Imperial Oil Co., Limited, Greenwich.

Student Associate—Mr. Joseph Lynn Pickering, engineer, Colonial Sugar Refining Co., Limited, O'Connell Street, Sydney.

The above having been duly nominated and approved by Council were balloted for and unanimously elected.

Paper on "Condensers and their Application in Sugar Factories," illustrated with lantern slides, by Mr. D. F. J. Harricks.

Paper read and lantern slides explained by Mr. Harricks.

Mr. W. H. German, in opening the discussion, proposed that a very hearty vote of thanks be accorded Mr. Harricks for his paper, and said there seemed to him to be very much food for reflection in the matter Mr. Harricks had put before them, and he hoped the seconder of the resolution would move an adjournment of the discussion. Apart from moving the vote of thanks, he felt he ought to compliment Mr. Harricks very highly upon the paper, because he had brought such an amount of information before them, which he thought had been well presented, and he felt certain that the paper was a most important one to members of this Association.

Followed by Mr. A. Stobo, who seconded the vote of thanks.

The President, Mr. G. A. Julius, put the motion to the meeting, which was carried by acclamation, and declared the discussion adjourned until the next meeting of the Association.

Mr. Harricks having replied, the meeting terminated.

Signed WALTER REEKS,

Vice-President.

Minutes of the General Meeting held at the Society's room, 5 Elizabeth Street, Sydney, on Thursday, the 8th August, 1912.

Present.—Mr. Walter Reeks, Vice-President, in the chair, and about 40 members.

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

Ballot for New Members.—Member—Mr. Francis Duncan Hunter, engineer, "Merrievale," Aitchison Street, North Sydney; Mr. Henry Shipman, engineer, Eureka Motor Co., Grafton Lane, Sydney.

The above having been duly nominated and approved by Council, were ballotted for and unanimously elected.

Discussion on Mr. D. F. J. Harricks' paper on "Condensers and their Application in Sugar Factories," illustrated with lantern slides.—The discussion adjourned from last

meeting was opened by Mr. Alex. Stobo, who explained the lantern slides, followed by Messrs. Hector Kidd and Henry Shaw.

Mr. Harricks replied to the various questions raised.

Mr. Walter Reeks, Vice-President said: This is a unique experience indeed in the annals of our Institution, for I do not remember an occasion before, where a discussion has been postponed until another night, and a whole evening occupied so fully, and listened to with such rapt interest has been the case this evening; when Mr. Harricks' paper was read Mr. German proposed and Mr. Stobo seconded a vote of thanks to him, which was carried by acclamation. I will not ask two gentlemen to propose and second a vote of thanks to those gentlemen who have done us the honour of coming here to discuss the paper, but if you will allow me to do so, I will put it direct to the meeting which I do with a considerable amount of pleasure on behalf of the institution.

The motion was carried by acclamation.

The meeting then terminated.

Signed G. A. JULIUS,

President.

Minutes of the General Meeting held at the Society's rooms, 5 Elizabeth Street, Sydney, on Thursday, the 12th September, 1912.

Present.—The President, Mr. G. A. Julius, in the chair, and about 60 members.

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

Ballot for New Members.—Associate—Mr. Malcolm Shore Stanley, engineering draftsman, C/o Messrs. Stone & Siddeley, Moore Street, Sydney.

Student—Mr. Hugh Malcolm Cleary, engineering apprentice, Colonial Sugar Refining Co., Limited, Rarawai, Fiji.

The above having been duly nominated and approved by Council, were balloted for and unanimously elected.

Annual Dinner and Smoke Concert.—On the motion of Mr. Hector Kidd, seconded by Mr. H. L. Thompson, it was resolved that the Association hold an annual dinner, and also a smoke concert, with an interval of six months between each.

Appointment of Auditors to audit the Accounts for the year ending 30th September, 1912.—On the motion of Mr. Hector Kidd, seconded by Mr. R. Steel, Messrs. H. J. Vale and Henry Shaw were duly appointed Auditors to audit the accounts for the year ending 30th September, 1912.

Appointment of Scrutineers of Ballot for Officers and Council for the ensuing Session.—On the motion of Mr. William Sinclair, seconded by Mr. B. S. Giles, Messrs. Hector Kidd and R. R. Ferrier were duly appointed scrutineers of the ballot for election of officers and Council for the ensuing session.

Paper on "The Overttype High Super-heat Steam Engine," illustrated by lantern slides, by Mr. G. Duncan-Moffat.

Paper read and lantern slides explained by Mr. G. Duncan-Moffat.

The discussion was opened by Mr. Hector Kidd, who proposed that a hearty vote of thanks be accorded Mr. Duncan-Moffat for his interesting paper, and moved that the discussion be adjourned until the next General Meeting, followed by Mr. John Carruthers, who seconded the proposition and vote of thanks.

The President, Mr. Julius, then put the motion and the vote of thanks to the meeting, which were carried by acclamation.

The meeting then terminated.

Signed G. A. JULIUS,
President.