THE ENGINEERING ASSOCIATION

 OF^i

NEW SOUTH WALES.

Established 1870.

Incorporated 1884.

SESSION 1905-6

PART I.

MINUTES OF PROCEEDINGS.

ANNUAL GENERAL MEETING,

12гн Остовек, 1905.



Mr. J. SCOULAR, PRESIDENT, in the chair.

The following candidate was ballotted for and duly elected:—

STUDENT.

EUSTACE CUNLIFFE HOLROYDE, draughtsman (apprentice), Messrs. Noyes Bros., 109 Pitt Street, Sydney.

Annual Report and Balance Sheet.—On the motion of the President (Mr. Scoular), seconded by Mr. E. J. Erskine, it was adopted.

ANNOUNCEMENT OF RESULT OF BALLOT FOR THE ELECTION OF OFFICERS AND COUNCIL FOR THE ENSUING SESSION.—The

President announced the result of this ballot as follows ;-

PRESIDENT:

W. H. GERMAN.

VICE-PRESIDENTS:

RUSSELL SINCLAIR

R. W. FINLAYSON

HON. TREASURER:

JOHN SANDS.

Hon. Secretary and Editor:

HENRY V. AHRBECKER.

MEMBERS OF COUNCIL:

H. ADAMSON

G. BOULTON

H. J. DIAMOND

R. R. FERRIER HECTOR KIDD

JAMES KIDD R. R. KING

JAMES MACARINEY

JAMES SHIRRA.

The retiring President (Mr. J. Scoular) then congratulated the new President (Mr. German) on his election, and welcomed him to the chair which he vacated in his favor.

The new President (Mr. W. H. German) on taking possession of the chair said that he hoped, with the hearty co-operation of the Council, and the unanimous co-operation of the members, to give a good account of his stewardship, by conducting the meetings with fairness to all, and with the dignity that the position demands.

Annual Dinner.—The President announced that it had been decided by the Council to hold the annual dinner on Thursday, 2nd November.

MR. FORKEL'S REPLY TO THE DISCUSSION ON HIS PAPER ON THE "SUCTION GAS PRODUCER; ITS EVOLUTION AND ECONOMICAL APPLICATION."—Mr. Forkel then read his reply to the various points raised.

TOPICAL DISCUSSION ON GAS PRODUCERS.—This was opened by Mr. R. R. Ferrier, followed by Messrs. James Shirra and A. J. Arnott.

The meeting then terminated.

8тн Макси, 1906.

Mr. W. H. GERMAN, PRESIDENT, in the chair.

The following candidates were balloted for and duly elected:

MEMBERS.

DUDLEY F. J. HARRICKS, engineering draughtsman, Colonial Sugar Refining Co., Ltd., O'Connell-street, Sydney.

HARRY PASQUILL, mechanical draughtsman, Colonial Sugar Refining Co., Ltd., O'Connell-street, Sydney,

A. C. ROBBINS, mechanical draughtsman, Colonial Sugar Refining Co., Ltd., O'Connell-street, Sydney.

WM. McNAMARA, mechanical draughtsman, Chief Mechanical Engineer's Office, Eveleigh.

HENRY ROBERT HILL, mechanical draughtsman, Chief Mechanical Engineer's Office, Eveleigh.

THOMAS CROSBY WALKER, mechanical draughtsman, Chief Mechanical Engineer's Office, Eveleigh.

PETER BARR HAMILTON, mechanical draughtsman, Chief Mechanical Engineer's Office, Eveleigh.

PRESIDENTIAL ADDRESS .- Mr. German then delivered his inaugural address, which proved to be of a highly interesting character. He thanked the members for the honor conferred upon him, and made mention of the suitable accommodation afforded in the new rooms, He detailed the work of the past session, making feeling reference to the death of Sir P. N. Russell, and the bequest from that gentleman to the Association. He then spoke of the present prosperity of New South Wales, as regards the pastoral, agricultural and mining interests, and showed how these should beneficially influence. engineers; while, in speaking of the existing condition of the engineering trade, he detailed some information regarding the Government contracts secured by the Clyde Engineering Co. and the Lithgow Ironworks, and gave descriptions of some of the steamers and engines recently completed by Mort's Dock and Engineering Co. He also reviewed present day boiler and engine practice, and spoke on the subjects of irrigation, water conservation and other allied matters, and terminated his remarks by an explanation of the advantages to be obtained by young men joining our Association, and pointed out that in so doing they were not only advancing their own interests but those of the Association itself, as well as the profession of engineering generally.

Mr. Shirra proposed—"That a hearty vote of thanks be accorded Mr. German for his instructive address," which was seconded by Mr. Scoular, and carried by acclamation.

The meeting then terminated.

19TH APRIL, 1906.

MR. W. H. GERMAN, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:—

MEMBERS.

JAMES McNAMARA, Electrical and Mechanical Draughtsman, Colonial Sugar Refining Co., O'Connell-street, Sydney.

WILLIAM SINCLAIR, Engineer, 82 Pitt-street, Sydney. ROBERT GEORGE WATKINS, Machinery Merchant and Importer, 107 Kent-street, Sydney.

FREDERICK AUGUSTUS SPENCE, Superintendent Engineer, Messrs. James and Alex. Brown, Newcastle.

PROPOSED ALTERATIONS TO RULES AND BY-LAWS

SECTION II.

CONSTITUTION.

PRESENT RULE.

1. The Engineering Association of New South Wales shall consist of Members who are entitled to the privileges of Corporate Membership, also Honorary Members, Associates, and Students who are not entitled to the privileges of Corporate Membership.

PROPOSED RULE.

1. The Engineering Association of New South Wales shall consist of Members who are entitled to the privileges of Corporate Membership, also Honorary Members. Associates, Student Associates, and Students.

PRESENT RULE.

3, Associates to be gentlemen not under twenty-four years of age, who from their scientific attainments or position in society may be considered eligible for election by the Council.

PRESENT RULE.

5. Students shall be persons not under sixteen years of age, who are students in Engineering at a University, or who are apprenticed or articled to any branch of Engineering, and may afterwards be admitted as members at the discretion of the Council. Such persons may continue students until they attain the age of twenty-two years, but not longer.

PROPOSED RULE.

3. Associates to be gentlemen not under twenty-four years of age, who from their scientific attainments or position in society may be considered eligible for election by the Council. Associates may attend all special and general meetings, may read papers, take part in discussions, in voting, in moving and supporting resolutions, in presentation of notices of motion, or in requisition of Special Meetings, and in the proposal of new members.

PROPOSED RULE.

5. Students shall be persons not under sixteen years of age, who are students in Engineering at a University, or who are apprenticed or articled to any branch of Engineering, or attend any class or school of Engineering, Science, Mechanical Design or Drawing, and may afterwards be admitted as members at the discretion of the Council. Such persons may continue students until they attain the age of twenty-four years, but not longer. Students may attend all General Meetings, may read papers, take part in discussions, and support resolutions, but shall not sign proposals for new members, vote, nor be eligible for office.

NEW BULE.

6. Student Associates shall be students of not less than two years' standing, and shall have attained the age of twenty-four years. The Council may, through the President, at any time call upon such Student

Associate to show cause why he does not present himself for full membership, should it consider him eligible for such. Student Associates shall have the same right and privileges as Students, above mentioned.

NEW RULE.

Honorary members, associates, student associates and students shall be entitled to copies of the transactions, and notice of general meetings, in the same way as corporate members.

SECTION III.

ELECTION AND EXPULSION OF MEMBERS, ASSOCIATES, HONORARY MEMBERS, AND STUDENTS.

PRESENT RULE.

5. Any person, duly elected a member, associate or student, shall be informed thereof without delay, by a letter according to Form 2, enclosing a promise (Form No. 3), to abide by the Act of Incorporation, Rules and By-laws of the Association, which promise the person elected shall sign and return to the secretary, and he must pay the admission fee and subscription for the current half-year within two months after the date of his election, which otherwise shall become void; but the Council may, in particular cases, extend the time

PROPOSED RULE.

5. Any person, duly elected a member, associate, associate student, or student, shall be informed thereof without delay, by a letter according to Form 2, enclosing a promise (Form No. 3) to abide by the Act of Incorporation, Rules and By-laws of the Association, which promise the person elected must sign and return to the secretary, and he must pay the admission fee (if any) and subscription for current half-year within two months after the date of his election, which otherwise shall become void; but the Council may, in particular cases, extend the time.

SECTION IX. MEETINGS.

PRESENT RULE.

5. The Council may at any time call a Special General Meeting of Corporate Members for a specific purpose relative to the direction and management of the concerns

PROPOSED RULE.

5. The Council may at any time call a Special General Meeting of Corporate Members and Associates for a specific purpose relative to the direction and management of of the Association; and the Council are at times bound to do so on a requisition in writing of twelve Corporate members, specifying the nature of the business to be transacted.

PRESENT RULE.

6. A notice shall be sent to the Corporate Members at least seven days before the time appointed by the Council for such Special General Meeting, and the notice shall specify the nature of the business to be transacted, and no other than that business shall be transacted at the meeting, and twenty shall constitute a quorum.

the concerns of the Association; and the Council are at times bound to do so on a requisition in writing of twelve Corporate Members, specifying the nature of the business to be transacted.

PROPOSED RULE.

6. A notice shall be sent to the Corporate Members and Associates at least seven days before the time appointed by the Council for such Special General Meeting, and the notice shall specify the nature of the business to be transacted, and no other than that business shall be transacted at that meeting, and twenty shall constitute a quorum.

NEW RULES.

Rule 7. The Council may arrange Special Meetings for Students, either on its own initiative or at the request of Students, and shall appoint a Chairman therefor, who shall be a Corporate or Associate member.

Rule 8. The Council may arrange for one or two papers each Session at ordinary General Meeting by members or others, for the special benefit of Students; and shall encourage the Students to discuss such papers, and to take part in the discussion of all papers read to the Association.

SECTION V.

CONTRIBUTIONS TO THE FUNDS.

PRESENT RULE.

1. Each Member shall pay two guineas, each Associate two guineas, and each Student one half guinea per annum.

PROPOSED RULE.

1. Each Member shall pay two guineas, each Associate two guineas, each Student Associate one guinea, and each Student one half guinea per annum. Students and others who seek to be absent from the State for twelve months or more, and who intimate their

intention to the Council, and get approval, may have their subscriptions (and privileges) suspended during such absence. Such intimation to be renewed at intervals of not over twelve months during the absence.

PRESENT RULE.

 Every new Member or Associate shall pay an admission fee of two guineas, and every Student shall pay an admission fee of one guinea.

PROPOSED RULE.

2. Every new Member or Associate shall pay an admission fee of two guineas. No admission fee is payable by a Student or on transfer of a Student of not less than two years' standing, or of a Student Associate to a more advanced grade.

It was proposed by Mr. James Shirra that the Rules as printed be adopted and brought up next meeting for confirmation, which resolution was seconded by Mr. James Kidd, and carried.

Paper on "Electric Power Transmission in Works and Factories," by Mr. E. J. Erskine.

Paper read, and lantern slides illustrating same explained, by Mr. Erskine.

Discussion on paper opened by Mr. E. Kilburn-Scott. Mr. Erskine replied to the various points raised by Mr. Scott.

Mr. James Kidd proposed a hearty vote of thanks to Mr. Erskine for his valuable paper, and moved that the discussion on same be adjourned until next menthly meeting, which was seconded by Mr. J. Scoular, and carried.

The meeting then terminated.

10тн Мау, 1906.

MR. W. H. GERMAN, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:-

MEMBERS.

EDWARD GRAHAM FLEMING, Electrical Engineer, 16 O'Connell-street, Sydney.

JAMES JOHNSTON, Manager Watson's Bay and S.S.S. Ferry Co., Ltd., Circular Quay, Sydney.

PROPOSED ALTERATIONS TO RULES AND BY-LAWS. (Confirmation of motion passed at the last General Meeting, held on 19th April, 1906.)—Mr. James Kidd moved that the alterations to Rules as printed, and passed at the previous meeting, be now adopted.

Mr. Russell Sinclair seconded the motion, which was put to the meeting by the President, and carried.

Discussion on Mr. E. J. Erskine's Paper on "ELECTRIC POWER TRANSMISSION IN WORKS AND FACTORIES."

The discussion was opened by Mr. James Kidd, followed by Messrs. C. J. Holroyde, James McNamara, A. J. Arnot, James Shirra, and the President.

Mr. A. W. Price, on behalf of the author of the paper replied to the various points raised.

The meeting then terminated.

14th June, 1906.

MR. W. H. GERMAN, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:—

MEMBERS.

REGINALD CLAYTON, Draughtsman, Colonial Sugar Refining Co., Ltd., O'Connell-street, Sydney.

THOMAS LLEWELLYN KENWAY, Engineer, Messrs. Babcock & Wilcox, 427 Sussex-street, Sydney.

WILLIAM WRIGHT PILLARS, Engineer, Messrs. Babcock & Wilcox, 427 Sussex-street, Sydney.

JOHN SAVILLE, Manager Commonwealth Portland Cement Company, Portland, N.S.W.

Paper by Mr. Norman Selfe, M.I.C.E., on "A CENTURY OF Bridge Building and the Proposed Great Sydney Bridge."

Mr. Selfe read his Paper, which proved to be very interesting, at the close of which questions were asked by Messrs. James Shirra, Hector Kidd, and F. E. Stowe.

Mr. Selfe replied to the various points raised.

Mr. Hector Kidd proposed a hearty vote of thanks to Mr. Selfe fer his very able and interesting Paper, which was seconded by Mr. Russell Sinclair, who said the Paper would be a valuable contribution to the proceedings of the Association. The motion was put to the meeting and carried by acclamation.

The meeting then terminated.

12тн Јицу, 1906.

Mr. W. H. GERMAN, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:—

MEMBERS.

THOMAS WILLIAM APPLETON, Engineer, 63 Booth-street, Balmain.

JAMES HENDRY, Electrical Engineer, Kembla Heights, Wollongong.

STUDENT.

GEORGE ALLAN TAILBY, Apprentice Engineer, Sydney Hydraulic and General Engineering Co., Mutual Life Building, Martin-place, Sydney.

Paper by Mr. Walter Reeks on "Double ended Single-screw Steamers."

Mr. Reeks read his paper. The President, in inviting discussion on the paper, said it had been a most interesting paper, likely to lead to a very useful discussion and thus form a valuable contribution to our volumes.

Mr. Norman Selfe moved that a hearty vote of thanks be accorded to Mr. Reeks for his paper, which was seconded by Mr. Russell Sinclair.

The discussion was opened by Mr. Norman Selfe, followed by Messrs. Smaile, J. H. Wise, H. W. Flashman, James Shirra, and James Johnston. Mr. A. Christie moved that the further discussion on the paper be adjourned until the next monthly meeting, which was seconded by Mr. J. W. Fell, and carried.

The meeting then terminated.

9TH AUGUST, 1906.

MR. W. H. GERMAN, President, in the Chair.

The following candidates were ballotted for and duly elected:—

MEMBERS.

JOSEPH EDWARDS, engineer, manager Messrs. Cameron and Sutherland, 35 Post Office Chambers, Pitt street, Sydney.

MATTHEW AUSTIN McCANN, engineer, Messrs. Toohey's, Ltd., Sydney.

ALBERT GEORGE McDONALD, engineer, manager

Messrs. Perks Bros. & Co., 79 Pitt-street, Sydney.

JOHN REID, engineer, Sydney Machine Co., 81 Haystreet, Sydney.

BERTRAM STANWAY, gas engineer, Gas Works, Mortlake, Parramatta River.

ASSOCIATE.

THOMAS DALE, manager Worthington Pump Co.

STUDENTS.

JAMES STEWART DUNSMORE, apprentice, Messrs. Wildridge & Sinclair, 82 Pitt-street, Sydney.

GARNET W. F. FINDLAY, junior draughtsman, Messrs. Wildridge & Sinclair, 82 Pitt-street, Sydney.

DOUGLAS FINLAYSON, engineer, Clyde Engineering Co., Ltd., Granville.

ISAAC VERNON DOUST, apprentice, engineering, Sydney Hydraulic and General Engineering Co., Hay-street, Sydney.

LEONARD BATHURST BORTHWICK, apprentice, 24 Fitzroy-avenue, Balmain.

Conversazione of Kindred Associations.—The President announced that it had been decided to hold a general meeting

of the various societies who occupy rooms in this building, or hold their meetings here, viz., The Engineering Section of the Royal Society of New South Wales, the Electrical Association of New South Wales, the Institute of Architects and the Engineering Association of New South Wales, with the principal object of bringing the members more together socially and scientifically. The date of the meeting had not been definitely settled, but it is believed it will be the last Thursday in this month.

Discussion on Mr. Walter Reeks' paper on "DOUBLE-ENDED SINGLE SCREW STEAMERS."—Mr. Russell Sinclair read the report upon the trials made on the S.S. "Lady Northcote."

Mr. Andrew Christie opened the adjourned discussion, and was followed by Messrs. Russell Sinclair, Norman Selfe, Thomas Brown and James Shirra.

The President then called on Mr. Reeks to reply, but owing to the lateness of the hour, and at the request of Mr. Reeks, it was resolved that his reply to the various points raised should be written by Mr. Reeks, submitted to the Council, and published in the proceedings of the Association in due course.

The meeting then terminated.

13TH SEPTEMBER, 1906.

Mr. W. H. GERMAN, PRESIDENT, in the Chair.

The following candidates were balloted for and duly elected:—

MEMBERS.

ROBERT EDWARD FINLEY, Business Manager, 289 Pitt-street, Sydney.

THOMAS FORRET MORRISON, Ship Builder, Donnelly-street, Balmain.

APPOINTMENT OF SCRUTINEERS—ELECTION OF OFFICERS AND COUNCIL FOR THE ENSUING SESSION.—It was resolved that Messrs. A. J. Arnot and D. F. J. Harricks be appointed scrutineers.

APPOINTMENT OF AUDITORS (to audit accounts for the current Session).—On the motion of R. Steel, seconded by Mr. Hargrave, Messrs. H. J. Vale and R. R. King were duly appointed auditors.

Paper by Professor Warren M. Inst. C.E., on "Reinforced Concrete Constructions" (illustrated by a large number of lantern slides).—Paper read by Professor Warren. The President said they were deeply indebted to Professor Warren for the highly instructive and interesting paper he had given them; and Professor Warren had kindly consented to answer any questions now, or be with them again on some future evening, and he had no doubt many of them would avail themselves of the opportunity of gaining further particulars.

Questions were asked by Messrs. J. S. Fitzmaurice, A. J. Arnot, and Russell Sinclair, to which Professor Warren replied.

On the motion of the President (Mr. German), seconded by Mr. Russell Sinclair, a very hearty vote of thanks was accorded to Professor Warren for his paper, which was carried by acclamation.

The meeting then terminated.

