

THE ENGINEERING ASSOCIATION

OF

NEW SOUTH WALES

*Established 1870.**Incorporated 1884.*

 SESSION 1913-1914

PART I.

MINUTES OF PROCEEDINGS

OF THE ANNUAL GENERAL MEETING, HELD AT THE
 SOCIETY ROOMS, 5 ELIZABETH STREET, SYDNEY,
 ON THURSDAY, OCTOBER 9TH, 1913.

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.—Member—Mr. T. M. Goodall, managing director T. M. Goodall & Co., 303-305 Kent-street, Sydney; Mr. G. W. F. Findlay, engineering draftsman, c/o Wildridge and Sinclair, 82 Pitt-street, Sydney; Mr. Edgar Foster, assistant engineer and manager, North Shore Gas Co. Works, North Sydney. Students—Mr. Henry Hammond, engineering student, Technical College, Sydney; Mr. Owen T. Baker, engineering student, Technical College, Sydney; Mr. John A. Williams, engineering student, Technical College, Sydney; Mr. Reginald A. Fry, engineering draftsman, Department of Public Works, Sydney. All the above having been duly nominated and approved by Council, were balloted for and unanimously elected.

ALLOCATION OF PRIZES FOR STUDENTS' COMPETITIVE PAPERS.

The President, Mr. G. A. Julius, announced that the Council had decided, on the report presented by the Committee appointed to deal with the papers, to award the prizes as follows:—

First Prize, £5 5s. to Mr. E. F. Campbell, for his paper on "Notes on Lubrication."

Second Prize, £3 3s., to be divided between Messrs. R. S. Moore and W. E. Pike, for the papers, "Some Notes on Case-hardening" and "Notes on Boiler Fuels" respectively.

ANNUAL REPORT AND BALANCE SHEET.

On the motion of Mr. G. A. Julius, seconded by Mr. Walter Reeks, the Annual Report and Balance Sheet were adopted.

LIBRARY SUB-COMMITTEE REPORT.

The President, Mr. G. A. Julius, announced that the Library Sub-Committee had presented its report, and that the Council had unanimously endorsed it, and advised that it should be carried into effect. He wished now to obtain the sanction or otherwise of the members that the recommendation of the Sub-Committee to use the interest from the Peter N. Russell Bequest towards the building up of the Association's Library should be carried out. On the motion of Mr. J. W. Bragg, seconded by Mr. J. A. McEwin, the recommendations of the Library Sub-Committee were unanimously approved.

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

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

President: Mr. Walter Reeks.

Vice-Presidents: Professor S. H. Barraclough, Mr. J. W. Bragg.

Hon. Treasurer: Mr. C. J. Holroyde.

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

Members of Council: Mr. W. H. Grieve, Mr. A. F. Saunders, Mr. Alex. Stobo, Mr. Thos. Brown, Mr. Jas. McNamara, Mr. Wm. Sinclair, Mr. H. A. Roberts, Mr. H. L. Thompson, Mr. James Macartney.

The retiring President said that before he vacated the chair, he would like to express his thanks to the Council for the very great help he had received during his three years' occupancy of the chair. Mr. Julius then vacated the chair in favour of Mr. Walter Reeks.

The new President, Mr. Walter Reeks, on taking the chair, thanked the members for the extreme honour they had bestowed on him in electing him to the office of President of the Association. He said he hoped to be able, by dint of hard work and unflagging interest, to do justice to the post.

Paper on "Elevating and Conveying Machinery," by Mr. B. W. Jones.

Paper read and diagrams and lantern slides explained by Mr. Jones.

The discussion was opened by Mr. J. W. Bragg, who proposed that a very hearty vote of thanks be accorded Mr. Jones for his excellent paper, followed by Mr. R. R. Ferrier, who seconded the motion, Mr. G. A. Julius, Mr. B. Giles, Mr. W. Sinclair, Mr. B. Holland, Mr. H. Oram, and Mr. James Shirra.

Mr. Jones, in acknowledging the vote of thanks, replied to the points raised in the discussion.

The meeting then terminated.

Signed WALTER REEKS, President.

MINUTES OF OPENING MEETING OF THE 44th SESSION.

Minutes of the General Meeting held in the Society's Rooms, 5 Elizabeth-street, Sydney, on Thursday, March 12th, 1914.

Present.—The President, Mr. Walter Reeks, occupied the chair, Vice-President, Mr. J. W. Bragg, and some 90 members.

The President announced that he had received a notification from the Secretary, Mr. W. Hosking, to the effect that he was indisposed, whereupon Mr. D. T. J. Harricks performed the necessary duties of Secretary during the evening.

Minutes.—The minutes of the last meeting, held on Thursday, October 9th, 1913, were read and confirmed.

Business.—(1) Ballot for new members. (2) Presidential Address by Mr. Walter Reeks.

Election of New Members.—The following gentlemen were duly elected members of the Association:—

Hugh Rose Forbes-Mackay, Chief Engineer, Sydney Municipal Council.

Robert Lockley, Mechanical Engineer, c/o Colonial Sugar Refining Co., Ltd., O'Connell-street, City.

Harold Robert Freeman, Mechanical Draftsman, c/o Messrs. Gibson, Battle and Co., Ltd., 535 Kent-street, City.

Alexander George Ambrose, Engineer and Manager, Corporation Gas Works, Bathurst.

Cyril Spooner, Civil Engineer, c/o Board Water Supply and Sewerage, Sydney.

Albert Cecil Fewtrell, Resident Engineer, Goulburn.

Herbert John Swain, Lecturer-in-Charge, Department of Mechanical Engineering, Technical College, Sydney.

Arthur William Tournay-Hinde, Consulting Engineer, Hunter House, 26 Hunter-street, Sydney.

Election of New Student:—

John Gillard Dilling, Engineering Draftsman, Cockatoo Dock.

The President announced that he had received expressions of regret from Mr. A. G. Ambrose and Mr. A. C. Fewtrell on account of their inability to attend that evening, and requested those present to come forward, whereupon he extended to them a personal welcome on behalf of the Association.

Referring to the Notice Paper for the year, the President announced that the paper to be read by Mr. J. A. McEwin would be entitled "Liquid Fuel" instead of "The Bulk Handling of Oil," and the one to be read by Mr. A. W. Tournay-Hinde would be called "Mechanical and Electrical Clocks," instead of "Chronology."

Before proceeding with his address Mr. Reeks remarked that his occupancy of the chair had thrust upon him a duty at once pleasing and sad—sad because it was necessary for him to announce to members present that they were about to lose, for the time being, the companionship of a gentleman whose untiring energy in the interests of the Association largely contributed to the happy position in which members found it that night—and pleasant because, although the occasion did not permit of their singing "For he's a jolly good fellow" (and he was sure everyone thought so), they were at least able to bid him

“bon voyage.” Continuing, the President said it was not for him to sing his praises—such an act was unnecessary—and he would content himself with an expression of his belief that, just as his never-failing courtesy, kindness and consideration, as well as his constant cheerfulness had compelled all members to hold Mr. Harricks in the highest respect and esteem, so would these same qualities ensure the arrival of new comrades and friends wherever he might go. Mr. Reeks further remarked that, although the subject of his remarks would soon be out of Sydney, he was sure that neither he nor the members of the Association would be likely to forget the friendship which existed between them, the pleasant comradeship, and intimacy of many years. These things would be treasured memories to them all.

In seconding the motion, the Vice-President, Mr. J. W. Bragg, stated that he fully endorsed the kindly remarks made by their President. That they all felt the deepest regret on losing Mr. Harricks he was perfectly sure, but he hoped the regret would be tempered by the reflection that, although he was about to break away from the ties of business, there need be no break in the friendship so highly valued.

Replying to the foregoing remarks, Mr. Harricks expressed his heart-felt appreciation of the very kindly remarks which had been uttered by the President and Vice-President, and also of the cheery manner in which they had been supported by members present. It was true that the duties he had performed in connection with the Engineering Association during the last few years had demanded a certain amount of energy and hard work, but he would point out that the Engineering Association had always been a hobby of his, and therefore no time spent in its interests had been dull in the slightest degree. Neither must they neglect to examine what he might call the debit side of the ledger, as he felt they had done him great honour in appointing him to the position of Honorary Secretary—a position which permitted him to come more closely into contact with the various members than was perhaps otherwise possible. Referring to his impending departure, Mr. Harricks stated that he was about to take a holiday after some 18 years' hard work. A little while ago he had been interested to read a phrase written by a well-known

American writer, "Rest means rust"; but personally he preferred to act upon the saying of the older Englishman, who said something to the effect that too much work and too little play made Jack a dull boy. For himself, said Mr. Harricks, he would rather be a happy boy, even if his mind were a little rusty, than to be without happiness, and a few extra dollars in the bank. (Loud applause.)

Motion carried by acclamation.

Mr. Walter Reeks then read his Presidential Address, and illustrated his remarks by means of lantern slides.

Mr. Bragg: Mr. President, on behalf of members present, I desire to thank you for the very able and interesting address you have just concluded. I am sure I am expressing the feelings of everyone present when I say that it has been a real pleasure to listen to it, the only fault to find with it being similar to the fault found by Sam Weller's father with the letter which his son had written to his young lady. The young fellow was writing of Valentine time to his girl, and the old man said, "Does it not end up rather suddenly, Sam?" His son replied, "Yes, that is the point of it; it will make her wish there was more."

I beg to move a very hearty vote of thanks to you, Sir, for your very able and instructive paper.

Mr. Grieve: I have very much pleasure in seconding the motion. Mr. Reeks has, I think, delivered a most instructive address, and one which will, I am sure, be the means of encouraging all members to contribute of their best to the interests of the Association. I would like to dilate on certain points to which our worthy President has referred, but the time is growing late, so I will not detain you further.

The President,—Gentlemen, I thank you for the very kind remarks which you have uttered in reference to the paper read, and, apropos of the quotation made by Mr. Bragg, I may say I am very glad to know that you have thought it rather too short than too long.

The motion was carried by acclamation.

Signed J. W. BRAGG, Vice-President.

Minutes of the General Meeting held in the Society's Rooms, 5 Elizabeth-street, Sydney, on Wednesday, April 15th, 1913, at 8 p.m.

Present.—The Vice-President, Mr. J. W. Bragg, in the chair, and about 90 members and students.

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

Business.—(1) Ballot for new students. (2) A paper, entitled "Oil Fuel," by Mr. J. A. McEwin.

Election of New Students.—Hugh Robert Lambert, Technical College, Sydney; Adin McNiven, 10 Old Canterbury road, Summer Hill; Edward Stanley Rowe, "Cremona," 30 Boyce-street, Glebe Point; Robert Buchanan Sharp, Technical College, Sydney; Eric Hamilton Thomas, "Glengariff," Gipps-street, Waverley, Sydney.

The Vice-President announced that the gentlemen named were duly elected as students, and extended to them a personal welcome on behalf of the Association.

Mr. J. A. McEwin then read a highly-instructive paper on "Oil Fuel," and illustrated same with lantern slides.

Signed WALTER REEKS, President

Minutes of the General Meeting held at the Society's Rooms, 5 Elizabeth-street, Sydney, on Thursday, 14th May, 1914.

Present.—The President, Mr. Reeks, in the chair, and about 60 members.

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

Ballot for New Members.—Members—Herbert A. Bremner, Works Manager, Commonwealth Oxygen Co., Park-street, Alexandria; Albert Edward Emmelhainz, Chief Engineer, the Greater J. D. Williams Co., George-street, Sydney; Henry E. J. Miles, Chief Engineer, Fairymead Sugar Co., Bundaberg, Queensland. Students—Chas. H. Eyre, Engineering Draftsman, Drawing Office, Cockatoo Island; Alfred S. Shepherd, Engineering School, The University, Sydney. The above having been duly nominated and approved by Council, were balloted for and unanimously elected.

Paper on "Mechanical and Electrical Clocks," by Mr. A. W. Tournay-Hinde, illustrated with lantern slides.

Paper read by Mr. Tournay-Hinde.

The discussion was opened by Mr. Sykes, who proposed a very hearty vote of thanks be accorded Mr. Tournay-Hinde for his very interesting paper, followed by Mr. J. Shirra, who seconded the motion, Mr. Duncan Moffat, and Mr. Murday (visitor).

Mr. Tournay-Hinde, in acknowledging the vote of thanks, replied to the various points raised in the discussion.

Signed WALTER REEKS, President.

Minutes of the General Meeting held in the Society's Rooms, 5 Elizabeth-street, Sydney, on Thursday, 11th June, 1914, at 8 p.m.

Present.—The President, Mr. Walter Reeks, in the chair, and about 60 members.

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

Business.—Mr. Fry read an intensely interesting paper on "The Design and Construction of Long Span Bridges," and illustrated same by means of lantern slides.

Signed WALTER REEKS, President.

Minutes of the General Meeting held at the Society's Rooms, 5 Elizabeth-street, Sydney, on Thursday, 9th July, 1914, at 8 p.m.

Present.—The President, Mr. Walter Reeks, in the chair, and about 70 members.

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

Business.—(1) Ballot for new members and students.
(2) A paper entitled "A Modern Pumping Plant."

Election of New Member.—James Henderson, Chief Inspector, Machinery and Scaffolding Dept., Queensland Government. Student—Norman A. Esserman, The University, Sydney.

After the customary welcome had been extended to the above-named, the President expressed his desire to notify the members present that the Council had in con-

templation the adoption of a suggestion that members should visit the wharves of Sydney on Saturday afternoons. Not only had the Harbour Trust consented to this proposal, but had greeted it with real pleasure, and signified their determination to make provision for one or more of their officials—probably one or more of their Commissioners—to act as guides in order that those interested should be afforded every possible opportunity of obtaining an intelligent idea of the growth and progress of the waterside arrangements around the city of Sydney. The date of the initial excursion was to be fixed by the Council at their next meeting.

Mr. F. Saunders then proceeded to read a comprehensive paper on the subject of "A Modern Pumping Plant," and illustrated the same by means of lantern slides.

Signed WALTER REEKS, President.

Minutes of the General Meeting held at the Society's Rooms, 5 Elizabeth-street, Sydney, on Thursday, 13th August, 1914, at 8 p.m.

Present.—The President, Mr. Walter Reeks, in the chair, and about 80 members.

The Secretary read the notice convening the meeting.

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

Business.—(1) Ballot for new members. (2) A paper on "An Investigation of the Turbulent Motion of the Case on an ordinary 4-cycle Gas Engine."

Ballot for New Members.—Members—John B. Fadden, Consulting Engineer, 105 Pitt-street, Sydney; James Smith, Superintendent Engineer, Union Steamship Co., Sydney. Associate—Roderick Gillies, General Manager, Simpson Bros., 32 Clarence-street. Students—Edward S. Maclean, Junior Engineering Draftsman, Ritchie Bros., Auburn; Chas. H. G. Henty, Junior Engineering Draftsman, Ritchie Bros., Auburn; Victor Geo. Christmas, Engineering Apprentice, Ritchie Bros., Auburn; Kyle S. Koppen, Engineering Apprentice, Ritchie Bros., Auburn.

The President extended his personal welcome to the above-named gentlemen, who were duly elected as members, associate, and students respectively.

An apology was received from Professor Pollack, who was unable to attend the meeting.

The lecturer then proceeded to read the paper, and illustrated same by means of lantern slides.

Signed WALTER REEKS, President.

Minutes of the General Meeting held at the Society's Rooms, 5 Elizabeth-street, Sydney, on Thursday, 10th September, 1914, at 8 p.m.

Present.—Mr. Walter Reeks, in the chair, and about 50 members.

The Secretary read the notice convening the meeting.

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

Election of Auditors and Scrutineers.—The President announced that previously it had been the custom to elect as auditors two of their members, but it was now deemed advisable to requisition the services of a professional accountant for one of the positions, and Mr. Small had offered his services in that capacity. Accordingly, on the motion of Mr. McNamara, seconded by Mr. Wright, Messrs. Small and Shaw were declared duly elected as Auditors.

Messrs. King and Gurney were declared duly elected as Scrutineers, on the motion of Mr. Thompson, seconded by Mr. McNamara.

PATRIOTIC FUND AND OFFER OF SERVICES TO THE DEFENCE DEPARTMENT.

President: Gentlemen, I have to intimate to you that at the last Council meeting it was decided to donate the sum of £50 to the Patriotic Fund—(loud cheers)—and I have also to inform you that it has been suggested by the Council, and now only awaits your confirmation or otherwise, that this Institution, as an institution, shall offer its services to the Defence Department. It is probably well known to you that some of our members are already engaged in active duties, and if it be your wish that the resolution of Council be confirmed, I shall be glad if you will do so in the usual manner. You are all perfectly well aware of the present position of affairs, and I leave the matter entirely in your hands, awaiting your

“yea” or “nay.” The question before you is “That the services of this Association be offered to the Defence Department.”

The motion was carried with enthusiasm.

A Member: Is it out of order to ask in what way the Institution will be of use or convenience to the Defence Department?

President: I think that will be left entirely in the hands of the Defence Department. I was careful to say that we offered our services as an Institution, and not as individuals. I am sorry to say I was not present at the Council meeting, but I presume that should any question arise or any point require elucidation, the Defence Department will apply to us, and it will become our business and pleasure to appoint the man best able to deal with it.

I now have rather a painful and yet pleasurable duty to perform. It was, as you know, the intention that Mr. Cutler should have read a paper to-night, but circumstances arose which rendered it absolutely impossible for him to prepare his paper in time for the meeting, and we fell back—I use a technical term—on our very good friend Mr. Grieve, and I may say—again using a technical expression—that we fell back on a very strong retrenchment. It will now be our pleasure to listen to Mr. Grieve’s paper on “Geared Turbines.” (Applause.)

Signed S. H. BARRACLOUGH, President.
