### Engineering Association of Rew South Wales.

# ANNUAL REPORT OF COUNCIL

AND

## BALANCE SHEET

FOR THE

YEAR ENDING SEPTEMBER 30TH, 1895.

Your Council, in presenting to you the Twenty-Fifth Annual Report for the year ending September 30th, 1895, have great pleasure in announcing that, although several members' names have been removed from the books by deaths, resignations, etc., the number now remaining shows a very decided increase over that of last year—the total number on the roll being one hundred and forty-five.

It is with extreme regret that your Council have to place on record the deaths of two of our oldest members, viz., Messrs. William Scott (late Loco. Superintendent N.S.W. Government Railways) and James Richmond (late Superintending Engineer of the North Coast Steam Navigation Company).

#### BALANCE SHEET.

From the Balance Sheet attached it will be seen that the financial position of the Society is in a fairly satisfactory condition, but owing to the want of attention on the part of many of the members in not paying their subscriptions as they became due, your Council have had to postpone the publishing of the Volume of Proceedings, and they take this opportunity of urging upon members the necessity of paying strict attention to this matter, and also pointing out that it is only by reason of the Annual Volume that our exchanges with kindred Societies can be maintained, which is an item of considerable moment.

The amount of arrears due to date is two hundred and ninety pounds, ten shillings and sixpence. Your Council trust that those members in arrears will kindly respond to this appeal to enable the Society's transactions to be published within the next few months.

Your Council beg to express their best thanks to the various members who have contributed papers during the session.

Nine meetings, with an average attendance of forty members, have been held during the year, at which the following papers were read and discussed:—

At the October 11th meeting.—Discussion on Mr. Reek's paper on "Double-Ended Screw Ferry Steamers" (Illustrated).

Paper by Mr. Norman Selfe "On the Rise and Progress of Lift Construction in New South Wales" (Illustrated).

October 25th.—Discussion of Mr. Selfe's Paper.

March 14th.—The President's Annual Address was delivered.

May 9th.—Paper by Mr. Auldjo on "Refrigeration" (Illustrated).

Discussion on same.

Discussion on the question of "Land Boiler Inspection" (introduced by the president, Mr. A. D. Nelson).

June 13th.—Discussion on Mr. Auldjo's paper on "Refrigeration."

July 11th.—Paper by Mr. J. W. Napier on "Hot Water Circulation" (Illustrated).

Discussion on same.

August 8th.—Paper by Mr. James Nangle on "Roof Coverings." Discussion on same.

September 19th.—Paper by Mr. A. M. Howarth "On a proposed Sub-Aqueous Viaduct across Sydney Harbour, from Dawes Battery to Milson's Point" (Illustrated).

#### EXCHANGE OF PROCEEDINGS.

The following additional Exchanges have been arranged and Donations received during the year, for which your Council tender their best thanks to the respective bodies, viz.:—

- "The Royal Scottish Society of Arts."
- "The English Patent Office,"
- "The Victorian Public Library and Museum."
- "The Library of the late P. N. Russell and Co., together with Models and Drawings," presented by Alderman Taylor, J.P.
- "A large number of Valuable Representative Catalogues," presented by Messrs. Jno. Birch and Co., of London.

#### TECHNICAL COLLEGE LIBRARY.

The Council are pleased to announce that, by the courtesy of J. H. Maiden, Esq., Superintendent of the Technical College, Ultimo, any member of the Association can avail himself of the College Library, which is one of the most complete collections of Technical Works in the Colonies.

#### SMOKE CONCERT.

On March 8th a very successful Smoke Concert was held at Aaron's Exchange Hotel, at which a very large number of members and their friends were present and spent a most enjoyable evening, and your Council desire to thank the various artists who assisted in attaining this.

#### EXCURSIONS.

OCEAN STREET CABLE TRACTION PLANT.—By the courtesy of the N.S.W. Railway Commissioners and Messrs. Hudson Bros, members were afforded an opportunity of inspecting the above Station on December 1st. About eighty members availed themselves of the invitation, and were escorted through the station by Messrs. Geo. Downe (Tramway Loco. Superintendent),

Henry Hudson, and Thos. Irons (Messrs. Hudson Bros.). Members expressed themselves in very high terms of the design and finish of the whole plant, and after having partaken of the hospitality of Messrs. Hudson Bros., the party returned to town.

COLONIAL SUGAR COMPANY'S REFINING WORKS, PYRMONT.— On the 12th January a large number of members took advantage of the courteous invitation of the Hon. Ed. Knox to inspect the above extensive works.

The party, which numbered about one hundred, were received by Messrs. Muir, Hector Kidd, and W. H. German, who conducted them through the vast establishment and explained the various processes. After partaking of light refreshments the members returned to town, having spent a very pleasant and instructive afternoon.

MESSRS. J. VICARS AND Co.'s WOOLLEN FACTORY.—At the kind invitation of Messrs. J. Vicars and Co., about sixty members availed themselves of the opportunity to inspect the above extensive works. Arrangements were made by the firm to keep the whole of the plant working, in order that members could see the various stages of cloth manufacture in actual operation, which was watched with keen interest by all present. Members returned to town after having partaken of Mr. Vicars' hospitality.

Sydney University.—A very pleasant and instructive afternoon was spent by about seventy members of the Association in the Test Laboratory of the above institution, by the kindness of W. H. Warren, Esq., M. Inst. C. E., Challis Professor of Engineering, on March 30th.

Tests were made with the various machines, including the newly-added one hundred ton testing-machine, in which a very large Colonial Hardwood Beam was tested to fracture. After which the Professor explained the different machines and the amount of work done in the Laboratory in testing materials of all classes. He then invited members to partake of refreshments.

PORT JACKSON FORTIFICATIONS.—On April 27th, by the kind permission of Major-General Hutton, C.B., A.D.C. to the Queen, members were afforded an opportunity of inspecting the Fortifications of the Harbour. About one hundred members proceeded to Middle Head, and were met by Lieut.-Colonel Savage, who escorted them through the various batteries and explained the working and action of the different guns. A most enjoyable and interesting afternoon was spent.

THE SYDNEY OBSERVATORY.—On May 4th, by the courtesy of H. E. Russell, Esq., B.A., C.M.G., F.R.S., Government Astronomer, your Council were invited to inspect the various instruments at the above establishment. Mr. Russell received the visitors, and explained the features of various ingenious appliances, which excited a large amount of interest.

TECHNICAL COLLEGE.—A large number of members spent a very enjoyable and interesting afternoon on May 11th at this institution, by the kind permission of J. H. Maiden, Esq. (the Superintendent), and the courtesy of Owen Blackett, Esq.

Members were shown round the various Departments by the respective officers, and afterwards were invited into the Cookery School, for refreshments prepared by the lady students.

NEW SOUTH WALES FRESH FOOD AND ICE Co.'s WORKS.—On the 13th July about sixty members availed themselves of the kind invitation of Henry Pateson, Esq. (Manager), to inspect the above extensive works. They were received by Mr. D. Frew (Chief Engineer), who escorted them round the establishment, and explained the various machines in operation. An interesting feature of the visit was the examination of "Mr. J. D. Postle's Thawing Apparatus," which was fully explained to members by that gentleman.

### ENGINEERING ASSOCIATION OF NEW SOUTH WALES.

ACCOUNT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING SEPTEMBER 30TH, 1895.

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JAMES S. FITZMAURICE, Secretary.

Audited and found correct,

HENRY JOHN VALE, EDWYN A. HOLDEN, AUDITORS.