## THE ENGINEERING ASSOCIATION

OF

NEW SOUTH WALES.

# ANNUAL REPORT OF COUNCIL

AND

## BALANCE SHEET,

FOR THE

### YEAR ENDING 30TH SEPTEMBER, 1912.

Your Council beg to present to you the Forty-second Annual Report for the year ending 30th September, 1912, showing the progress and work of the Association for the past year. During the session just closed the following twenty-nine gentlemen were elected members of the Association:—

Members—Messrs. P. E. Allan, C. J. Bates, John Carruthers, E. L. Eastgate, C. S. Fairclough, Thos. Gurney, W. B. Holland, F. D. Hunter, J. G. Lancaster, J. G. McEwin, N. W. Macintosh, A. Maclachlan, J. E. Mawdesley, G. Duncan-Moffat, J. H. Pocock, J. B. Rumford, Henry Shipman, H. Tindale.

Associate—Mr. M. S. Stanley.

Student Associate—Mr. J. L. Pickering.

Students—Messrs. G. C. A. Bernays, E. F. Campbell, H. M. Cleary, R. F. Galloway, R. G. Irons, T. Langwill, J. W. Lees, T. A. Witten, J. L. Wright.

And the following resignations were accepted, viz.:—

Members—Messrs. William Kelley, E. W. McKeown, A. W. Price, R. Rutherford, W. J. Simpson, John Toder. Associate—Mr. Thomas Dale.

Students—Messrs. H. G. Dickey, C. L. Fenner, L. W. Kidd, A. J. Lea, C. C. Neilson.

Your Council has to record with deep regret the loss by death of the following members:—Messrs. H. B. Howe, John Sands, Norman Selfe.

The total number of members of the several grades is now 245, as compared with 231 at the close of last session.

During the year twelve meetings	s of the	Cou	ncil have
been held, the attendance at which	was as fe	ollo	ws :
G. A. Julius, President	Attended	9	meetings
James Macartney, Vice-President	,,	7	,,
Walter Reeks, Vice-President	,,	8	,,
John Sands, Hon. Treas. (deceased)	,,	2	,,
C. J. Holroyd, Hon. Treasurer	,,	4	,,
D. F. J. Harricks, Hon. Sec. and		10	
Editor	,,	12	,,
Professor Barraclough, Councillor	,,	5	, ,
J. W. Bragg, Councillor	,,	6	,,
H. H. B. Deane, Councillor	,,	.7	,,
Thos. Ferguson, Councillor	,,	12	,,
R. R. Ferrier, Councillor	,,	7	,,
W. H. Grieve, Councillor	,,	4	,,
Hector Kidd, Councillor	,,	5	,,
James Shirra, Councillor	,,	9	,,
Robert Steel, Councillor	,,	9	,,

Mr. J. C. Holroyde was appointed Honorary Treasurer on May 2nd, vice Mr. John Sands, deceased.

#### PRIZES TO STUDENTS.

As last Session, in order to encourage Student members in the preparation of papers, your Council decided to offer two prizes of five guineas and two guineas respectively, for the two best papers on subjects connected with mechanical engineering and naval architecture.

The Committee appointed by the Council to deal with the papers awarded the prizes as follows:—

First Prize, Mr. G. N. Tregarthen, for his paper on "Economiser Notes."

Second Prize, Mr. W. R. Medway Smith, for his paper on "Experiences with Some of the Valves on the Ships' Sides."

Your Council has pleasure in recording that the best prize has been won by Mr. Tregarthen three years in succession.

#### PAPERS.

Your Council desires to express their thanks to the various members who have contributed papers during the Session.

During the year 8 General Meetings—with an average attendance of 67 members—have been held, at which the following papers have been read and discussed:—

1911.—Oct. 12: Paper on "Refuse Destructors," illustrated with Lantern Slides, by Mr. T. L. Kenway.

- 1912.—March 14: The Annual Address, illustrated with Lantern Slides, by Mr. G. A. Julius ,B.Sc., M.E.
- April 18: Paper on "The Gyroscope, and Some of its Technical Applications," illustrated with Lantern Slides, by Professor S. H. Barraclough, M.M.E., Assoc.M. Ins. C.E.
- May 9: Paper on "Nominal Horse Power of Steam Engines," by Mr. James Shirra; "The R.A.C. Rating of Oil Engines," by Mr. Eric F. Boult.
- June 13: Paper on "The Use of the Spiling Staff," by Mr. Walter Reeks.
- July 11: Paper on "Condensers and Their Application in Sugar Factories," illustrated with Lantern Slides, by Mr. D. F. J. Harricks.
- August 8: Discussion on Mr. D. F. J. Harricks' paper on "Condensers and their Application in Sugar Factories," illustrated with Lantern Slides.
- September 12: Paper on "The Overtype 'High Superheat' Steam Engine," illustrated with Lantern Slides, by Mr. G. Duncan-Moffat.

#### EXCURSIONS.

July 12,1912.—Visit to the Small Arms, Factory, Lithgow.

By the courtesy of the Commonwealth Defence Department, the members of the Association were afforded an opportunity of inspecting the recently completed Small Arms Factory at Lithgow. Members were much interested in the equipment of the factory for the carrying out of exact work, and spent a most enjoyable and instructive day. A special train conveyed the party to and from Lithgow, and the excursion was in every way a success.

#### SMOKE CONCERT.

The inaugural Smoke Concert was held at Aaron's Exchange Hotel on the 16th November. There was a large attendance of members, and a very enjoyable evening was passed.

## STUDENTS' SECTION.

The following papers have been read and discussed at the General Meetings of Student Members, held in the Library of the Association during the Session, the average attendance being 14 Students:—

1911.—Oct. 17: Paper on "The General Use of the Steam Indicator," by Mr. R. S. Lloyd.

- 1912.—March 19: Paper on "Notes on the Testing of Steam Boilers and their Economical Working," by Mr. J. Kenneth Donaldson.
  - April 16: Paper on "The Governing of Modern Steam Engines," by Mr. R. S. Lloyd.
  - May 21: Paper on "Some of the Uses of Chemistry to the Engineer," by Mr. J. Hamilton.
  - June 18: Annual Debate, "Coal versus Oil Fuel for Steam Raising."
  - July 16: Paper on "The Manufacture and Applications of Irons and Steels," by Mr. G. M. Drinkwater.
  - August 20: Paper on "Some Notes on Automatic Gear Cutting Machines," by Mr. R. S. Moore.
  - September 17: Paper on "Steam Steering Engines and Gears," by Mr. J. L. Wright.

#### EXCURSION.

June 26, 1912.—Visit to the Tramway Power House, Ultimo.

# ACCOUNT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING 30th SEPTEMBER, 1912.

1911—October 1st.—  To Balance at Bank of New South  Wales			By Printing & Reporting Proceedings  Rent of Rooms Secretary's Salary Stamps General Printing Tinsurance Premiums Delivery of Proceedings, Vol. xxv. Advertising General Meetings, etc. Hire of Lantern, General Meetings Bank Charge for Current Account Exchange on Cheques Sundries Students Prize (Competitive Papers) Ahrbecker Memorial Trip to Small Arms Factory Smoke Concert City Bank of Sydney, Fixed Deposit Savings Bank of New South Wales, Deposit Bank of New South Wales, Deposit Sank of New South Wales Deposit	146 75 56 19 28 4 1 2 4 7 0 0 3 2 50 84 18	0 13 16 0 17 13 0 19 0 10 2 16 2 0 12 9	10 1
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October 1st, 1912.

Audited and found correct,

HENRY SHAW.

R. R. KING.

# REVENUE ACCOUNT, 30th SEPTEMBER, 1912.

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1912—September 30th.—	£ s.	d. £			1912—September 30th.— £ s. d. £ s. d.
To Printing and Reporting Proceedings					By Entrance Fees—
,, Smoke Concert		- 3	3	1	19 Members at £2 2s 39 18 0
"Students' Prize		2	<b>2</b>	0	"Sale of Proceedings 0 15 0
,, General Expenses—					" Membsrs' Subscriptions—
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Secretary's Salary	56 13	4			ing half-year ending March
	10 10	ą			21 1 0 1 20 1 7 15 0
Stamps		ñ			
General Printing	4 17	e			Less Amounts Paid, prior to
Stationery	4 17	0			half-years ending March 31
Insurance Premiums	1 13	0			and September 30 5 10 6
Delivery of Proceedings, Vol. xxv.	$^{2}$ 0	0			- 0 5 0
Advertising General Meetings,					,, Trip to Small Arms Factory 10 7 2
etc.	4 19	6			,, City Bank of Sydney, interest
Hire of Lantern, General					on Fixed Deposit 60 0 0
Meetings	7 0	0			,, Members' Subscriptions—
Bank Charge, Current A/c	0 10	0			Half-year ending March 31, '12 195 16 6
Sundries	3 16	4			Half-year ending Sept. 30, '12 198 9 0
	0 10	_ 204	7	2	394 5 6
,, Subscriptions written off		6	6	õ	001 0 0
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,, Furniture, Fixtures and Fittings,					
amount written off for deprecia-			7 F		
tion			15	9	
", Capital Account		133	10	8	
		£505	10	8	£505 10 8

October 1st, 1912.

Audited and found correct.

HENRY SHAW. R. R. KING.

#### ENCINEERING ASSOCIATION OF N.S.W. 1900 '01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 FROM NUMBER PRINTING BOO SCOST of

THE VARIATIONS IN THE EXPENDITURE ARE DUE TO THE IMPOSSIBILITY OF ALLOTTING THE COST OF PRINTING CORRECTLY FOR EACH YEAR. THIS IS DUE TO THE UNAVOIDABLE DELAYS THAT HAVE OCCURRED IN THE PUBLICATION OF THE VOLUMES.