Your Council beg to present to you the Forty-first Annual Report for the year ending 30th September, 1911, showing the progress and work of the Association for the past year. During the Session just closed, the following forty-two gentlemen were elected members of the Association, as follows:—

Member Mr. W. E. Adams.

,,	,,	H. Bale.
,,	"	S. H. Barraclough.
,,	,,	H. Brown.
"	,,	D. Cameron.
,,	,,	E. J. Crocker.
"	,,	H. H. B. Deane.
,,	,,	F. C. Fox.
"	,,	B. S. Giles.
,,	,,	G. W. Grayson.
**	,,	J. Henderson.
•,	,,	T. H. Houghton.
"	• •	J. F. Howarth.
"	"	C. E. Marchant.
22	,,	Arthur Mayoh.
,,	,,	E. W. McKeown.

Member, Mr.	S. E. Moorhouse.
,, ,,	H. A. Roberts.
,, ,,	H. E. Spencer.
,, ,,	W. J. Spruson.
,, ,,	R. Sykes.
""	H. L. Thompson.
,, ,,	T. W. Thornley.
,, ,,	G. W. Twigden.
Student Associa	te Mr. C. N. Huntley
57	W. J. Marr.
,, ,,	E. L. Tighe.

Student Mr. T. M. Baylis.

luent	TAT .	1. M. Dayns.
,,	,,	A. G. Campbell.
,,	"	L. G. Cole.
"	,,	D. R. Dowling.
,,	59	C. L. Fenner.
,,	,,	C. Ferguson.
,,	,,	F. J. Ferguson.
,,	,,"	L. W. Kidd.
,,	,,	H. V. Hoskins.
,,	,,	W. L. Lamond.
,,	,,	L. J. Fathers.
"	,,	R. S. Moore.
,,	,,	C. N. Nagle.
,, .	,,	S. T. Robbins.
,,	,,	R. M. Robinson.
<i>,,</i>	,,,	

And the following resignations were accepted, viz :---

Member Mr. M. T. N. Bluck.

,,	,,	J. H. Butters.
55	"	P. Connie.
,,	,,	J. Faulkner.
7 >	"	M. B. Halligan.
5.5	,,	E. W. Marriott.

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Student Mr. R. W. Garling. " L. R. Muras. ,,

Whilst the following gentlemen ceased to be members :---

Member	Mr.	T. W. Appleton.
"	,,	J. W. Balfour.
,,	,,	A. J. Fischer.
,,		K. E. Forkel.
,,		H. R. Hill.
"	"	T. T. Hodgkinson.
,,	,,	A. M. Howarth.
,,	,,	G. R. Mair.
,,	,,	R. Maxwell.
. ,,	,,	W. McNamara.
,,	,,	H. A. Membrey.
,,	,,	A. W. Richardson.
"	,,	E. C. Steere.
Student	Mr.	T. Freeman.

Student Mr. T. Freeman.

,,	,,	A. R. Tivendale.
? ? •	"	E. H. Closs.
,,	,,	E. J. Parry.
,,	,,	K. Reeks.
"	,,	R. C. Thomas.

Your Council has to record with deep regret the serious loss sustained by the Association through the death of the late Honorary Secretary and Editor, Mr. Henry V. Ahrbecker, and desire to place on record the unselfish devotion which Mr. Ahrbecker has always shown to the interests of the Association and Engineering profession generally.

The total number of members of the several grades is now 231, as compared with 217 at the close of last Session.

During the year 12 meetings of the Council have been held, the attendance at which was as follows:---

G. A. Julius, President	Attended	lım	eetings
James Macartney, Vice-President	<i>,</i> ,	8	,,
Walter Reeks, Vice-President	. ,,	8	"
John Sands, Hon. Treasurer	"	.9	,,
H. V. Ahrbecker, Hon. Sec. and			
Editor	(dec	eased.))
I. W. Bragg, Councillor	,,	3	,,
Thomas Ferguson, Councillor	,,	10	"
R. R. Ferrier, Councillor	,,	7	"
R. Grant, Councillor	"	7	"
C. J. Holroyde, Councillor	,,	I	"
Hector Kidd, Councillor	"	6	,,
James Kidd, Councillor	"	5	,,
R. R. King, Councillor	"	4	,,
James Shirra, Councillor	.,	9	"
Edw. J. Erskine, Ex-Officio Mem-			
ber, Past President	,,	2	.,,

PRIZE TO STUDENTS.

Your Council regret the lack of interest shown by the Student Members in the Prize Competitive Papers, only one paper being received in connection with the competition this Session, and hope for better results next year. The second prize of $\pounds 2$ 2s. has been awarded to Mr. G. N. Tregarthen for his paper on "The Use of Cylinder Oil."

During the year 10 meetings—with an average attendance of 69 members—have been held, at which the following papers have been read and discussed: —

1910.

Oct. 13: Paper on "Troubles due to the Aeration of Water in Pumps," by Mr. G. N. Tregarthen (Student Member).

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1911.

- March 9: The Annual Address delivered by the President, Mr. G. A. Julius.
- April 20: Paper on "Fitting and Running Refrigerating Machinery on Shipboard," by Mr. William Sinclair.
- May 26: Paper on "The Deisel Engine and its Application," illustrated with Lantern Slides, by Mr. H. H. B. Deane.
- June 8: Paper on "The Strength, Elasticity, and other Properties of New South Wales Hardwood Timbers," illustrated with Lantern Slides, by Professor W. H. Warren, Wh.Sc., M. Inst., C.E., etc.
- June 29: Discussion on Professor Warren's paper on "The Strength, Elasticity, and other Properties of New South Wales Hardwood Timbers."

Discussion on Mr. H. H. B. Deane's paper on "The Deisel Engine and its Application."

- July 13: Paper on "Condensing Plant," by Mr. F. Saunders, A.M.I.Mech.E., illustrated by Lantern Slides.
- Aug. 10: Paper on "Supply of Air for Blast Furnace and Kindred Operations," illustrated with Lantern Slides, by Mr. W. H. Grieve.
- Sep. 14: Paper on "Boiler Explosions as Affected by Unsymmetrical Riveted Joints," part I., "Typical Lap Joint Boiler Explosions," illustrated with Lantern Slides, by Professor S H. Barraclough.
- Sep. 29: Paper on "Boiler Explosions as affected by Unsymmetrical Riveted Joints." Part II., "An Experimental Investigation of the Strains on Unsymmetrical Riveted Joints"; illustrated with Lantern slides by Professor S. H. Barraclough.

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EXCURSIONS.

October 27, 1910.—Trip to Lithgow.

By the courtesy of the Messrs. G. and C. Hoskins, a number of members visited the Lithgow Ironworks, and spent a most enjoyable and instructive day, the party being most liberally entertained by the Messrs. Hoskins, a special train conveyed the party to and from Lithgow, and the excursion was in every way a success.

March 3, 1911.-Trip to Port Kembla.

By the courtesy of B. Magnus, Esq., members were afforded an opportunity of inspecting the works of the Electrolytic Refining and Smelting Co. of Australia, Limited, at Port Kembla, which proved of great interest to those present, and the excursion was a most enjoyable one.

P. N. RUSSELL BEQUEST.

Following the death of the late Lady Russell, the sum of three thousand pounds has been paid into the funds of the Association by the trustees of the Estate of the late Sir P. N. Russell, who bequeathed that sum to this Association without restriction of any kind.

It was undoubtedly his intention that this money should be devoted to the development of Engineering education and training, and your Council trust that during the coming year, some arrangement may be made to utilize the bequest in such a manner as will be in keeping with his intention.

PUBLICATION OF PROCEEDINGS.

Owing to the sudden decease of the late Mr. Henry V. Ahrbecker, the Honorary Secretary and Editor, an unavoid-

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able delay has occurred in the publication of the proceedings of the Association. Mr. Ahrbecker had in hand the completion of the volume for last session at the time of his death. Your Council have appointed a committee to edit the proceedings and hope shortly to have them brought up to date.

STUDENTS' SECTION.

The following papers have been read at the General Meetings of Student Members, held in the Library of the Association during the Session:—

- 1910.—Oct. 18: Paper on "Experiences with Centrifugal Pumps," by Mr. G. N. Tregarthen.
- 1911.—March 21: Paper on "Friction Clutches," by Mr. K. M. Fletcher.
 - April 26: Paper on "Relative Merits of Locomotive Reversing Gears," by Mr. G. M. Drinkwater.
 - May 16: Paper on "The Design and Efficiency of Screw Propellers," by Mr. R. S. Lloyd.
 - June 20: Debate on "Centrifugal v. Reciprocating Steam Pumps."
 - July 18: Paper on "Locomotive Injectors," by Mr. J. K. Donaldson.
 - Aug. 15: Paper on "Notes on Hull Design," by Mr. G. W. F. Findlay.
 - Sep. 19: Paper on "Ignition of Internal Combustion Engines," by Mr. J. Hamilton.

EXCURSIONS.

June 7, 1911: Visit to the Government Printing Office.

September 27: Visit to the City Municipal Power House, Pyrmont.

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ENGINEERING ASSOCIATION OF NEW SOUTH WALES.

ACCOUNT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING 30th SEPTEMBER, 1911.

October 1, 1910.					12		
	£	s.	d.	£	s.	d.	£ s. d. £ s. d.
To Balance at Bank of New South							By Printing and Reporting Pro-
Wales	78						ceedings
" Cash in hand	3	18	0				" Rent of Rooms
		-		82	1	3	" Secretary's Salary 52 0 0
September 30, 1911.							"Stamps 16 5 5
To Trustees of the Estate of the					: S		" General Printing 16 9 6
late P. N. Russell				3000	0	0	" Stationery 10 4 6
" Members' Subscriptions				318		6	"Insurance Premiums 1 13 6
" Entrance Fees, 22 Members at				010	-	0.	"Advertising General Meetings . 5 10 0
42s				46	4	0	"Hire of Lantern, General Meet-
" Sale of Proceedings				3	5	õ	ings 4 0 0
" Royal Society of New South				U	0	U	,, Exchange on cheques 4 6
Wales, compensation for							"Bank Charge for Current A/c. 10 0
damaged volumes, Proceed-				10	0	0	" - " Fernered second rabors -
ings				10	-	0	" Sundries 19 4
"Ahrbecker Memorial					17	0	" Students' Prize 2 2 0
" Trip to Lithgow				68		0	" Trip to Lithgow 60 12 3
" Trip to Port Kembla				18	2	6	" Trip to Port Kembla 12 17 6
" Postage refunded					7	8	" Balance at Bank of New South
" Exchange on cheques					2	0	Wales 3305 10 5
							" Cash in hand 1 18 0
							3307 8 5
			£	3595	4	11	£3595 4 11
				The local division of the	and the of tasks	Contraction of	

October 3rd, 1911.

Audited and found correct. G. BOHLER, HENRY SHAW,

ENGINEERING ASSOCIATION OF NEW SOUTH WALES

REVENUE ACCOUNT, 30th SEPTEMBER, 1911.

	£ s. d		Es.	d.		30th September, 1911.		
To Printing and Reporting Pro-	1		- 0			£ s. d. £	s.	đ.
, Rent of Rooms	75 0	0 2	5 8	0)	By Entrance Fees, 24 Members at 42s	8	0
"Secretary's Salary	52 0	0				" Sale of Proceedings 30	5	0
" Postage Stamps	15 17	9				" Royal Society of New South	0	v
"General Printing	16 9	6				Wales, compensation for		
"Stationery	10 4	6				damaged volumes 10	0	0
" Insurance Premiums	$1 \ 13$	6				" Trip to Lithgow 8	2	9
" Advertising General Meetings	$5 \ 10$	0				" Trip to Port Kembla 5	5	0
" Hire of Lantern, General Meet-						" Members' Subscriptions—		
ings	4 0	0				Half-year ending March 31, 1911 189 15 9		Sec.
" Exchange on cheques	2	6				Half-year ending Sept. 30, 1911 193 19 9	10	
" Bank Charge for Current A/c.	$\begin{array}{c} 10\\ 4 & 0 \end{array}$	0				383	19	6
" Typewriting Students' Papers " Sundries	4 0	4				- 전화 - · · · · · · · · · · · · · · · · · ·		
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"Members' Spbscriptions paid in		10			1			
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Less paid during Session	10 10	3				. 영화 전 1997년 19 1997년 1997년 1997		
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" Members' Subscriptions written					199	같은 것이 귀찮는 것 가지만 모두 같은 것이다. 것이 같은 것이 같이 같은 것이 같이 같이 같이 없다. 것이 같은 것이 같이 많은 것이 없다. 것이 같은 것이 없다. 것이 없는 것이 없다. 것이 없는 것이 않는 것이 없는 것 않이 않이 않는 것이 않이 않이 않는 것이 않이		
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October 3rd, 1911.

Audited and found correct.

G. BOHLER, HENRY SHAW,