# ENGINEERING ASSOCIATION of New South Wales

## Annual Report of Council and Balance Sheet

FOR THE

Year Ending 30th September, 1916.

Your Council beg to present to you the Forty-sixth Annual Report for the year ending 30th September, 1916, showing the work of the Association for the year.

The following gentlemen were elected members of the several grades of the Association during the Session, viz.:--

Members—A. J. Debenham, A. C. Nicholson, W. G. R. Snellgrove, S. B. Mitchell, J. W. Mackie.

Associate Members-C. G. Calman, A. H. Perrett, F. T. Paisley, H. J. Bartlett, T. G. Bennet, A. R. Williams.

Graduate—A. G. Armstrong.

Students—W. R. Morris, A. F. G. Stafford, V. Kenniff, D. G. Poyitt, K. V. Sinelair, H. R. Coulson.

While the following Students were transferred to higher grades:---

Associate Member-J. W. Bell, E. F. Campbell, J. G.

Dilling, L. G. Henderson, J. G. Macartney, I. V. Doust, P. R. King.

Associate—E. C. Holroyde.

Graduates—C. F. Ferguson, R. H. Fry, H. C. J. Kidd, R. S. Lloyd, G. Pauch, W. E. Pike.

The resignations of the following members were received with regret:—

W. Edmonds, E. F. Boult, J. B. Fadden, R. Steel, J. P. Hutchinson. G. A. Rodda.

Whilst the names of the following have been removed from the list of members in terms of Section V., No. 5 of the Rules and By-laws of the Association:—

E. J. Crocker, C. Bogenreider, F. J. Healy, H. S. Goldsmith. It is with regret that we have to announce that during the year we have lost by death the following esteemed members, viz.:--

Mr. R. Pollock, member, 1878.
Mr. W. R. Little, member, 1910.
Mr. A. P. Smith, member, 1910.
Mr. R. G. Irons, student, 1912.
Mr. W. G. Bill, student, 1912.

Members will all agree that in the death of Mr. R. Pollock we have suffered a grievous loss, as this gentleman was one of the pioneer members of the Association.

The names of the last three members referred to appear in the Roll of Honor included in this Report as having nobly laid down their lives for the Empire's cause.

Membership.—Owing to the reasons previously mentioned, the names of 16 members do not appear in this year's list, but we are pleased to record that 18 new members have been added to various grades, and although your Council claims that this is to some extent gratifying, considering the present state of affairs, they wish to point out the utmost importance to the welfare of the Association that is derived from the greater accession of new members. At the present time there are upwards of 50 members absent on military duty, whose subscriptions, of course, are not expected; whilst the increasing cost of printing, and all other material, steadily swells the Association's expenses. The only way in which we can satis-factorily meet increased expenses is by obtaining a greater number of members, and, quite apart from the financial aspect, increased membership is a benefit to the Association in every way. Surely at this time, when we are being exhorted to do all in our power in the interests of the country, one of the first things is to extend the usefulness of Associations such as ours.

#### COUNCIL MEETINGS.

During the Session 12 ordinary Council meetings and 4 special munitions' meetings have been held, at which the attendances were as follows:—

	12 Ordinary Council	4 Special Munition
	Meetings.	Meetings
J. W. Bragg	11	 4
D. F. J. Harricks	. 12	 4
A. F. Saunders (absent from State fo	r	
$3 \text{ months}) \dots \dots \dots \dots \dots \dots$	. 6	 4
A. Stobo (resigned, $6/4/16$ )	. 3	 2

J. McNamara P. A. Fildes (absent from State for		 4 Special Munition Meetings 4
months)		 4
W. Reeks	. 10	 4
G. A. Julius		 4
A. W. Tournay-Hinde	. 9	 3
W. Sinclair	. 11	 4
H. L. Thompson	. 11	 3
J. G. McEwin		 <b>2</b>
G. H. Bromwich (engaged on Nava	ıl	
duties)	. 3	 2
A. J. Hart	. 8	 <b>2</b>
S. H. E. Barraclough (absent from	n	
State on Military duties)	. 1	 
B. W. Jones (appointed $1/6/16$ )	. —	 

#### PAPERS at GENERAL MEETINGS.

It is with pleasure that your Council reports that the standard of the papers submitted at the general meetings has maintained a high degree of excellence, although the attendances were not up to the average of the last few years. This was, no doubt, owing to the number of our members who are at the front, and otherwise engaged in military duties; but your Council feels sure that the interest evidenced by those present, and the discussions which followed the rendering of the papers, must have been gratifying to the various authors concerned.

We look forward to a successful series for the coming Session.

The papers presented and discussed at the general meetings were as follows:---

- 1915.—October 21st: Address by the President, Professor S. H. E. Barraclough, M.M.E., M.I. Mech. E., Associate M. Inst., C.E.
- 1916.—March 9th: "The Bulk Handling and Storage of Grain," by Mr. William Poole, B.E., Assoc. M. Inst., C.E.
- April 13th: "The Air Supply and Flow of Air in Lead Smelters," by Mr. A. W. Tournay-Hinde.

May 11th: "Aerial Ropeways," by Mr. J. W. Mackie.

June 8th: Lecture on "The Third Rail System in Australia," by Mr. Chas. Wilkin, M.I. Mech. Engineers. xlvii.

- July 13th: "The Colonial Type Boiler (Land and Marine)," by Mr. William Sinclair.
- August 10th: "Lubricating Oils," by Mr. J. G. McEwin.
- September 14th: "The Commercial Manufacture of Oxygen," by Mr. H. A. Bremner.
- October 12th (To be rendered): Address by the President, Mr. J. W. Bragg.

### THE ASSOCIATION'S OFFER TO THE DEFENCE DEPARTMENT FOR VOLUNTARY WAR WORK.

In response to an offer made by your Council to the Commonwealth Defence Department, offering their services in whatsoever capacity they might think fit, a reply was received through the N.S.W. State Munitions Committee to the effect that they would be only too pleased to give all their assistance to any scheme which the Association might develop.

The ready response of the members to do all in their power to form a Voluntary Munitions Association was greatly appreciated by the members of your Council, but owing to unforeseen circumstances arising which prevented the scheme from being put into effect, the whole matter was reluctantly abandoned.

#### ROLL OF HONOR.

It is with feelings of pride that we publish the names of those of our members who have answered their country's call, though we regret to state that, up to date, five of them have laid down their lives. The following is the full list of those who have enlisted:—

- 1. Brand, J. I. C., Eng. Lieutenant, H.M.A.S. "Encounter."
- 2. Burton, C. R., Sergeant.
- 3. Carruthers, J.
- 4. Cliff, R. C.
- 5. Fewtrell, A. C., Colonel O.C. Mining Corps.
- 6. Holliday, H. A. S., Private.
- 7. Holroyde, J. B., Eng. Lieut. H.M.S. "Carron."
- 8. Mawdesley, J. E.
- 9. Sinclair, A., Lieutenant.
- 10. Smith, A. P., Lieut. (killed in action).
- 11. Smyth, J., Lieut. Trench Mortar Brigade.

12. Tregarthen, G. N., Lieut. 19th Royal Welsh Fusiliers.

- 13. Tindale, H., Captain.
- 14. Wright, W. R., Eng. Lieut. H.M.S. "Princess."
- 15. Bill, G. W., Corporal (died of illness).
- 16. O. W. Baker, Private.
- 17. T. M. Bayliss, 2nd Signal Troop.
- 18. Campbell, A. G., Ammunition Park.
- 19. Cole, L. G., Lance-Corporal.
- 20. Cleary, H. M., Australian Flying Corps.
- 21. Dowling, D. R., Corporal.
- 22. Donaldson, J. K., Lieut. (killed in action).
- 23. Ferguson, C., serving on troopship.
- 24. Ferguson, F. J., serving on troopship.
- 25. Fry, R. H., Sergeant, 2nd Signal Troop.
- 26. Fletcher, K., Corporal.
- 27. Galloway, R. F., Private.
- 28. Hamilton, J., Captain, Ammunition Park.
- 29. Henderson, L. G., Private.
- 30. Herbert, J. E., Lieutenant.
- 31. Huntley, C. N., Lieut. (killed in action).
- 32. Irons, R. G., Lieut. (killed in action).
- 33. Lambert, H. B., Private.
- 34. Lees, J. W., Private.
- 35. McAuliffe, S. J., Sergeant.
- 36. McClure, B. H., Private.
- 37. Pickering, J. L., Sergeant (Bombing Corps).
- 38. Pauch, G., serving on troopship.
- 39. Pike, W. E., Lieutenant.
- 40. Shepherd, A. S., Private.
- 41. Smith, W. C. M., Eng. Lieut., H.M.S. "Biarritz."
- 42. Thomas, E. H., Private.
- 43. Williams, J. A., Private.
- 44. Wright, J. L., Private.
- 46. Witten, T. A., serving on troopship.
- 47. Witney, C., Corporal.
- 48. Drinkwater, S. M., Lieut.
- 49. Roberts, H. A., Captain.

### LIBRARY REPORT.

The Library Committee held seven business meetings during the year, as well as attending at other times for the purpose of re-classifying the books already on the shelves. The response to our appeal for exchange with kindred bodies has not been all that we desired, but the number of other Societies with whom we have succeeded in this respect will considerably augment our volumes.

We have placed an order for a large number of new text-books for inclusion in the "Reference" section of the library, in the selection of which we have had the assistance of the members of your Council, as well as the advice of several outside authorities with whom we consulted.

With regard to the best means by which the members may obtain access to the library, your Committee are of the opinion that the best way of carrying this out would be to have a permanent Librarian in the rooms. They would suggest that the duties of Secretary and Librarian be combined, but such an arrangement would make a further call upon the already heavy expenditure, and the matter is therefore still under consideration. We feel that some such course must be adopted if the library is to be utilised to its full advantage by all members, as well as offering facilities for a meeting place for members at all times.

J. W. BRAGG. D. F. J. HARRICKS. H. L. THOMPSON. H. PASQUILL. J. McNAMARA.

#### STUDENTS' SECTION.

Although working under great disadvantages owing to their greatly depleted numbers through their absentee members being on active service, this Section has carried out a very successful Session. It would be out of place if we let this opportunity pass without referring to the splendid work of their energetic Secretary, Mr. E. S. Maclean, who, at great personal inconvenience to himself, has worked hard to elevate the status of his section, both as regards the class of member and the papers presented at the Students' meetings.

Your Council have purchased a lantern for the use of the students at their meetings, and we think this was a very wise expenditure, as it has enabled the various authors to make their subject matter more interesting to the members.

#### STUDENTS' PRIZE.

The Committee formed to adjudicate on the papers for the 1914-15 Session have awarded the prize of £5 5s. to Mr. J. W. Lees for his paper on "Some Notes on Elastic and Vulcanite Grinding Wheels."

The papers read before the Students' Section during the 1915-16 Session were as follows:—

- 1915.—October 28th: Discussion on the Handling of Passenger Traffic in a large city.
- 1916.—March 22nd: "Military Field Signalling," by E. S. Maclean.
- April 26th: "Transmission of Power by Ropes," by J. W. Lees.
- May 23rd: "Lubrication of Cylinders and Bearings," by N. A. Esserman, B.Sc.
- June 28th: "The Preservation of Metals in Marine Work," by E. S. Maclean.
- July 26th: "Elevating and Conveying Machinery," discussion opened by I. V. Doust.
- August 23rd: "The Manufacture of Coal Gas," by S. J. McAuliffe.
- September 26th: "Steam Turbines," by N. A. Esserman, B.Sc.

ACCOUNT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDED 30th SEPTEMBER, 1916.

	d. £	s.	d.		s. d
1915—October 1.—				1916—Sept. 30th.—	
To Balance—				By Printing and Reporting Pro-	
Bank of N.S.W 21 17	<b>2</b>			ceedings 204	3 4
Savings Bank of N.S.W 201 2	7			,, Rent of Rooms	5 (
Govt. Savings Bank N.S.W. 13 17	7			"Secretary's Salary 80 (	
Bank of N. Queensland-				"Students' Prize 5	
Fixed Deposit	0			, Stamps and Postages	
Cash on Hand 6 0	Õ			"General Printing	
		17	4	, Stationery 3 4	
1916—Sept. 30th.—	0112		-	, General Expenses	
To Members' Subuscriptions re-				, Hire of Lantern for General	-
ceived 324 19	6			Meetings	) (
" Members' Entrance Fees re-	0			Libnowy C1 C	
19 19	0			,, Excursion to Broken Hill Pty.	
	- 343	17	6	Coy., Ltd., Works, Newcastle 75	) (
"Sundries—	- 515	т.	0	Deturned Chegue	
Bank of N. Queensland—					
Interest on Fixed Deposit 135 0	0			Deposit Electric Demon	
Interest, Savings Bank of	0			Lantonn Glidog	
New South Wales 7 1	3			, Lantern Slides 1 , Engineers' Depot, Moore Park 15 4	
	0 C			,,	
Interest, Govt. Savings Bank 0 9	0 149	10	0	,, interior and interings	3 6
Encursion to Dashen Hill Das	142	10	9	,, Proposed Munitions Factory 4	
" Excursion to Broken Hill Pro-				,, Government Savings Bank 100 (	) (
prietary Coy. Ltd., Works,	= 0	0	~	,, Balance—	
Newcastle	70	0	0	Bank of N.S.W 66 6 7	
"Returned Cheque	1	0	0	Savings Bank of N.S.W 108 3 10	
" Lantern Slides refund	0	4	6	Govt. Savings Bank 14 7 1	
" Exchanges	0	6	0	Bank of N. Queensland—	
" Rent of Hall refund	1	<b>5</b>	0	Fixed Deposit 3000 0 0	
,, Hire of Lantern refund	1 -	0	0	Cash in hand	
"Withdrawal from Government				3193 9	9 10
Savings Bank	100	0	0		
	£3903	1	1	£3903 1	1

		1	2	s.	d.	£	s.	d.	(	£s	. d.	£	s.	d.
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· ,,	Student's Prize					5	5	0				344	2	3
,,	Rent of Rooms	••				90	0	0	<b>,</b> ,	Interest on Savings Bank De-				
	Secretary's Salary					80	0	0		posits		7	10	9
	Stamps					<b>21</b>		10	,,	Library Reserve Account, pro-				
,,	General Printing					23		6		vision for Library deprecia-				
,,	Stationery	••				3	7	6		tion		18	15	6
,,	Hire of Lantern					6	0	0	<b>,</b> ,	Net Deficit for year		98		2
"	Insurance	••				0	17	5		• • • • • • • • • • • • •				
,,	Lantern Slides					1	4	0						
,,	General Expenses					6	18	<b>2</b>						
,,	Proposed Munitions Fac	tory												
	(Printing)					4	8	6						
,,	Excursion to Broken Hill	Pty.												
	Coy., Ltd., Works, Newca	astle				5	0	0	]					
,,	Engineers' Depot, Moore 1	Park				15	4	6		*				
,,	Depreciation, Furniture,	Fix-												
	tures and Fittings, 5 per	cent.				6	0	0	· · · ·					
,,	Depreciation, Library, D	raw-												
	ings,, Photos, etc., 5 per	cent.				18	15	6						
				-	£	468	16	8			£	468	16	8

### REVENUE ACCOUNT, YEAR ENDED SEPTEMBER 30th, 1916.

