



## PROCEEDINGS OF THE SECOND ANNUAL GENERAL MEETING.

HELD in the Metallurgical Lecture Theatre of the University, St. George's Square, Sheffield, at 2.15 p.m., April 16th, 1919, the President, Mr. W. F. J. Wood, in the Chair.

The Annual Report of the Council, together with the Balance Sheet, for the year 1918 had been circulated, and after being open for comment were approved.

The Report and Balance Sheet are as follows:—

THE Society still continues to grow, with no sign of diminution in the number of applications. On January 1st, 1918, the net membership stood at 264. During the year the election of 146 additional members, 44 Collective, 101 Ordinary, and 1 Student Member, took place, making the total number of elections to membership since the formation of the Society 413. As the Society lost 5 Ordinary members by death during 1918, and 5 members resigned, the net number on December 31st stood at 391. The names of the members whom the Society has lost by death are:—

Alfred Sherwood Esslemont, C.B.E.  
William A. Brown.  
William Robinson.  
Thomas Tyrer.  
Marquis de Mos.

The names of the members who have resigned are:—

*Collective Member.*—Messrs. Periscopes and Hyoscopes, Ltd., 39 Victoria Street, S.W.1.

*Ordinary Members.*—F. G. Mansfield, Messrs. Mansfield Bros., Church Gresley, Nr. Burton-on-Trent.

J. Kenworthy, Stretton Villa, Deepcar, Sheffield.

Guy Simpson, Messrs. John Lumb and Co., Ltd., Glass Works, Castleford.

G. A. Seaward, Fairfax House, Mortlake, London, S.W.

Amongst the applications for membership it has been a source of satisfaction to note that there have been quite a number from the officers of trades unions and glassworkers, thus testifying to the appeal which the Society makes to all thoughtful members of the glass industry. Another noteworthy feature, and one that is a source of great pleasure to the Council, is the large number of applications for membership from our friends in the United States.

During the year, 25 papers were communicated to the Society, as against 19 in 1917, and most of them have already appeared in print. Volume II. of the Journal contains, in addition to indexes, 30 pages of Proceedings and Reports, 26 papers comprising 294 pages of Transactions, and 296 Abstracts, in addition to Reviews occupying a total of 186 pages. The Council's thanks are again tendered to the Abstractors for their services, and particularly to Miss A. M. Jackson, B.Sc., for assistance in preparing the Annual Indexes. The number of copies printed during the past year has been 750, but the demand is becoming so considerable that it has become necessary to decide whether or not the issue cannot be considerably increased. An increased circulation will also make the Journal of greater value as an advertising medium. It is a source of satisfaction to note that the number of pages taken up by advertisers is approximately twice that of 1917.

The attendances at the meetings during 1918 have been very good, on two occasions, namely, at Stourbridge and at London, more than 100 members being present. The discussion on "The Glass Industry after the War" aroused much interest, and attracted the notice of various Government Departments as well as of Associations of manufacturers and employees. In regard to papers of technical interest, the Council would appeal to manufacturers who have been in the habit of keeping systematic records to contribute papers for the benefit of the industry in general. It is to the great advantage of the Society and of the industry that contributions shall be drawn from as many different sources as possible. Even historical notes on the development of the industry are welcomed, so long as the data have been fully authenticated.

Several additions to the Library have been made during the year. Amongst them may be noted the following periodicals, namely:—

- "The Journal of the American Ceramic Society,"
- "The New Zealand Journal of Science and Technology,"
- "The National Glass Budget" (America),

by exchange;

- "The Pottery and Glass Trades Record,"

by presentation, whilst further periodicals in the library of the Department of Glass Technology have been put at the disposal of the Society, namely:—

“Diamant,”

“Die Zeitschrift für Instrumentenkunde,”

“Die Deutsche-Mechaniker-Zeitung.”

The total number of volumes in the Library is now 100.

During the year an important development took place in the formation of a Refractories Research and Specifications Committee. The constitution of this Committee, and of its Sub-Committees, has already been reported in the Journal. The work has been pursued actively during the year, and received considerable stimulus as the result of the discussion held by the Society at the October meeting.

In order to foster interest in the work of the Society abroad and to make its advantages as real as possible to members resident overseas, the Council has adopted a set of Bye Laws, permitting and regulating the formation of Branches of the Society abroad.

The Council has signified its adherence to the Federal Council for the Advancement of Pure and Applied Chemistry, and the Secretary was appointed to represent the Society on the Federal Council. It is hoped that the strength of the Federal Council, which comprises a number of powerful Societies, will make its influence felt in the advancement of scientific methods applied to commerce and the business of the Government.

In May, 1918, the Council of the Society met in joint session with representatives of the Society of the Illuminating Engineers in London to discuss the position of illuminating glassware and its possible production in larger quantities in this country. A representative of the Ministry of Munitions was present, and the result of the deliberations was transmitted to the Ministry, Optical Munitions and Glassware Branch.

On the invitation of the Department of Scientific and Industrial Research, the Council nominated Mr. F. W. Branson, F.I.C., to be a member of the Committee on the Standardisation of Laboratory Glassware.

The income of the Society for 1918 amounted to £833 6s. 4*d.*, as against £482 13s. 6*d.* in 1917, an adverse balance of £16 17s. 3*d.* being converted into a credit balance of £45 7s. 5*d.* During 1918 the cost of producing the Journal was approximately £700, out of the £788 1s. 11*d.* expended by the Society. The increasing cost of the Journal has been a matter of serious concern to the Council for a long time, and it is only due to the fact that all the service rendered to the Society has been voluntary that has enabled it to

## SOCIETY OF GLASS TECHNOLOGY.

INCOME AND EXPENDITURE ACCOUNT, DECEMBER 31st, 1918.

	RECEIPTS.		PAYMENTS.		
To Subscriptions :		£ s. d.	Jan. 1.		£ s. d.
93 Collective Members at £3 3s. each ... ..		292 19 0	By Amount due to Treasurer as per statement for 1918		16 17 3
264 Ordinary Members at £1 1s. each ... ..		277 4 0	„ Printing and distribution of Journals, No. 5 and		
8 at 2s. 6d. each ... ..		1 0 0	No. 6 ... ..	269 3 4	
„ Donation by T. Ferry, Esq. ... ..		2 2 0	„ Author's reprints, No. 5 and No. 6... ..	14 16 10	
„ Sale of Journals and Binding Cases ... ..		126 12 1	„ Binding 200 copies, Vol. I ... ..	10 4 0	
„ Bank Interest ... ..		7 5 6	„ Binding Cases (200) ... ..	5 16 0	
			„ Printing and Stationery ... ..	20 6 11	
			„ Library purchases ... ..	4 0 5	
			„ Petty Cash and Postages ... ..	29 13 1	
			„ Sundry Expenses ... ..	5 6 9	
			„ Bank Charges and Postages ... ..	3 13 0	
			„ Shorthand Notes and transcripts of meetings ... ..	10 4 4	
			Dec. 31.		
			„ Cash in hand ... ..	308 0 8	
		£707 2 7		£707 2 7	

18

BALANCE SHEET AS AT 31ST DECEMBER, 1918.

LIABILITIES.				ASSETS.							
				£	s.	d.	£	s.	d.		
Printing and Distribution of Journal No. 7 ...	...	...	...	102	15	2	Cash in hand ... ..	...	308	0	8
Author's reprints ... ..	...	...	...				Due for commission on advertisements ... ..	...	126	3	9
Printing and Distribution of Journal No. 8 ...	...	...	...	188	2	2	Journals in stock:				
Author's reprints ... ..	...	...	...	8	0	0	No. 1, 8; No. 2, 120; No. 3, 110; No. 4, 90;				
Reprints of lists of members ... ..	...	...	...	3	16	9	No. 5, 2; No. 6, 3; No. 7, 3; No. 8, 6;				
Binding Cases, Vol. II ... ..	...	...	...	3	10	0	Total, 360.				
Binding 175 copies, Vol. II ... ..	...	...	...	12	13	0	Vol. I Bound, 153; Vol. II Bound, 175.	328			
Printing ... ..	...	...	...	5	15	10	Vol. I Cases 130; Vol. II Cases, 84.	214			
Postages ... ..	...	...	...	4	4	1					
				<hr/>							
				£388	17	0					
Balance of Assets over Liabilities in addition to	...	...	...	45	7	5					
copies of Journal in Stock ... ..	...	...	...	<hr/>							
				£434	4	5					
				<hr/>							
				<hr/>			£434	4	5		
				<hr/>							

19

We have examined the above accounts with Pass Book, Vouchers, etc., and in our opinion they are correct, and exhibit a true view of the Society's affairs as at December 31st, 1918.

April 3rd, 1919.

G. WILSON CLARKE,  
FREDERICK LAX.

show a credit balance. Owing to the growth of the work of the Society it cannot longer depend entirely on voluntary service, and some clerical assistance must necessarily be engaged. The Council proposes to make certain recommendations which will enable the Society to continue its work unimpaired during 1919, when its budget will, it may safely be predicted, exceed £1,000.

The position is one that is bright with promise. Although the Society may claim already to have reached a worthy place amongst scientific societies, better things are still in store, given the enthusiasm of the past two years and the continued co-operation between all branches of the industry for which, on the technical side, the Society speaks.

The SECRETARY was called on by the PRESIDENT to explain the recommendation of the Council with regard to increasing the annual subscription of ordinary members. After the statement, it was resolved that Rule 16, relating to subscriptions, shall be amended so as to read:—

“Rule 16.—Subscription.

“The Annual Subscription shall be as follows:—

“(a) Collective Members shall pay £3 3s. per annum.

“(b) Ordinary Members shall pay £1 10s. per annum.

“(c) Student Members shall pay 2s. 6d. per annum.”

It was further resolved that the new rule shall come into operation on January 1st, 1920.

Amendments, of which due notice had been given, were made to Rules 3 (c) and 20. The rules as amended read:—

“Rule 3 (c).—Student Members, *i.e.*, registered students, under the age of 21, who are attending a course or courses of technical instruction in the United Kingdom.”

“Rule 20.—Council.

“The Council shall consist of the President, Past-Presidents, twelve Vice-Presidents, the Treasurer, Secretary and Assistant Secretary, and fifteen members, who shall be elected at the Annual General Meeting.”

Messrs. J. D. Cauwood and J. R. Clarke were elected scrutineers for the purposes of the election of officers.

As the result of the ballot, the following were appointed officers for the year 1919—20:—

*President*: S. N. Jenkinson, M.B.E.

*Past-President*: W. F. J. Wood, C.B.E., B.Sc., F.I.C.

*Vice-Presidents:* G. E. Alexander, S. B. Bagley, Prof. P. G. H. Boswell, D.Sc., D.I.C., F. W. Branson, F.I.C., Prof. J. W. Cobb, C.B.E., B.Sc., F.I.C., J. E. Foxon, Congreve Jackson, S. W. Morrison, O.B.E., Harry J. Powell, B.A., Col. C. W. Thomas, M. W. Travers, D.Sc., F.R.S., F.I.C., and H. S. Williams-Thomas.

*Ordinary Members of Council:* M. Asquith, F. J. Boam, W. R. Barker, R. S. Biram, W. Butler, F. G. Clark, J. Connolly, S. English, M.Sc., A.I.C., Thos. Davidson, Prof. W. G. Fearn-sides, M.A., W. J. Rees, F.I.C., Stephen Shaw, F. Swann, W. W. Warren, and Duncan Webb (jun.).

*Treasurer:* F. Sweeting.

*Secretary:* W. E. S. Turner, O.B.E., D.Sc., M.Sc.

*Assistant Secretary:* C. J. Peddle, M.Sc., F.I.C.

*Auditors:* G. Wilson Clarke and Frederick Lax.

As three of the Council vacancies were due to death or premature retirement of members, a subsidiary ballot was held, as the result of which Prof. J. W. Cobb was elected a Vice-President to take the place of the late Sir Wm. Crookes, holding office, therefore, for one year only, Mr. F. W. Branson was elected to fill the place vacated by Mr. S. N. Jenkinson, and retires, therefore, in 1921; whilst Mr. Milton Asquith was elected to fill the vacancy due to the resignation of Mr. J. W. French, B.Sc., and will retire, therefore, in 1920.

Votes of thanks were passed to the retiring officers for their services.

At 3.15 an important discussion was initiated on "Scientific Research and the Glass Industry," by the retiring President, Mr. W. F. J. Wood, who gave an account of the steps which had been taken towards the formation of a Glass Research Association.

The following addresses were then delivered:—

"Industrial Research in the United States," by A. P. M. Fleming, O.B.E., M.I.E.E., illustrated by lantern-slides.

"State Aid for Scientific Research in the Glass Industry," by Sir Frank Heath, K.C.B.

After an interval for tea, an address was given by Dr. W. E. S. Turner on "The Future Welfare of the Glass Industry as Dependent on Scientific Effort."

During the course of the morning a visit of inspection was paid to the Department of Glass Technology, and demonstrations were

carried out on the casting of a 2 cwt. glass pot by the members of the staff, and of the vacuum casting of a 38-inch covered pot by Mr. B. J. Allen.

The following new members were elected:—

*Ordinary Membership.*

Lothner, E. R.	Pukeberg, Nybro, Sweden.
Ostlund, K. E.	Hogbergsgatan, 21, Stockholm, Sweden.
Kjeugren, S.	Rejmyra, Sweden.
Butler, W.	Messrs. Icknield Glassworks, Freeth St., Birmingham.
Gass, G. P.	418, Manchester Road, Bolton.
Pearson, Samuel.	Charles St., West Bromwich.
Kirkpatrick, F. A., M.S.	Bureau of Standards, 40th and Butler Streets, Pittsburgh, Pa.
Fogelberg, C. G.	Kosta, Sweden.
Bunce, A., A.C.G.I.	Messrs. Cannington Shaw and Co., Ltd., St. Helens.
Davis, D. H.	Pacific Coast Glass Co., San Fran- cisco.
Taylor, W. C.	Corning Glass Works, Corning, New York.
Loomis, G. A.	Corning Glass Works, Corning, New York.
Shelly, F.	13, Rolleston Road, Burton-on-Trent.
Giles, Capt. A. S., M.C.	Messrs. J. Stevens and Son, Dart- mouth St., Birmingham.
Firth, Miss E., M., B.Sc.	Dept. of Glass Technology, The Uni- versity, Sheffield.
Middleton, G. G.	7, Highland Grove, Worksop.

In the evening the First Annual Dinner of the Society was held, the following guests and members being present:—

*Guests.*

Wood, W. F. J. (retiring President of the Society).	
Ainger, R. (Commercial Editor of the <i>Sheffield Independent</i> ).	Ripper, Prof. W., C.H., D.Eng., D.Sc., M.Inst.C.E., J.P. (Vice- Chancellor of the University of Sheffield).
Bradley, F. E., M.A., M.Com., LL.D., F.R.S.E. (jointly represent- ing the Worshipful Company of Glaziers).	Sparks, T. Mortimore (Commercial Editor of the <i>Sheffield Daily Tele- graph</i> ).
Gibbons, W. M., M.A. (Secretary of the Glass Research Delegacy).	Tippetts, W. B. (Clerk to the Wor- shipful Company of Glaziers).
Heath, Sir Frank, K.C.B., B.A., Ph.D. (Secretary of the Depart- ment of Scientific and Industrial Research).	Trotter, A. P., M.Inst.C.E., M.I.M.E., M.I.E.E. (President of the Society of Illuminating En- gineers).



*Members and Friends.*

Allen, B. J.	Jackson, Miss A. M., B.Sc.
Ames, R. Y.	Kitson, J. E.
Asquith, H. H.	Lamplough, F. E., M.A.
Barclay, W. R., A.M.I.E.	McCormick, J.
Barclay, Mrs.	Martin, W., M.A., M.D.
Bateson, H. A.	Morton, E.
Boam, F. J.	Muirhead, Miss C. M. M., B.Sc.
Bunnis, H.	Peddle, C. J., M.Sc., F.I.C.
Burdin, —	Rees, W. J., F.I.C.
Butler, W.	Rees, Mrs.
Cauwood, J. D., M.Sc., A.I.C.	Sinkinon, E., D.I.C.
Chief Reporter, <i>Sheffield Telegraph</i> .	Smart, G. W., and guest.
Clark, F. G.	Styring, J. B.
Clarke, Capt. J. R., M.Sc.	Thomas, Col. C. W.
Clark, Noel.	Thomson, R. H.
Clarke, W. B.	Tinkler, W.
Connolly, Mr. and Mrs. J.	Trewartha-James, W. H., M.I.M.E.,
Davidson, J. H., M.Sc., F.I.C.	M.I.M.M., M.C.M.I.
Dimbleby, Miss V., B.Sc.	Turner, W. E. S., O.B.E., D.Sc.,
Dowse, G.	M.Sc.
Dryden, H. D.	Turner, Mrs.
English, S., M.Sc., A.I.C.	Wainwright, F. P.
Firth, Miss E. M., B.Sc.	Watkins, —
Fox, J. C.	Watts, J. W.
Foxon, J. E.	Webb, Duncan, Jun.
Gardner, W. J.	Wood, Capt. Alphonse, M.I.C.E.
Giles, Capt. A. S., M.C.	Wood, T. E., M.A., LL.B.
Heckels, J. S.	Wood, W. L. R., M.B.
Hodkin, F. W., B.Sc., A.I.C.	

The following toasts were rendered:—

- (1) "The King," by the Chairman (Mr. J. Connolly).
- (2) "The Society of Glass Technology," coupled with the name of Mr. W. F. J. Wood, C.B.E., B.Sc., F.I.C., retiring President. Proposed by Mr. J. Connolly.
- (3) "The Guests." Proposed by Dr. W. E. S. Turner, O.B.E.
- (4) "The Secretary." Proposed by Sir Frank Heath, K.C.B.