

PROCEEDINGS
OF THE
MINERALOGICAL SOCIETY
(1945)

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 25, 1945, at 2 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Messrs. Peter Aubrey Sabine, Robert Dudley Sampson Shrimpton, and Robert Mitchell Thompson were proposed and provisionally elected Ordinary Members of the Society. The death of Professor J. Ellis Thomson was reported.

Reports were received from the Treasurer and the Editor, and the Treasurer presented the audited accounts for 1944, which were adopted. It was decided to write off the subscriptions due from members in enemy-occupied countries for the current year.

The supply of literature for war-damaged libraries was considered.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 25, 1945, at 3.30 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Forty Members and fourteen Visitors were present.

The elections of Messrs. P. A. Sabine, R. D. S. Shrimpton, and R. M. Thompson as Ordinary Members of the Society were confirmed.

Lieut.-Col. J. V. Ramsden delivered a lecture on 'Practical barytes mining in Devonshire' (vol. 27, p. 75).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 22, 1945, at 2.15 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Messrs. William Anderson, Paul Desmond Blake, Tha Hla, Ivan Kostov, Malcolm David Samuel Lewis, Igor Serge Loupekine, William Pulfrey, and James Harward Taylor were proposed and provisionally elected Ordinary Members of the Society.

Reports were received from the Treasurer and the Editor.

The President reported that two of the sets of the *Magazine* available for distribution to war-damaged libraries were being sent to Czechoslovakia and Poland.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 22, 1945, at 3.30 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Twenty-nine Members and thirteen Visitors were present.

The elections of Messrs. W. Anderson, P. D. Blake, Tha Hla, I. Kostov, M. D. S. Lewis, I. S. Loupekine, W. Pulfrey, and J. H. Taylor as Ordinary Members of the Society were confirmed.

Dr. W. Campbell Smith exhibited photographs taken by Mr. Arthur Champion in the Kamasia Hills and the Elgeyo escarpment district in Kenya Colony.

The following papers were read:

1. The shape of reflections on X-ray, single-crystal photographs: by Dr. Kathleen Lonsdale (vol. 27, p. 112).
2. A magnesian chamosite from the Wenlock Limestone of Wickwar, Gloucestershire: by Mr. F. A. Bannister and Prof. W. F. Whittard (vol. 27, p. 99).
3. Myrmekite in graphic granite and in vein perthite: by Dr. Edmondson Spencer (read by Dr. David Williams) (vol. 27, p. 79).
4. Electrodialysis of mineral silicates: an experimental study of rock-weathering: by Mr. Tha Hla (vol. 27, p. 137).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 7, 1945, at 2.15 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Messrs. Duncan McConnell, Hans Jurie Nel, and James Bowman Nelson were proposed and provisionally elected Ordinary Members of the Society. Dr. Waldemar Theodore Schaller was elected an Honorary Member, subject to confirmation at the ensuing general meeting. The death of Prof. A. E. Fersman, Honorary Member, was reported.

Reports were received from the Treasurer and the Editor. It was agreed that the number of free reprints allowed to authors of papers should be increased from 25 to the pre-war figure of 50.

The list of Officers and Council for 1945-6 was considered. The following were due to retire: President, Mr. F. N. Ashcroft; Ordinary Members of Council, Mr. C. E. N. Bromehead, Mr. G. E. Howling, Mr. R. C. Spiller, and Dr. W. Campbell Smith. The following were nominated for election at the Anniversary

Meeting in November 1945: as President, Dr. W. Campbell Smith; as Ordinary Members of Council, Dr. M. H. Hey, Dr. J. H. Taylor, Dr. A. E. J. Vickers, and Prof. L. R. Wager.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 7, 1945, at 3.30 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Thirty-four Members and three Visitors were present.

The elections of Dr. W. T. Schaller as an Honorary Member, and of Messrs. D. McConnell, H. J. Nel, and J. B. Nelson as Ordinary Members of the Society were confirmed.

Dr. A. E. J. Vickers and Mr. D. G. A. Whitten exhibited minerals from the anhydrite mine at Billingham, Co. Durham.

The following papers were read:

1. The atomic structure of fluor-apatite and its relation to that of tooth and bone material: by Dr. C. A. Beevers and Mr. D. B. McIntyre (read by Mr. F. A. Bannister).

2. Whitlockite from Sebdon, Oran, Algeria: by Mr. F. A. Bannister, with chemical analysis by Miss Hilda Bennett.

3. On the petrology of the ultrabasic and basic plutonic rocks of the Isle of Rum: by Mr. S. I. Tomkeieff (taken as read) (vol. 27, p. 127).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 1, 1945, at 3.30 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Prof. Jean Orcel (Paris), Dr. Aleksei Vasilievich Shubnikov (Moscow), and Prof. František Slavík (Praha) were provisionally elected Honorary Members of the Society; and Dr. Cecil Arnold Beevers, Dr. Edward Joseph Gübelin, Mr. Edward Harold Jaques, Mr. Charles Lessner, Mr. Harold Leslie Nixon, Mr. Jiří Paclt, Dr. Denis Parker Riley, Mr. John Stuart Webb, and Mr. Maurice Kingsley Wells were provisionally elected Ordinary Members. The deaths of Miss Catherine A. Raisin and Mr. Harold Elliott were reported.

Reports were received from the Treasurer and the Editor. The Secretary read the draft of the Annual Report of Council, which was approved.

Mr. F. A. Bannister and Dr. S. E. Hollingworth were appointed auditors for 1946. The following dates of 1946 meetings were approved, subject to confirmation by the Geological Society: Thursdays, January 24, March 28, June 6, and November 7.

GENERAL (ANNIVERSARY) MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 1, 1945, at 5 p.m.*

Mr. F. N. ASHCROFT, President, in the Chair.

Thirty-six Members and eight Visitors were present.

Mr. B. W. Anderson and Mr. G. H. Osborn were appointed as scrutineers of the voting papers for the election of Officers and Council.

The elections of Prof. J. Oreel, Dr. A. V. Shubnikov, and Prof. F. Slavik as Honorary Members, and of Dr. C. A. Beevers, Dr. E. J. Gübelin, Mr. E. H. Jaques, Mr. C. Lessner, Mr. H. L. Nixon, Mr. J. Pacit, Dr. D. P. Riley, Mr. J. S. Webb, and Mr. M. K. Wells as Ordinary Members were confirmed.

The General Secretary read the following:

ANNUAL REPORT OF THE COUNCIL FOR 1944-5

Membership.—Including 10 Ordinary Members whose whereabouts are at present unknown, the total membership on October 31 was 288 against 275 on October 31, 1944. Seventeen new members have been elected during the year. Dr. Waldemar T. Schaller, an Ordinary Member since 1912, was elected an Honorary Member on June 7, 1945. The Society has lost by death one Honorary Member, Dr. A. E. Fersman, and three Ordinary Members, Mr. H. Elliott, Dr. Catherine A. Raisin, and Prof. J. Ellis Thomson. On October 31 the membership consisted of 5 Honorary Members and 283 Ordinary Members, of whom 47 were Life Members.

Since the liberation of those countries that have suffered from enemy occupation the Council has endeavoured to regain touch with the members of the Society resident therein, and is glad to be able to report that contact has been regained with the following: *France*, Prof. A. Lacroix (Honorary Member), Col. N. T. Belaiew, Monsieur N. Boubée; *Belgium*, Prof. H. J. F. Buttgenbach, Dr. J. L. E. Drugman, Prof. A. Schoep; *Norway*, Prof. T. F. W. Barth. Indirect information has been received that Col. J. P. L. Vésignié (France) and Dr. M. J. L. Solignac (Tunis) are alive and well, but direct contact has not yet been established with them. No information is to hand relative to Prof. S. Kreutz (Poland). Contact has also been established with various kindred institutions in the countries referred to.

Meetings.—At the four meetings held during the session 1944-5 the total attendance was 142 members and 32 guests. The average attendance of 43 is slightly below that of last session. At these meetings 11 papers have been read, one lecture delivered, and 3 exhibits shown.

Publications.—Four numbers (186-189) of the *Mineralogical Magazine* have been issued during the year and have contained the Proceedings in 10 pages, 10 papers in 65 pages, with 4 plates and 15 text-figures, and 406 abstracts in 88 pages.

Financial.—The accounts for the calendar year 1944, published in the March number of the *Magazine*, showed an excess of assets (exclusive of the stock of the *Magazine* and of the Society's other effects) over liabilities of £3010. 16s. 9d. This figure, however, is not comparable with that shown in the accounts for 1943, as the latter does not include the value of the securities then allocated to the Composition Fees Account. The value of the securities standing in the name of the Custodian Trustee was on December 31, 1944, General Reserve £2509. 5s. 3d., Miers Memorial Fund £375. 0s. 0d.

The cash at Bankers, in the Post Office Savings Bank, and in hand, credited to the General Purposes Account on January 1, 1945, amounted to £483. 3s. 1d. against £381. 9s. 3d. at the beginning of 1944, and that credited to the Miers Memorial Fund to £28. 0s. 6d. The undischarged liabilities at the close of 1944, estimated in January at £61. 13s. 3d., amounted to £65. 3s. 9d., against £118. 8s. 4d. at the close of 1943.

The receipts from annual subscriptions have been well maintained, and from January 1 to October 31, 1945, amounted to £203. 5s. 0d. in respect of annual subscriptions for 1945, as arrears £18. 7s. 11d. and in advance for 1946 £2. 4s. 9d. The receipts from the Society's publisher for sales of the *Mineralogical Magazine* show a substantial increase over those for 1944, being £228. 6s. 6d. against £190. 15s. 5d.

The expenditure on the *Magazine* has continued to be restricted. The actual payments in respect thereof made in 1944 amounted to £342. 17s. 6d. against £215. 5s. 3d. in 1943. The outstanding liabilities at the close of these years in respect of the *Magazine* were, 1944 £61. 10s. 9d., 1943 £118. 8s. 4d. The expenditure on nos. 184-187 of the *Magazine*, i.e. those due for issue in 1944, was £285. 19s. 11d. against £333. 13s. 10d. on the previous four numbers.

Five Composition Fees, totalling £68. 5s. 0d., have been received and invested.

Donations to the Miers Memorial Fund amounting to £13. 9s. 0d. have been received since the beginning of the year, and the sum of £35. 0s. 0d. has been added to the capital of the Fund and invested.

The cash available on October 31 was General Purposes Account £746. 0s. 7d. against £608. 19s. 11d. on October 31, 1944, Miers Memorial Fund £17. 16s. 7d. The accounts for the March and June numbers of the *Magazine* have been settled. The outgoings for the remainder of the year, provided it is possible to settle the accounts for both the September and December numbers of the *Magazine* before the close of the year, are estimated at about £280, and the receipts at about £177. On this basis the cash available for future use at the close of the year (excluding that standing to the credit of the Miers Memorial Fund) should be about £643.

General.—The Petrological Microscope Committee has issued during the session two reports on the essential characteristics of petrological microscopes which have been submitted to the Ministry of Supply and to the British Scientific Instrument Research Association.

The adoption of the Annual Report was proposed and seconded, and carried unanimously.

A vote of thanks to the Geological Society for the use of its apartments was proposed and seconded, and carried with acclamation.

A vote of thanks to the retiring President and Ordinary Members of Council was proposed and seconded, and carried unanimously.

The scrutineers reported that 25 ballot papers had been returned and examined and that the following list as nominated by the Council had been approved and were accordingly duly elected for 1945-6:

President. Lt.-Col. W. Campbell Smith, M.C., T.D., M.A., Sc.D., F.G.S.

Vice-Presidents. Sir Lewis L. Fermor, O.B.E., D.Sc., F.R.S.; Prof. W. R. Jones, D.Sc., M.I.M.M., F.G.S.

Treasurer. Dr. A. J. Bull, M.Sc., Ph.D., F.G.S.

General Secretary. Dr. G. F. Claringbull, B.Sc., Ph.D., F.G.S.

Foreign Secretary. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., D.Sc., LL.D., F.R.S.

Editor of the Journal. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

Ordinary Members of Council

Dr. S. E. Hollingworth, M.A., D.Sc., F.G.S. Prof. W. T. Gordon, M.A., D.Sc., F.R.S.E.,

Dr. C. E. Marshall, B.Sc., Ph.D., F.G.S. F.G.S.

Dr. F. C. Phillips, M.A., Ph.D., F.G.S.

Dr. David Williams, M.Sc., Ph.D., M.I.M.M.,

Dr. A. K. Wells, D.Sc., F.G.S.

F.G.S.

A. B. Broughton-Edge, M.B.E., B.Sc.,

Dr. M. H. Hey, M.A., D.Sc., F.C.S.

M.I.M.M., F.G.S.

Dr. J. H. Taylor, B.Sc., Ph.D., F.G.S.

Dr. K. C. Dunham, B.Sc., Ph.D., S.D.,

Dr. A. E. J. Vickers, M.Sc., Ph.D., F.R.I.C.,

M.I.M.M., F.G.S.

F.G.S.

Prof. L. R. Wager, M.A., Sc.D., F.G.S.

Mr. E. P. Bottley exhibited specimens of crystallized gold from the Rezende mine, Southern Rhodesia, and other minerals.

The following papers were read:

1. Simpsonite and other tantalates from Bikita, Southern Rhodesia: by Mr. A. M. Macgregor (read by Dr. F. C. Phillips) (vol. 27, p. 157).

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MINERALOGICAL

ABSTRACT OF RECEIPTS AND PAYMENTS

		RECEIPTS		GENERAL PUR	
		£	s. d.	£	s. d.
By Balances brought forward from 1944—					
1. At Bankers:					
(a) On Deposit Account		110	0 0		
(b) On Current Account		126	5 0		
2. In Post Office Savings Bank		246	17 6		
3. In Office		0	0 7		
				483	3 1
Entrance Fees				24	3 0
Annual Subscriptions—					
1. Current Year		207	9 0		
2. Arrears		18	7 11		
3. Advance		12	14 9		
				238	11 8
Sale of Publications—					
1. By Publisher, April 1, 1944–March 31, 1945. Sales at subscription rate £304. 5s. 0d. and other sales £16. 18s. 0d. less trade discount and commission £81. 13s. 11d. and distribution charges £11. 2s. 7d.		228	6 6		
2. By Custodian of Stock, 1945, £129. 6s. 6d. less distribution charges £3. 15s. 4d.		125	11 2		
				353	17 8
Advertisement Fees £13. 7s. 10d. less commission £2. 13s. 7d.				10	14 3
Interest on Investments, including Income Tax recovered—					
1. £1685 3½% War Loan, 1952 and after		58	19 6		
2. £105 4% Consolidated Loan, 1957		4	4 0		
3. £100 4% Funding Loan, 1960–90		4	0 0		
4. £146. 10s. 0d. 3% War Loan, 1955–59		4	7 8		
5. £26 3% Conversion Loan, 1948–53.		0	15 6		
6. £205 3% Defence Bonds		3	3 4		
7. £250 3% Savings Bonds, 1960–70		7	10 0		
				83	0 0
Deposit Interest—					
1. Bankers		0	1 1		
2. Post Office Savings Bank		10	10 6		
				10	11 7
Small Receipts				0	10 4
Donations for Illustrations				15	0 0

£1219 11 7

SOCIETY

FOR THE YEAR ENDING DECEMBER 31, 1945

POSES ACCOUNT

	PAYMENTS	£ s. d.	£ s. d.
To Printing and distributing the Mineralogical Magazine, Nos. 187-191 (Oxford University Press)—			
1. Printing		349 16 0	
2. Illustrations		66 8 3	
3. Authors' Separate Copies (Nos. 187-190)		13 5 0	
4. Distribution Charges		16 11 6	
		<hr/>	446 0 9
Printing and distributing Notices of Meetings and other annual printing			25 12 9
Miscellaneous printing, &c., not annual—			
Treasurer's Notices, &c.			3 0 0
Expenses at Meetings—			
1. Operator of Lantern		2 2 0	
2. Porter		1 0 0	
3. Tea		4 1 6	
		<hr/>	7 3 6
Custodian Trustee's charges			0 14 1
Care and storage of stock of Publications—			
1. Care of stock in London; J. Mugford		1 1 0	
2. Storage of stock in Oxford (six months)		0 10 0	
		<hr/>	1 11 0
Editor's Honorarium			50 0 0
Stationery and Office Equipment—			
1. Deed Box for Archives		4 17 4	
2. Register of Members; loose-leaf binder and specially ruled sheets (1946-1970)		10 2 6	
3. Stationery		0 16 0	
		<hr/>	15 15 10
Postage—			
1. Hon. Secretary		1 5 9	
2. Editor (not charged)		0 0 0	
3. Hon. Treasurer		4 8 0	
		<hr/>	5 13 9
Foreign Exchange; Control charges and losses on exchange			1 14 3
Donation towards cost of X-ray Jubilee Meeting			3 3 0
War Emergency Expenditure—			
Transport; return of Archives and stock of the Mineralogical Magazine from Oxford to London			5 4 0
Small items including Bank Charges			0 17 8
Investments—			
Purchase of £5. 5s. 0d. 3% Defence Bonds			5 5 0
Balances, December 31, 1945—			
1. At Bankers on Current Account		130 6 9	
2. In Post Office Savings Bank		507 8 0	
3. In Office		10 1 3	
		<hr/>	647 16 0
			<hr/> <hr/>
			£1219 11 7

Examined and compared with Vouchers and found correct.

January 17, 1946.

F. A. BANNISTER }
S. E. HOLLINGWORTH } Auditors.

A. J. BULL, Hon. Treasurer.

MIERS MEMORIAL FUND, YEAR

	RECEIPTS	£	s.	d.
By Balances brought in from 1944—				
At Bankers on Current Account		28	0	6
Donations received during year		38	9	0
Interest on Investments, including Income Tax recovered		11	7	1
		£77 16 7		

COMPOSITION FEES (INVESTMENT) ACCOUNT,

	RECEIPTS	£	s.	d.
By Composition Fees received during the year		99	15	0
		£99 15 0		

Note:—The total sum received as Composition Fees and invested was on December 31, 1945 £1354 10 0

BALANCE

DECEMBER

	LIABILITIES,	£	s.	d.	£	s.	d.
<i>To General Funds:—</i>							
Annual Subscriptions received in advance—							
1. Received in 1944 for 1946		1	1	0			
2. Received in 1944 for 1947		1	1	0			
3. Received in 1945 for 1946		11	13	9			
4. Received in 1945 for 1947		1	1	0			
		14 16 9					
<i>Sundry Creditors—</i>							
1. Oxford University Press (Printers)							
For Authors' Separate Copies from No. 191 of the Mineralogical Magazine		4	4	0			
2. Expenses of the Petrological Microscope Committee		6	0	0			
		10 4 0					
<i>Special Funds:—</i>							
Miers Memorial Fund					452	17	10

Excess of Assets over Liabilities		3363	1	0
		£3840 19 7		

ENDING DECEMBER 31, 1945

	PAYMENTS	£	s.	d.
To Investments: Purchase of £60 3% Defence Bonds		60	0	0
Balance, December 31, 1945—				
At Bankers on Current Account		17	16	7
		<u>£77 16 7</u>		

Examined and compared with Vouchers and found correct.

January 17, 1946. F. A. BANNISTER } Auditors. A. J. BULL, Hon. Treasurer.
S. E. HOLLINGWORTH }

YEAR ENDING DECEMBER 31, 1945

	PAYMENTS	£	s.	d.
To Investments; purchase of £99. 15s. 0d. 3% Defence Bonds		99	15	0
		<u>£99 15 0</u>		

Examined and compared with Vouchers and found correct.

January 17, 1946. F. A. BANNISTER } Auditors. A. J. BULL, Hon. Treasurer.
S. E. HOLLINGWORTH }

SHEET

31, 1945

	ASSETS	£	s.	d.	£	s.	d.
<i>By General Funds:—</i>							
Investments at Broker's Valuation—							
1. £1685 3½% War Loan, 1952 and after, at 103¼%		1748	3	9			
2. £105 4% Consolidated Loan, 1957, at 109¼%		114	14	3			
3. £100 4% Funding Loan, 1960-70, at 113¼%		113	5	0			
4. £146. 10s. 0d. 3% War Loan, 1955-59, at 102¼%		150	10	6			
5. £26 3% Conversion Loan, 1948-53, at 102½%		26	13	0			
6. £205 3% Defence Bonds at par		205	0	0			
7. £250 3% Savings Bonds, 1960-70 at 102%		255	0	0			
		<u>2613</u>			6	6	
<i>Sundry Debtors—</i>							
1. Oxford University Press (Publishers)							
(a) For sales of publications, April 1-December 31, 1945		108	6	3			
(b) For Advertisement Fees, April 1-December 31, 1945		6	7	8			
2. Interest due 1/8/45 on £15 3% Defence Bonds, acquired May 1945			1	10			
3. Refund of Consular Fee on set of the Mineralogical Magazine sent to the U.S.A.			12	6			
		<u>115</u>			8	3	
<i>Entrance Fees in Arrear</i>							
Annual Subscriptions in Arrear (£74. 10s. 8d. including £45. 11s. 7d. due from ex-enemy countries) estimated to realize			1	1	0		
			10	10	0		
<i>Balances—</i>							
1. At Bankers on Current Account		130	6	9			
2. In Post Office Savings Bank		507	8	0			
3. In Office		10	1	3			
		<u>647</u>			16	0	
<i>Special Funds:—</i>							
<i>Miers Memorial Fund—</i>							
Investments at Broker's valuation—							
£435 3% Defence Bonds at par			435	0	0		
<i>Sundry Debtors—</i>							
Interest due 1/8/45 on £10 3% Defence Bonds, acquired May 1945				1	3		
<i>Balance—</i>							
At Bankers on Current Account			17	16	7		
		<u>£3840</u>			19	7	

Note:—The value of the periodicals retained after the disposal of the Library, that of the unsold stock of Publications and that of the Society's other effects are not included in the above Assets.

January 17, 1946.

A. J. BULL, Hon. Treasurer.

2. A contribution to the study of luxullianite: by Mr. M. K. Wells.
 3. An X-ray examination of decomposition products of chrysotile (asbestos) and serpentine; by Dr. A. Hargreaves and Dr. W. H. Taylor.
 4. Note on variations in the structure of zircon: by Dr. V. H. Stott and Mr. A. Heller.
 5. Barium-felspars from Broken Hill, New South Wales: by Mr. E. R. Segnit (taken as read) (vol. 27, p. 166).
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