

PROCEEDINGS
OF THE
MINERALOGICAL SOCIETY

EXCERPT MINUTES OF COUNCIL MEETING,

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 18, 1927, at 4.30 p.m.*

SIR HENRY A. MIERS, F.R.S., Past-President, in the Chair.

The resignation of Mr. T. C. F. Hall was accepted.

Dr. Norman Levi Bowen and Mr. Sidney William Wooldridge were provisionally elected Ordinary Members of the Society.

The audited accounts and balance-sheet for the year ending December 31, 1926, submitted by the Treasurer, were approved. Audited accounts and balance-sheet of the Jubilee Entertainment Fund and an abridged statement for publication were also submitted and approved.

A vote of thanks to the Treasurer for his presentation to the Society of the Jubilee Record Album was passed.

GENERAL MEETING.

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 18, 1927, at 5.30 p.m.*

Prof. HAROLD HILTON, Vice-President, in the Chair.

Twenty-three Members and two Visitors were present.

The elections of Dr. N. L. Bowen and Mr. S. W. Wooldridge as Ordinary Members of the Society were confirmed.

The following papers were read :—

1. The temperature-range of formation of tourmaline, rutile, brookite, and anatase in the Dartmoor granite : by Dr. A. Brammall and Dr. H. F. Harwood (p. 205).

2. Notice of an occurrence of niccolite and ullmannite at the Settling-stones mine, Fourstones, Northumberland; and of serpierite at Ross Island mine, Killarney, Co. Kerry : by Mr. Arthur Russell (p. 383).

Micro-sections of a theralite from Rapa Island were exhibited by Mr. Campbell Smith, and specimens in illustration of his paper by Mr. Russell.

EXCERPT MINUTES OF COUNCIL MEETING.

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 15, 1927, at 4.30 p.m.*

Prof. W. W. WATTS, F.R.S., President, in the Chair.

Mr. Edward Leslie Gilbert Clegg, Prof. Tsutomu Ogura, and Mr. William Alfred Wooster were provisionally elected Ordinary Members of the Society.

A proposed exchange of advertisements made by the Swiss Mineralogical Society was accepted.

GENERAL MEETING.

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 15, 1927, at 5.30 p.m.*

Prof. W. W. WATTS, F.R.S., President, in the Chair.

Twenty Members and three Visitors were present.

The elections of Mr. E. L. G. Clegg, Prof. T. Ogura, and Mr. W. A. Wooster as Ordinary Members of the Society were confirmed.

The following papers were read:—

1. A melilite-spurrite- Ca_2SiO_4 assemblage from Larne (Co. Antrim): by Dr. C. E. Tilley.
2. Alkali-rocks from Nimrud volcano, Armenia: by Dr. G. T. Prior.
3. Rotating crystal X-ray photographs: by Mr. G. Greenwood (p. 258).
4. Biographical notices of mineralogists recently deceased (third series): by Dr. L. J. Spencer (p. 229).

Dr. Felix Oswald gave a description of the Nimrud volcano illustrated by lantern-slides, and specimens and microscope slides were exhibited by Dr. Tilley and Dr. Prior in illustration of their papers.

EXCERPT MINUTES OF COUNCIL MEETING.

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 14, 1927, at 4 p.m.*

Prof. W. W. WATTS, F.R.S., President, in the Chair.

The deaths of Prof. Gustav von Tschermak, Honorary Member, and of Dr. Richard Pearce and Dr. Jorge Belmiro Araujo Ferraz, Ordinary Members, were announced. The Foreign Secretary was instructed to send a letter of sympathy to the family of Prof. Tschermak.

The following were provisionally elected Ordinary Members of the Society: Mr. Nérée Boubée, Lieut.-Colonel Basil Elmsley Coke, Miss Gertrude Lilian Elles, Mr. Charles Stansfield Hitchen, Mr. Charles Mathews, and Dr. Charles Taylor Trechmann.

The following changes in the list of Officers and Council were approved for recommendation to the Members of the Society: President—Dr. G. T. Prior, in place of Prof. W. W. Watts; Vice-President—Sir John S. Flett, in place of Prof. Harold Hilton; General Secretary—Mr. W. Campbell Smith, in place of Dr. G. T. Prior; Ordinary Members of Council—Mr. A. J. Bull, Prof. C. G. Cullis, Prof. Harold Hilton, and Dr. W. F. P. McLintock, in place of the four retiring Members of Council, Mr. A. F. Hallimond, Mr. J. A. Howe, Mr. W. Campbell Smith, and Dr. C. E. Tilley.

It was decided to hold four meetings next year on the following dates: Tuesdays, January 17, March 20, June 12, and November 6, 1928.

GENERAL MEETING.

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 14, 1927, at 5.30 p.m.*

Prof. W. W. WATTS, F.R.S., President, in the Chair.

Twenty-eight Members and three Visitors were present.

The elections of Mr. N. Boubée, Lieut.-Colonel B. E. Coke, Miss G. L. Elles, Mr. C. S. Hitchen, Mr. C. Mathews, and Dr. C. T. Trechmann as Ordinary Members of the Society were confirmed.

A kinematograph film, which had been taken by Dr. Harry von Eckermann of episodes during the Northern Excursion of the Jubilee Celebrations in 1926, was shown on the screen.

The following papers were then read :—

1. On the atomic volume relations in certain isomorphous series: by Mr. A. F. Hallimond (p. 277).
2. Petrology of the Bodmin Moor granite (eastern part), Cornwall: by Dr. P. K. Ghosh (p. 285).
3. On the distribution of purple zircon in British sedimentary rocks: by Prof. P. G. H. Boswell (p. 310).
4. On β -quartz twins from some Cornish localities: by Dr. J. Drugman (p. 366).
5. The separation of manganese in rock analysis: by Mr. E. V. Holt and Dr. H. F. Harwood (p. 318).
6. Corundum twins from Transvaal: by Dr. L. J. Spencer (p. 329).
Specimens were exhibited by Dr. Drugman in illustration of his paper.

EXCERPT MINUTES OF COUNCIL MEETING.

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 1, 1927, at 4 p.m.*

Prof. W. W. WATTS, F.R.S., President, in the Chair.

The death of Prof. Archibald Liversidge, one of the earliest members of the Society, was announced, and the Secretary was instructed to send a letter of sympathy to his sister, Mrs. C. S. Balfern.

Mr. Frederick Allan Bannister and Mr. William Richard Storr were provisionally elected Ordinary Members of the Society.

The Treasurer reported the receipt of a legacy of £200 (less duty) bequeathed to the Society under the Will of the late Sir William Phipson Beale, Bart., Past-President, who died in April 1922. This bequest became payable on the death of Lady Beale, which occurred in January last.

Dr. H. H. Thomas and Mr. H. Dewey were appointed auditors of the accounts for the year ending December 31, 1927.

The draft Annual Report of Council submitted by the Secretary was read and approved.

GENERAL (ANNIVERSARY) MEETING.

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 1, 1927, at 5.30 p.m.*

Prof. W. W. WATTS, F.R.S., and later Dr. G. T. PRIOR, F.R.S., President,
in the Chair.

Twenty-five Members and five Visitors were present.

The President nominated Prof. W. G. Fearnside and Mr. J. Broadhead to act as scrutineers of the voting-papers for the election of Officers and Council. The scrutineers reported that forty-one voting-papers had been returned to the Secretary, and that the list as nominated by the Council was approved, namely:—

President. Dr. G. T. Prior, M.A., D.Sc., F.R.S.

Vice-Presidents. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., D.Sc.,
F.R.S.

Sir John S. Flett, K.B.E., M.A., LL.D., D.Sc.,
F.R.S.

Treasurer. F. N. Ashcroft, M.A., F.G.S., F.C.S.

General Secretary. W. Campbell Smith, M.C., M.A., F.G.S.

Foreign Secretary. J. W. Evans, C.B.E., D.Sc., LL.B., F.R.S.

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

Ordinary Members of Council.

Prof. P. G. H. Boswell, O.B.E., D.Sc., F.G.S.	H. F. Harwood, M.Sc., Ph.D., A.I.C.
T. Crook, A.R.C.Sc.I., F.G.S.	G. F. Herbert Smith, M.A., D.Sc., F.G.S.
L. Hawkes, D.Sc., F.G.S.	A. J. Bull, M.Sc., F.Inst.P., F.G.S.
H. H. Thomas, M.A., Sc.D., F.R.S.	Prof. C. G. Cullis, D.Sc., F.G.S.
Prof. H. L. Bowman, M.A., D.Sc., F.G.S.	Prof. Harold Hilton, M.A., D.Sc.
Prof. W. T. Gordon, M.A., D.Sc., F.R.S.E.	W. P. F. McLintock, D.Sc., F.G.S.

The elections of Mr. F. A. Bannister and Mr. W. R. Storr as Ordinary Members of the Society were confirmed.

A vote of thanks to the Geological Society for the use of their rooms, proposed by Dr. Tutton and seconded by Mr. Arthur Russell, was carried.

The General Secretary then read the following

ANNUAL REPORT OF COUNCIL.

During the Session 1926-7 four ordinary meetings have been held, by kind permission, in the apartments of the Geological Society, Burlington House, London, W., at which seventeen papers were read. An interesting feature of the June meeting was the exhibition of a kinematograph film, which had been taken by Dr. Harry von Eckermann, of episodes during the Northern Excursion of the Jubilee Celebrations in 1926.

Four numbers of the Journal (nos. 115-118), containing eighteen papers and 614 abstracts, have been issued quarterly. No. 115 for December, 1926, is the Jubilee Number, and contains a detailed account of the Jubilee Celebrations, including the Presidential Address dealing with the fifty years work of the Society. During the Session has been published also the General Index to vols. XI-XX (1895-1925), for the compilation of which the Society has once more to express its great indebtedness to the Editor. It is preceded by a Topographical Index and contains the 1506 mineral names which have appeared in Dr. Spencer's ten 'Lists of new mineral names.' An album to contain the letters and addresses of congratulation, &c., on the occasion of the Jubilee has been presented to the Society by Mr. F. N. Ashcroft.

The balance-sheet for the year ending December 31, 1926, showed that the financial position of the Society was sound. The assets (exclusive of the Library and stock of the publications) amounted to £1,574 18s. 9d., with no liabilities. The value of the stock invested in the names of the Trustees of the Society was on that date £1,256 3s. 9d., corresponding to £24 12s. 0½d. for each Life-Member. A sum of £100 was granted by the Royal Society from the Government Publication Fund in aid of the publication of 'Mineralogical Abstracts'. On the death of Lady Beale this year the Society received the £200 (less duty) legacy bequeathed by Sir William Beale.

During the Session the Society has lost by resignation, one Ordinary Member; by removal for non-payment of subscription, one Ordinary Member; and by death, one Honorary Member, viz. Prof. Gustav von Tschermak, and three Ordinary Members, viz. Dr. Jorge Belmiro Araujo Ferraz, Prof. Archibald Liversidge, and Dr. Richard Pearce. Three Honorary Members and sixteen Ordinary Members have been elected. The total number of Members on October 31, 1927, was 202, of whom twelve are Honorary. Of the Ordinary Members fifty-one are Life-Members.

During the Session Dr. Prior has continued to represent the Society on the Federal Council of Pure and Applied Chemistry, and Dr. Spencer and Dr. Herbert Smith on the 'Publications' and 'Miscellaneous' Committees respectively of the Imperial Institute.

The Council has to congratulate the Society on its continued scientific activity and prosperity.

On the motion of Mr. F. H. Butler, seconded by Mr. R. A. A. Johnston, the Report was adopted.

Before vacating the Chair, Prof. Watts made reference to the eighteen years' service of the retiring Secretary, to which Dr. Prior, on taking the Chair, replied.

The following papers were then read :—

1. Specific gravities of minerals: an index of some recent determinations; by Dr. L. J. Spencer (p. 337).

2. South African occurrences of willemite. Fluorescence of willemite and some other zinc minerals in ultra-violet rays: by Dr. L. J. Spencer (p. 388).

3. A study of bauxite: by Dr. T. V. M. Rao (p. 407).

4. On the biotite-bearing greenstones and on a rhyolitic pumice in the metamorphic aureole of the Falmouth granite: by Dr. P. K. Ghosh (p. 436).

In illustration of his paper Dr. Spencer demonstrated the striking luminescent effects shown by willemite, fluorite, and some other minerals when exposed to ultra-violet rays in the 'analytic quartz lamp', kindly lent for the occasion by the British Hanovia Quartz Lamp Co., Ltd.

MINERALOGICAL

ABSTRACT OF RECEIPTS AND PAYMENTS

	RECEIPTS.			GENERAL PUR-		
	£	s.	d.	£	s.	d.
By Balance brought forward from 1926—						
1. At Bankers:						
(a) Current Account		9	13 3			
(b) Deposit Account	100	0	0			
2. In Office		0	7 9			
				110	1	0
Annual Subscriptions—						
1. Current year	134	8	0			
2. Arrears	10	10	0			
3. Advance	8	10	11 ¹			
				153	8	11
Entrance Fees				13	13	0
Composition Fees				78	15	0
Sale of Publications—						
1. By Publishers:						
(a) Simpkin, Marshall, Hamilton, Kent & Co., Jan.–Feb. 1926 (£30 0s. 0d., less trade discount and commission £3 15s. 0d.)	26	5	0 ²			
(b) Oxford University Press, April 1, 1926– March 31, 1927 (Subscription Copies £262 0s. 0d., and other sales £170 1s. 6d., less trade discount and com- mission £122 3s. 10d., and postage and packing £8 1s. 3d.)	301	16	5 ²			
2. By Custodian of Stock, 1927 (£37 14s. 3d., less trade discount £3 9s. 11d., and distribution charges £1 3s. 11d.)	33	0	5			
				361	1	10
Advertisement Fees (£17 10s. 6d., less commission £3 10s. 1d.)				14	0	5
Interest on Investments—						
1. £1,505 5% War Loan 1929–47 Inscribed Stock	63	5	0			
2. £105 4% Consolidated Loan 1957 Inscribed Stock	2	2	0			
3. £50 4% Funding Loan 1960–90 Inscribed Stock	2	0	0			
4. £50 5% War Bonds 1927 Registered	0	16	10			
				68	3	10 ³
Deposit Interest				7	6	0
Small Receipts				0	3	0
Bequest under the Will of the late Sir William P. Beale, Bart., Past-President (£200, less Legacy Duty £20)				180	0	0
Transferred from Jubilee Entertainment Fund Account (final in- stalment)				7	19	11
				£994	12	11

¹ Includes a part payment.² Vide note following the Balance-sheet.³ Except in the case of the 5% War Bonds which were converted into £62 2s. 6d. 4% Consolidated Stock in February, 1927, the holdings shown are those on December 31, 1927, not those on which interest was received.

SOCIETY.

FOR THE YEAR ENDING DECEMBER 31, 1927.

POSES ACCOUNT.

PAYMENTS.		£	s.	d.	£	s.	d.
To Printing and distributing the Mineralogical Magazine Nos. 116-119 inclusive (Oxford University Press)—							
1. Printing		284	8	6			
2. Illustrations		31	8	6			
3. Authors' Copies		26	18	6			
6. Distribution Charges		12	4	0			
					354	19	6
Miscellaneous Printing (not annual)—							
1. Prospectus (including distribution charges)		26	17	6			
2. Notices <i>re</i> special numbers of the Magazine		0	13	6			
3. Sheets of printed numbers and letters for Editor (stock of)		0	15	0			
					28	6	0
Printing and distributing notices of Meetings and other annual miscellaneous printing					14	12	6
Expenses at Meetings, 1927—							
1. Operator of lantern		2	2	0			
2. Porter		1	0	0			
3. Hire of Kinematograph Projector (including Operator)		2	12	6			
					5	14	6
Care of Stock of Publications, 1927 (J. Mugford)					1	1	0
Editor's Honorarium					25	0	0
Postage—							
1. Hon. Secretary		0	8	4			
2. Editor		2	4	0			
3. Hon. Treasurer (not charged)							
					2	12	4
Stationery (renewal of stock of)					2	3	6
Bank charges and other small items					0	1	6
Investments (including composition fees and the bequest received during the year), purchase of £855 5% War Loan Inscribed Stock and £42 17s. 6d. 4% Consolidated Loan Inscribed Stock, commissions and stamps							
					401	4	0
Balance, December 31, 1927—							
1. At Bankers :							
(a) Current Account		18	14	10			
(b) Deposit Account		140	0	0			
2. In Office		0	3	3			
					158	18	1
					£994	12	11

Examined and compared with vouchers and found correct.

HENRY DEWEY }
 HERBERT H. THOMAS } Auditors.
 F. N. ASHCROFT, Hon. Treasurer.

January 4, 1928.

RECEIPTS.		LIBRARY FUND	
		£	s. d.
By Balance brought forward from 1926 —			
At Bankers		13	9 0
		<hr/>	
		£13	9 0
		<hr/>	

BALANCE

LIABILITIES.		DECEMBER	
		£	s. d.

Excess of Assets over Liabilities	1961	19	7
	<hr/>		
	£1961	19	7
	<hr/>		

ACCOUNT.

	PAYMENTS.	£	s.	d.
To Binding of Periodicals		6	10	0
Balance, December 31, 1927—				
At Bankers		6	19	0
		<u>£13</u>	<u>9</u>	<u>0</u>

Examined and compared with vouchers and found correct.

January 4, 1928. HENRY DEWEY
HERBERT H. THOMAS } Auditors.
F. N. ASHCROFT, Hon. Treasurer.

SHEET.

31, 1927.

	ASSETS.	£	s.	d.	£	s.	d.
Balances—							
I. General Purposes Account:							
1. At Bankers:							
(a) Current Account		18	14	10			
(b) Deposit Account		140	0	0			
2. In Office		0	3	3			
					158	18	1
II. Library Fund Account:							
At Bankers					6	19	0
Sale of Publications—							
By Publishers, April 1 to Dec. 31, 1927							
(estimate)					120	0	0
Advertisement Fees (estimate)					15	0	0
Investments at Broker's Valuation—							
1. £1,505 5% War Loan Inscribed Stock at 101 $\frac{1}{4}$		1523	16	3			
2. £50 4% Funding Loan Inscribed Stock at 88 $\frac{1}{4}$		44	2	6			
3. £105 4% Consolidated Loan Inscribed Stock							
at 85 $\frac{3}{4}$ ¹		90	0	9			
					1657	19	6
Arrears of Annual Subscriptions, valued at					3	3	0
					<u>£1961</u>	<u>19</u>	<u>7</u>

The Stock of Publications and the value of the Library are not included in the above assets.

January 11, 1928.

F. N. ASHCROFT, Hon. Treasurer.

¹ Ex dividend payable February 1, 1928.

NOTE RE SALE OF PUBLICATIONS.

The Accounts for the past year have been materially affected by the change in the Society's publishers (which took place early in 1926), owing to the institution at that time of a subscription rate for the four numbers issued each year, and to the new publishers' financial year ending on March 31 instead of on December 31. Some explanation, therefore, of the figures for the sales by the publishers seems required.

Under the new scheme all payments at the subscription rate are received by the publishers in advance, and very largely during the first three months of the year. This means an antedating of the Society's receipts from that source, with the result that last year the Society received the proceeds of such payments for the numbers issued during both 1926 and 1927¹ at the same time (Item, Sale of Publications 1*b* in the Accounts). Stated in figures the net receipts during 1927 were thus greater than they would otherwise have been by from £95 to £100. The position is now stabilized and this duplication will not recur.

The estimates of the receipts from sales by the publishers given in the Balance Sheets have also been affected. Prior to the change, as in the Balance Sheet for December 31, 1925, the figure therefor was the amount expected to be received from the publishers during 1926 for sales effected during 1925, and also represented the total the Society would receive during the year from that source. On the other hand, the estimate in the Balance Sheet for December 31, 1927, relates to the publishers' receipts from ordinary sales and at the subscription rate during the period April 1-December 31, 1927, in addition to which the Society will receive during the year the receipts from these sources for the period January 1-March 31, 1928.

F. N. ASHCROFT, Hon. Treasurer.

¹ Exclusive of subscription payments received by the publishers after March 31, 1927.

JUBILEE ENTERTAINMENT (VOLUNTARY) FUND ACCOUNT.

Abstract of Receipts and Payments during 1927.

RECEIPTS.	£	s.	d.	PAYMENTS.	£	s.	d.
By Balance brought forward				To Expenditure	7	8	2
from 1926	15	8	1	Transferred to the General			
				Purposes Account	7	19	11
	£15	8	1		£15	8	1

Examined and compared with vouchers and found correct.

February 18, 1927.

W. F. P. McLINTOCK } Auditors.
A. F. HALLIMOND }
F. N. ASHCROFT, Hon. Treasurer.

NOTE.—A detailed statement was issued to the subscribers to the Fund when the account was closed on February 18, 1927.