# MINERALOGICAL SOCIETY OF AMERICA PROCEEDINGS FOR 1944

C. S. Hurlbut, Jr., Secretary.

Because of the situation created by the war no meeting of the Mineralogical Society of America was held in 1944, nor was there a meeting of the Council of the Society. However, arrangements were made to hold a meeting of the Council in New York City in February 1945.

The various reports of the officers of the Society for the year 1944 are submitted herewith together with abstracts of two papers presented by title.

ELECTION OF OFFICERS AND FELLOWS FOR 1945.

REPORTS OF THE SECRETARY, EDITOR, TREASURER AND AUDITING COMMITTEE.

LIST OF FORMER OFFICERS AND MEETING PLACES OF THE SOCIETY.

CORRESPONDENTS, FELLOWS, MEMBERS, AND SUBSCRIBERS OF THE MINERALOGICAL SOCIETY OF AMERICA.

# ABSTRACTS OF PAPERS PRESENTED BY TITLE Nepheline Syenites of Wausau, Wisconsin

R. C. EMMONS, University of Wisconsin, Madison, Wisconsin.

The area in which the nepheline occurs is one in which the roof of the Wisconsin batholith is truncated by the erosion surface and is characterized by alternating roof pendants and cupolas. Some of the cupolas are areas of aplite and one is an area of syenite aplite, several miles across. This syenite aplite is sheared along definite fault lines of parallel trend. These faults are intruded by igneous material which is apparently refused syenite aplite. The intrusive material is syenite and nepheline syenite. Some of these dike rocks carry commercial quality nepheline and feldspar.

## Groutite, HMnO2, a New Mineral of the Diaspore-Goethite Group

JOHN W. GRUNER, University of Minnesota, Minneapolis, Minnesota.

This new manganese mineral occurs in vugs in the iron ores of the Cyuna range in Minnesota. Beautiful groups of crystals have been obtained. The crystals are flattened normal to c, and the faces are usually rounded, resulting in wedge- or lens-shaped individuals. The zone [001] is striated. Axial ratio a:b:c=0.4262:1:0.2663. Unit cell,  $a_0=4.56\text{\AA}$ ,  $b_0=10.70\text{\AA}$ ,  $c_0=2.85\text{\AA}$ . The cleavage is very perfect parallel to  $\{010\}$ , less so parallel to  $\{100\}$ . G.=4.14, theoretical density=4.172. Color, jet black; Streak, dark brown. The luster is splendent submetallic to adamantine. Pleochroism is strong. The mineral has been named in honor of Professor Frank F. Grout.

#### ELECTION OF OFFICERS AND FELLOWS FOR 1945

There were 369 ballots cast for officers of the Society as nominated by the Council. The following were elected:

President: K. K. Landes, University of Michigan, Ann Arbor, Michigan.

Vice-President: George Tunell, Geophysical Laboratory, Washington, D. C.

Secretary: C. S. Hurlbut, Jr., Harvard University, Cambridge, Massachusetts.

Treasurer: Earl Ingerson, Geophysical Laboratory, Washington, D. C.

Editor: Walter F. Hunt, University of Michigan, Ann Arbor, Michigan.

Councilor, 1945-1948: R. E. Grim, Illinois Geological Survey, Urbana, Illinois.

Councilor, 1945-1946: Michael Fleischer, U. S. Geological Survey, Washington, D. C.

According to the provisions of the constitution, the following have been elected to fellowship:

Barnes, Virgil E., University of Texas, Austin, Texas.

Goddard, Edwin N., U. S. Geological Survey, Washington, D. C.

Hutton, Colin Osborne, Geological Survey of New Zealand, Wellington, New Zealand.

Lemmon, Dwight M., U. S. Geological Survey, Washington, D. C.

Nagelschmidt, Gunther, Rothamsted Experimental Station, Harpenden, England.

Park, Charles Frederick, Jr., U. S. Geological Survey, Washington, D. C.

Phemister, Thomas Crawford, University of Aberdeen, Aberdeen, Scotland

Switzer, George, Yale University, New Haven, Connecticut.

Wahlstrom, Ernest E., University of Colorado, Boulder, Colorado.

Wayland, Russell G., Army and Navy Munitions Board, Washington, D. C.

#### REPORT OF THE SECRETARY FOR 1944

To the Council of the Mineralogical Society of America:

	1943	1944	Gain	Loss
Correspondents	6	6		_
Fellows	209	211	10	8
Members	462	522	88	28
Subscribers	288	313	32	7
	-		( <del>) - ()</del>	-
	965	1052	130	43

A net gain of 2 fellows, 60 members and 25 subscribers gives a total gain for 1944 of 87 This substantial gain gives a grand total of 1052, the highest since the founding of the Society and the second time it has passed the 1000 mark. The closest approach was 1042 in 1939. This increase is remarkable for it has taken place despite the many dislocations brought about by the war.

The Society lost through death the following eight fellows during 1944:

Harry Berman George L. English Edward B. Mathews Benjamin L. Miller Frank C. Schrader George Steiger Ellis Thomson Roger C. Wells

This is the largest number of fellows to have died in any one year in the history of the Society. Their loss will be felt keenly, for many of them had been extremely active.

In the spring of 1944 Paul F. Kerr resigned from the Secretaryship of the Society, an office he had held faithfully for a decade. The Society owes Professor Kerr a debt of gratitude for so ably performing the duties of Secretary during that time. Cornelius S. Hurlbut, Jr. was appointed by the Council to complete the unexpired term of Professor Kerr. Even though out of office, Professor Kerr has been most helpful to the present Secretary in tutoring him in his duties.

Respectfully submitted,

C. S. HURLBUT, JR., Secretary

## REPORT OF THE EDITOR FOR 1944

To the Council of the Mineralogical Society of America:

As indicated in the editor's report of a year ago, due to the diversion of much of our man power to efforts pertaining either directly or indirectly to the war, and the consequent decrease in the number of manuscripts received, it became necessary, as an emergency measure, to issue the Journal bimonthly instead of monthly.

During 1944 we have continued this policy as the causes which made the change necessary in 1943 still exist. The partial drying up of our usual sources of manuscript supply is responsible for the reduced size of the current volume as the material received during 1944 was considerably less than that sent in the preceding year. Every effort will be made in 1945 to continue the Journal on a bimonthly basis and from present indications there is some assurance that this can be done.

Dr. Frondel, director of research at the Reeves Sound Laboratories, has suggested that an issue might be devoted exclusively to a symposium on quartz oscillator-plates. He is in a unique position to assemble a group of papers dealing with this interesting and very important industry. Such an issue, according to present plans, would probably run several times the size of a normal issue and contain more than the usual number of illustrations. Outside financial assistance would be forth-coming due to the size and unusual character of this special number.

A valid criticism that might be made, especially with reference to certain issues of 1944, was the lack of sufficient diversity in the types of articles selected. Keeping in mind the wide interests and training of our large membership, papers of a varied character seem highly desirable in each issue in order to hold the interest of the largest possible number of readers. But when material is limited, as it was during the current year, selection must be confined to what is on hand and an unbalanced number is likely to result. A larger stock pile to draw upon would be the best remedy for this condition.

Recognition and appreciation is here again expressed for the financial assistance received during the year from the Geological Society of America to help defray publication costs.

In an analysis of the Journal for 1944 we find that volume 29 contains 456 pages, exclusive of index. This represents a substantial decrease in size compared with the volume of the previous year, in fact it is the smallest volume issued by the Society since 1927. Leading articles, which number 29, occupy approximately 83% of the total space of the Journal. Table 1 which accompanies this report indicates the distribution of the leading articles in the eight fields listed. It may be of some interest to point out the increasing activity in the field of structural crystallography and that the number of these articles published in the Journal in 1944 surpassed all others. If to the main articles we add six shorter papers appearing under the heading of Notes and News, we obtain a total of 35 published manuscripts for the calendar year. These contributions were received from forty contributors associated with twenty-six different universities, research bureaus and technical laboratories. The Journal for 1944 carries detailed descriptions of four new minerals: hydrotungstite, mackayite, blakeite and minnesotaite. One hundred and twenty-one illustrations of various types assist in clarifying the descriptive portions of the text. As in previous years a number of manuscripts were received from sources beyond our borders and in 1944 we printed seven of such contributions.

The accompanying table of contents summarizes in detail the subject matter in volume 29.

Table 1. Distribution of Subject Matter in Volume 29

Subjects	Articles	Pages	Per Cent of Total
Leading articles			
Descriptive mineralogy	4		
Chemical mineralogy	5		
Structural crystallography	9		
Geometrical crystallography	3		
Petrography	3		
Optical mineralogy	2		
Mineralography	1		
Memorials	2		
	29	377.5	82.8
Short articles	6	20.5	
Notes and news	24	6.5	
Abstracts of new mineral names	36	5.0	17.2
Proceedings of societies	13	35.0	
Book reviews	10	11.5	
	0.000		
Total entries	118	456.0	100.0
Illustrations	121		
Index, Title page, Table of contents		8.0	
Grand total		464.0	
	Respectfully submitted		

Respectfully submitted,

WALTER F. HUNT, Editor

# REPORT OF THE TREASURER FOR 1944

To the Council of the Mineralogical Society of America:

Your treasurer submits herewith his annual report for the year beginning December 1, 1943, and ending November 30, 1944.

Receipts	
Cash on hand December 1, 1943	\$ 4,317.86
Dues and subscriptions	3,352.29
Sale of back numbers	523.89
Authors' charges on separates	260.22
Sale of 20-volume index	8.66
Interest and dividends from endowment	2,788.40
Partial payments on principal of Trenton Mortgage Service Company's pre-	
ferred stock	242.57
Geological Society of America Grant for 1944	1,615.26
Advertisements	214.87
Aid in publishing long papers	75.00
Honolulu Water Bonds called	45,000.00
Refund on postage	.30

\$58,399.32

DISBURSEMENTS	
Printing and distribution of the Journal (6 issues)	\$ 3,416.11
Printing and distribution of separates	360.85
To the Editor, Secretary, and Treasurer	970.00
Postage	138.61
Printing and stationery	96.92
Office equipment	.80
Clerical help	276.14
Committee expenses	3.22
Safety deposit box	9.60
Check returned	3.00
Roebling Medal	121.00
New securities purchased	47,331.88
Broker's commission on securities	134.74
Accrued interest on bonds bought	348.51
Postage on securities	9.20
Tax on securities	8.10
	\$53,228.68
Cash balance November 30, 1944	5,170.64
	\$58,399.32
The endowment tunds of the Society as of November 30, 1044, consist of	
The endowment funds of the Society as of November 30, 1944, consist of securities:	the following
securities: Bonds	
securities: Bonds $ 6M \   \text{Atlantic Coast Line, } 4\tfrac{1}{2}\%. $	\$ 5,257.50
securities:  Bonds  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .	\$ 5,257.50 5,190.63
securities:  Bonds  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .	\$ 5,257.50 5,190.63 3,887.50
securities:  BONDS  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .	\$ 5,257.50 5,190.63 3,887.50 5,743.75
securities:  BONDS  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .  5M Cleveland Union Terminal, $5\%$ .	\$ 5,257.50 5,190.63 3,887.50
securities:  BONDS  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75
securities:  Bonds  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .  5M Cleveland Union Terminal, $5\%$ .  4C Great Northern Railway, $5\frac{1}{2}\%$ .  PREFERRED STOCKS	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00
BONDS  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .  5M Cleveland Union Terminal, $5\%$ .  4C Great Northern Railway, $5\frac{1}{2}\%$ .  PREFERRED STOCKS  55 shares, U. S. Steel, $7\%$ .	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20
BONDS  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .  5M Cleveland Union Terminal, $5\%$ .  4C Great Northern Railway, $5\frac{1}{2}\%$ .  PREFERRED STOCKS  55 shares, U. S. Steel, $7\%$ 50 shares, Union Pacific, $4\%$	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00
BONDS  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .  5M Cleveland Union Terminal, $5\%$ .  4C Great Northern Railway, $5\frac{1}{2}\%$ .  PREFERRED STOCKS  55 shares, U. S. Steel, $7\%$ 50 shares, Union Pacific, $4\%$ 50 shares, Virginia Electric & Power Co., $5\%$	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20 4,570.25
securities:  BONDS  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .  5M Cleveland Union Terminal, $5\%$ .  4C Great Northern Railway, $5\frac{1}{2}\%$ .  PREFERRED STOCKS  55 shares, U. S. Steel, $7\%$ 50 shares, Union Pacific, $4\%$ 50 shares, Virginia Electric & Power Co., $5\%$ 10 shares, Consolidated Edison, $5\%$	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20 4,570.25 5,942.50
securities:  BONDS  6M Atlantic Coast Line, 4½%  5M U. S. Treasury, 2½%  5M Illinois Central, 4%  5M Southern Railway, 5%  5M Cleveland Union Terminal, 5%  4C Great Northern Railway, 5½%  PREFERRED STOCKS  55 shares, U. S. Steel, 7%  50 shares, Union Pacific, 4%  50 shares, Virginia Electric & Power Co., 5%  10 shares, Consolidated Edison, 5%  5 shares, Public Service of New Jersey, 8%	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20 4,570.25 5,942.50 1,066.64
securities:  BONDS  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .  5M Cleveland Union Terminal, $5\%$ .  4C Great Northern Railway, $5\frac{1}{2}\%$ .  PREFERRED STOCKS  55 shares, U. S. Steel, $7\%$ 50 shares, Union Pacific, $4\%$ 50 shares, Virginia Electric & Power Co., $5\%$ 10 shares, Consolidated Edison, $5\%$	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20 4,570.25 5,942.50 1,066.64 702.00
BONDS  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .  5M Cleveland Union Terminal, $5\%$ .  4C Great Northern Railway, $5\frac{1}{2}\%$ .  PREFERRED STOCKS  55 shares, U. S. Steel, $7\%$ 50 shares, Union Pacific, $4\%$ 50 shares, Virginia Electric & Power Co., $5\%$ 10 shares, Consolidated Edison, $5\%$ 5 shares, Public Service of New Jersey, $8\%$ 37 514/1000 shares, Trenton Mortgage Service Co	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20 4,570.25 5,942.50 1,066.64 702.00
Bonds  6M Atlantic Coast Line, 4½%  5M U. S. Treasury, 2½%  5M Illinois Central, 4%  5M Southern Railway, 5%  5M Cleveland Union Terminal, 5%  4C Great Northern Railway, 5½%  PREFERRED STOCKS  55 shares, U. S. Steel, 7%  50 shares, Union Pacific, 4%  50 shares, Virginia Electric & Power Co., 5%  10 shares, Consolidated Edison, 5%  5 shares, Public Service of New Jersey, 8%  37 514/1000 shares, Trenton Mortgage Service Co  COMMON STOCK  50 shares, Chesapeake & Ohio Railway  50 shares, Pennsylvania Railroad	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20 4,570.25 5,942.50 1,066.64 702.00 2,209.62
Bonds  6M Atlantic Coast Line, 4½%  5M U. S. Treasury, 2½%  5M Illinois Central, 4%  5M Southern Railway, 5%  5M Cleveland Union Terminal, 5%  4C Great Northern Railway, 5½%  PREFERRED STOCKS  55 shares, U. S. Steel, 7%  50 shares, Union Pacific, 4%  50 shares, Virginia Electric & Power Co., 5%  10 shares, Consolidated Edison, 5%  5 shares, Public Service of New Jersey, 8%  37 514/1000 shares, Trenton Mortgage Service Co  Common Stock  50 shares, Chesapeake & Ohio Railway  50 shares, Pennsylvania Railroad  25 shares, Standard Oil of New Jersey.	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20 4,570.25 5,942.50 1,066.64 702.00 2,209.62
Bonds  6M Atlantic Coast Line, $4\frac{1}{2}\%$ .  5M U. S. Treasury, $2\frac{1}{2}\%$ .  5M Illinois Central, $4\%$ .  5M Southern Railway, $5\%$ .  5M Cleveland Union Terminal, $5\%$ .  4C Great Northern Railway, $5\frac{1}{2}\%$ .  PREFERRED STOCKS  55 shares, U. S. Steel, $7\%$ 50 shares, Union Pacific, $4\%$ 50 shares, Virginia Electric & Power Co., $5\%$ 10 shares, Consolidated Edison, $5\%$ 5 shares, Public Service of New Jersey, $8\%$ 37 514/1000 shares, Trenton Mortgage Service Co  COMMON STOCK  50 shares, Chesapeake & Ohio Railway	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20 4,570.25 5,942.50 1,066.64 702.00 2,209.62 2,368.75 1,468.75
Bonds  6M Atlantic Coast Line, 4½%  5M U. S. Treasury, 2½%  5M Illinois Central, 4%  5M Southern Railway, 5%  5M Cleveland Union Terminal, 5%  4C Great Northern Railway, 5½%  PREFERRED STOCKS  55 shares, U. S. Steel, 7%  50 shares, Union Pacific, 4%  50 shares, Virginia Electric & Power Co., 5%  10 shares, Consolidated Edison, 5%  5 shares, Public Service of New Jersey, 8%  37 514/1000 shares, Trenton Mortgage Service Co  Common Stock  50 shares, Chesapeake & Ohio Railway  50 shares, Pennsylvania Railroad  25 shares, Standard Oil of New Jersey.	\$ 5,257.50 5,190.63 3,887.50 5,743.75 5,068.75 400.00 6,946.20 4,570.25 5,942.50 1,066.64 702.00 2,209.62 2,368.75 1,468.75 1,356.25

Note: The 45 \$1,000 Honolulu Water Works Bonds were called on August 24, 1944.

Respectfully submitted,

EARL INGERSON, Treasurer

## REPORT OF THE AUDITING COMMITTEE

To the President of the Mineralogical Society of America:

The Auditing Committee has examined and verified the accounts of the Treasurer of the Mineralogical Society of America, for the fiscal year ending November 30, 1944. The securities listed in the Treasurer's report, with all future coupons on the coupon bonds attached, are in the safety deposit box at the Friendship Branch of the Riggs National Bank of Washington, D. C.

Respectfully submitted,

GEORGE T. FAUST, Chairman JOSEPH J. FAHEY GEORGE PHAIR

## DANA FUND

No disbursements made during the fiscal year 1944. Interest received = \$9.22. Available balance, November 30, 1944 = \$934.07.

Respectfully submitted,

WALDEMAR T. SCHALLER

The Mineralogical Society of America held a luncheon at the Pennsylvania Hotel in New York City on Tuesday, February 20, 1945, the occasion being the presentation of the Roebling Medal to Professor Edward H. Kraus, Dean of the College of Literature, Science and the Arts at the University of Michigan. This luncheon was attended by about 50 members and friends of the Society. Following the luncheon the Council held a business meeting at which the reports for 1944 were presented and matters of general welfare of the Society discussed.

On February 20, 1945, the Council of the Mineralogical Society of America voted to suspend for the duration of the war the dues of fellows and members in the armed forces with the understanding that *The American Mineralogist* will not be sent to them during this time.

C. S. HURLBUT, JR., Secretary

# LIST OF FORMER OFFICERS AND MEETING PLACES

By recommendation of the Council, a complete list of past officers is printed in the proceedings of the annual meeting of the Society:

#### PRESIDENTS

1920 Edward H. Kraus

1922 Thomas L. Walker

1924 Henry S. Washington

1926 Waldemar T. Schaller

1923 Edgar T. Wherry

1925 Arthur S. Eakle

1927 Austin F. Rogers

1929 Arthur L. Parsons

1930 Herbert E. Merwin

1931 Alexander H. Phillips

1933 Herbert P. Whitlock

1934 John E. Wolff

1938 Ellis Thomson

1939 Max N. Short

1935 Clarence S. Ross

1936 William S. Bayley

1937 Norman L. Bowen

1940 William F. Foshag

1943 John F. Schairer

1944 R. C. Emmons

1941 Frederick E. Wright

1942 Arthur F. Buddington

1932 Alexander N. Winchell

1928 Esper S. Larsen

1921 Charles Palache

Thomas L. Walker Waldemar T. Schaller

VICE-PRESIDENTS

Frederick A. Canfield George F. Kunz

Washington A. Roebling

Herbert P. Whitlock George Vaux, Jr.

George L. English Lazard Cahn

Edward Wigglesworth

John E. Wolff
William F. Foshag
Joseph L. Gillson
Frank N. Guild
William A. Tarr
Ellis Thomson
Harold L. Alling
H. V. Ellsworth

Kenneth K. Landes Burnham S. Colburn

Ian Campbell

William J. McCaughey Martin J. Buerger

John W. Gruner

Harry Berman

#### SECRETARIES

1920–1922 Herbert P. Whitlock 1923–1933 Frank R. Van Horn 1933–1934 Albert B. Peck 1934–1944 Paul F. Kerr 1944– C. S. Hurlbut, Jr.

# TREASURERS

1920–1923 Albert B. Peck
 1924–1929 Alexander H. Phillips
 1929–1930 Albert B. Peck
 1931–1940 Waldemar T. Schaller
 1941– Earl Ingerson

#### EDITORS

1920–1921 Edgar T. Wherry 1922– Walter F. Hunt

#### Councilors

1920 Arthur S. Eakle, Frank R. Van Horn, Fred E. Wright, Alexander H. Phillips.

1921 Frank R. Van Horn, Fred E. Wright, Alexander H. Phillips, Austin F. Rogers.

1922 Fred E. Wright, Alexander H. Phillips, Austin F. Rogers, Thomas L. Watson.

1923 Alexander H. Phillips, Austin F. Rogers, Thomas L. Watson, Esper S. Larsen.

1924 Austin F. Rogers, Thomas L. Watson, Esper S. Larsen, Arthur L. Parsons.

1925 Thomas L. Watson, Esper S. Larsen, Arthur L. Parsons, William F. Foshag.

1926 Esper S. Larsen, Arthur L. Parsons, William F. Foshag, William A. Tarr.

1927 Arthur L. Parsons, William F. Foshag, William A. Tarr, Alexander N. Winchell.

1928 William F. Foshag, William A. Tarr, Alexander N. Winchell, Ellis Thomson.

1929 William A. Tarr, Alexander N. Winchell, Ellis Thomson, Clarence S. Ross.

1930 Alexander N. Winchell, Ellis Thomson, Clarence S. Ross, Paul F. Kerr.

1931 Ellis Thomson, Clarence S. Ross, Paul F. Kerr, William S. Bayley.

1932 Clarence S. Ross, Paul F. Kerr, William S. Bayley, William J. McCaughey.

1933 Paul F. Kerr, William S. Bayley, William J. McCaughey, Kenneth K. Landes.

1934 William S. Bayley, William J. McCaughey, Kenneth K. Landes, E. P. Henderson.

1935 William J. McCaughey, Kenneth K. Landes, E. P. Henderson, J. F. Schairer.

1936 Kenneth K. Landes, E. P. Henderson, J. F. Schairer, Arthur F. Buddington.

1937 E. P. Henderson, J. F. Schairer, Arthur F. Buddington, Arthur P. Honess.

1938 J. F. Schairer, Arthur F. Buddington, Arthur P. Honess, R. C. Emmons.

1939 Arthur F. Buddington, Arthur P. Honess, R. C. Emmons, Carl Tolman.

1940 Arthur P. Honess, R. C. Emmons, Carl Tolman, D. Jerome Fisher.

1941 R. C. Emmons, Carl Tolman, D. Jerome Fisher, Martin A. Peacock.

1942 Carl Tolman, D. Jerome Fisher, Martin A. Peacock, Adolf Pabst.

1943 D. Jerome Fisher, Martin A. Peacock, Adolf Pabst, C. S. Hurlbut, Jr.

1944 Martin A. Peacock, Adolf Pabst, Michael Fleischer, S. J. Shand.

## Annual Meeting Places

1920 Chicago, Illinois

1921 Amherst, Massachusetts

1922 Ann Arbor, Michigan

1923 Washington, D. C.

1924 Ithaca, New York

1925 New Haven, Connecticut

1926 Madison, Wisconsin

1927 Cleveland, Ohio

1928 New York, N. Y.

1929 Washington, D. C.

1930 Toronto, Canada

1931 Tulsa, Oklahoma

1932 Cambridge, Massachusetts

1933 Chicago, Illinois

1934 Rochester, New York

1935 New York, N. Y.

1936 Cincinnati, Ohio

1937 Washington, D. C.

1938 New York, N. Y.

1939 Minneapolis, Minnesota

1940 Austin, Texas

1941 Boston, Massachusetts

1942 No meeting held

1943 No meeting held

1944 No meeting held