Bulletin

of the

Geological Society of America

VOLUME 47. NUMBER 4

APRIL 30, 1936

PUBLISHED MONTHLY BY THE SOCIETY

COUNCIL · 1936

President

W. C. MENDENHALL, Washington, D. C.

Past President

NEVIN M. FENNEMAN, Cincinnati, Ohio

Vice Presidents

W. E. WRATHER
Dallas, Texas

GEORGE D. LOUDERBACK
Berkeley, Calif.

C. K. SWARTZ
Baltimore, Md.

C. S. ROSS
Washington, D. C.

Secretary

CHARLES P. BERKEY, 419 West 117 Street, New York, N. Y.

Treasurer

EDWARD B. MATHEWS, Johns Hopkins University, Baltimore, Md.

Councilors

(Term expires 1936)

F. W. DEWOLF
Urbana, Ill.

D. H. MCLAUGHLIN
Cambridge, Mass.

ADOLPH KNOPF
New Haven, Conn.

(Term expires 1937)

WALTER H. BUCHER
Cincinnati, Ohio

RUSSELL S. KNAPPEN
Tulsa, Okla.

E. L. BRUCE
Kingston, Ont., Canada

(Term expires 1938)

G. F. LOUGHLIN
Washington, D. C.

THOMAS L. WALKER
Toronto, Canada

JOSEPH STANLEY-BROWN
Kew Gardens, L. I., N. Y.

COMMITTEE ON PUBLICATIONS

ROLLIN T. CHAMBERLIN, *Chairman*

CHARLES P. BERKEY
(ex officio)

RAYMOND C. MOORE

JOSEPH T. SINGEWALD, JR.

BOARD OF EDITORS

CHARLES H. BEHRE, JR.
ELIOT BLACKWELDER
WILMOT H. BRADLEY
J HARLEN BRETZ

A. F. BUDDINGTON
BERT S. BUTLER
CARL O. DUNBAR
JAMES GILLULY

FRANK F. GROUT
CHESTER R. LONGWELL
JOHN L. RICH
WILLIAM H. TWENHOFEL

IN CHARGE OF PUBLICATIONS

CHARLES P. BERKEY, *Secretary*

H. R. ALDRICH, *Assistant Secretary, Editor-in-chief*

H. R. FAIRBANKS, *Managing Editor*