

in Denver in April. The publication is profusely illustrated with figures, plates, and a 24"×28" index map of the state, showing major geologic structure and significant oil and gas information. Well-known geologists from the consulting and educational fields and from the U. S. Geological Survey have contributed authoritative articles, and in addition there are discussions of the areas in which the field trips were made. The guidebook, which may be obtained from the Department of Publications, Colorado School of Mines, Golden, is priced at \$3.00 (postpaid).

Bulletin 848, *The Microscopic determination of the nonopaque minerals* (2nd edition) by E. S. Larsen and Harry Berman, 1934 [1948], VI, 266 pages, 7 figures, has been reprinted and is offered for sale by the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Price 50 cents.

NOMINATIONS FOR OFFICERS OF THE MINERALOGICAL SOCIETY OF AMERICA FOR 1949

The Council has nominated the following as officers of the Mineralogical Society of America for the year 1949 to be voted on by the membership at the November election:

President: John W. Gruner, University of Minnesota, Minneapolis, Minnesota.

Vice-President: J. D. H. Donnay, The Johns Hopkins University, Baltimore, Maryland.

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

Treasurer: Earl Ingerson, U. S. Geological Survey, Washington, D. C.

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

Councilor (1949-52): Lewis S. Ramsdell, University of Michigan, Ann Arbor, Michigan.

ANNOUNCEMENT OF THE TWENTY-NINTH ANNUAL MEETING

The twenty-ninth annual meeting of the Society will be held at the Hotel Pennsylvania in New York City, November 11-13, 1948, in connection with the sixtieth annual meeting of the Geological Society of America.

Members of the Society who are planning to present papers at the scientific sessions of the annual meeting should notify the Secretary as soon as possible in order to receive the proper blanks for their abstracts. All abstracts must be in the Secretary's office by *September 1*. By a ruling of the Council no abstracts will be accepted for presentation by title only.

Advance announcement of the annual meeting will be distributed to members of the Society, with the ballot for officers, in September. The final program of the meeting, including the schedule of papers, abstracts, and other information will be sent to each member about November 1st. Further specific information regarding the annual meeting may be obtained from the Secretary's office.

C. S. HURLBUT, JR., *Secretary*

BOOK REVIEW

ERUPTIVE ROCKS, their genesis, composition, classification, and their relation to ore-deposits with a chapter on meteorites, by S. JAMES SHAND, third edition, Thomas Murby & Co., 40 Museum Street, London; John Wiley & Sons, Inc., 440 Fourth Ave., New York, 1947. xvi+488 pages. Price \$7.50.

The first edition of this excellent book was published in 1927 and the second in 1945. In the third edition the chapters have been rearranged and the text somewhat revised, but

the most important change is the insertion of three chapters "devoted to a discussion of the link between eruptive rocks and certain types of ore deposits." The headings of these chapters are:

Chapter X Late-magmatic and post-magmatic reactions

XI The genesis of pegmatites

XII Eruptive rocks and ore deposits

The three chapters give briefly the carefully considered views of a petrologist on this subject and should be read by every geologist interested in ore deposits. Shand believes that on crystallization of the magma beyond a certain stage it will liberate the excess of water as a second fluid phase and that in a deep-seated magma this fluid phase will in all probability be a liquid below its critical temperature. The suggestion that we discard the term pneumatolitic should be followed. It is refreshing to find that Shand believes that the aplites did not crystallize from a dry melt but that they owe their texture to some physical cause. The newer data on the layered pegmatites—such as some of those mined for muscovite and feldspar—are not discussed.

The presentation is concise, the descriptions are clear, the arguments are fair and the conclusions generally convincing. The reviewer is annoyed at the terms "acid granite" and "basic plagioclase." The author will agree that no granite is acid and no plagioclase basic. "Silicic" and "calcic" describe the rock and the feldspar much better.

The author wisely avoids lists of criteria for the determination of some fact such as the order of crystallization of the minerals in rocks, recognizing that such lists of rules are commonly unreliable.

Shand's classification of igneous rocks is logical and quantitative. He has two groups based on the crystallinity, five on degree of saturation with silica, four on the content of alumina, four on the composition of the feldspar and four on the color index. Most petrographers accustomed to some modification of the Rosenbusch classification will probably see no great advantage in giving so great importance to alumina.

Shand's book is the best book in English and probably in any language on modern igneous petrology. It is an excellent textbook and should be interesting and profitable reading for anyone who is interested in petrology.

ESPER S. LARSEN, JR.,
Harvard University