

PROCEEDINGS OF SOCIETIES

MINERALOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND

March 10th, 1938

Dr. L. J. Spencer, C.B.E., F.R.S., President, in the chair. The following were exhibited: Mr. B. W. Anderson, an imitation topaz; Mr. Arthur Russell, the manuscript catalogue of Philip Rashleigh's collection with entries dating from 1784 to 1804, and specimens of minerals from several British localities.

The following papers were read:—

- (1) **Tabular spessartite crystals in muscovite.** By Prof. E. D. MOUNTAIN and Mr. LESLIE E. KENT.

In a quartz-albite pegmatite at the Union Mica Mine, south of the Murchison range in N.E. Transvaal, garnet crystals flattened parallel to (110) occur in muscovite "books" parallel to the cleavages. The garnets among themselves have no well-defined orientation but sometimes occur in rows parallel to growth-planes of the muscovite. The crystallization of mica and garnet seems to have been more or less simultaneous, the partially crystallized muscovite influencing the habit of the garnet by molecular forces.

- (2) **On the nature of withamite.** By C. OSBORNE HUTTON.

The pink epidote mineral, withamite, occurring in altered andesites in Glen Coe, Scotland, has been analysed and its optics determined. This data shows that it is a slightly manganiferous piedmontite with a pleochroism comparable to that recorded for the New Zealand mineral. The occurrence was compared with several piedmontite-bearing localities in America and two hypotheses as to origin were put forward.

- (3) **Australites: a unique shower of glass meteorites.** By Dr. CHARLES FENNER.

The different types of tektites and the several theories of their origin were reviewed. The similarity of type and the wide distribution of australites point to a cosmic origin. It was suggested that they were shed from a meteoritic body in the earth's atmosphere as siliceous blobs, which on further melting during flight acquired their particular shapes.

- (4) **The stilpnomelane group of minerals.** By C. OSBORNE HUTTON.

Stilpnomelane minerals have been found, often abundantly developed in the low grade dynamically metamorphosed schists of western Otago, New Zealand. Their chemical and optical properties have been studied and the relationship between them was represented by curves. These minerals are found to vary between end members, the hydrous ferric silicate, stilpnomelane, and the hydrous ferrous type, for which the name ferrostilpnomelane was proposed, and a manganiferous member, parsettensite. Six new analyses of members of the group and seven rock analyses were given while the results of dehydration and x-ray work were also submitted. A theory of metamorphic origin of members of the group was advanced.

- (5) **The rare-earth content of the fluorite of England and Wales.** By V. L. ASPLAND, A. BRAMMALL, and J. G. C. LEECH.

Quantitative spectrographic analyses of these fluorites for elements cerium (Ce_{63}) to lutetium (Lu_{71}) have been made; and the significance of their distribution in relation to petrographic and metallogenetic provinces was discussed.

NEW YORK MINERALOGICAL CLUB

American Museum of Natural History, New York City, April 20, 1938

The meeting was called to order at 8:00 P.M. by First Vice-President Anderson, with 70 members and guests present. The officers for the next year were elected, as follows:

President:	Dr. Olaf Andersen	Secretary:	Dr. F. H. Pough
First Vice-Pres.:	Mr. H. R. Lee	Treasurer:	Mr. J. A. Taylor
Second Vice-Pres.:	Mr. J. C. Boyle	Directors:	Mr. G. S. Stanton and Mr. James Morton

Mr. Yedlin announced the Spring field trip for May 1st, a trip by bus to the quarries at Easton, Pa.

Dr. Andersen then introduced the speaker of the evening, Dr. Heinrich Ries, of Cornell University, who spoke upon "Some Volcanic Regions of the West." Beginning with Mt. Rainier, Dr. Ries spoke of Crater Lake, showing many views of the unusual and little visited area of the San Francisco Peaks. He traced the three phases of volcanic activity in the area and showed maps and photographs of the deposits of the different periods; the second built up the large peaks, and the third, a very recent period, was responsible for the many small cinder cones scattered throughout the area. Although the magma came up through limestone, there has been little metamorphism and few minerals are to be found in the vicinity. One unique mineral, flagstaffite, has been found in veinlets in tree trunks buried in the ash.

After exhibiting some spectacular views of the Grand Canyon and Glacier Park, Dr. Ries showed many slides of the Lassen Volcanic Park region, pointing out the unusual shapes developed in the "extrusive dome" type of cones. The hot springs are numerous and some so strongly acidic that they have kaolinized and alunized the rocks with which they are in contact. One spring is depositing small crusts of iron sulphide which float on the surface. Following the slides, Dr. Ries showed moving pictures in color of most of the localities which brought out the magnificent coloring of the rocks. After the meeting an informal reception was held for the members and their guests.

F. H. POUGH, *Secretary*