PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences, Philadelphia, Pa., December 6th, 1934.

Vice-President H. W. Arndt presided at a stated meeting of the Philadelphia Mineralogical Society, 42 members and 33 visitors being present.

Rev. Bentley R. Morrison spoke on "Labrador: Geology and Minerals." The talk was illustrated with maps, specimens, and hunting equipment and clothing worn by the eskimos.

Rev. Morrison and a party of seven went to Labrador during the summer of 1934 to quarry labradorite under the auspices of the International Grenfell Association. Permit to quarry had to be obtained at St. Johns and claims must be worked a minimum of 160 days in four years.

The scene of the quarrying operations was one of the long bays known as the Bay of Nain. The quarry was about 50 feet long and seemed to represent a concentration of labradorite of the quality which could be used in jewelry and for ornamental purposes. The foot wall is a trap rock. The whole 600 ft. hill in which the quarry was located is anorthosite. At the northern end of the hill, 500 lbs. of pure hypersthene was found. The quarry operations resulted in some 200 tons of the labradorite being removed which was sorted to 50 tons of usable material.

W. H. FLACK, *Secretary*

Academy of Natural Sciences, Philadelphia, Pa., Jan. 3, 1935.

President Gillson called to order a stated meeting of the Philadelphia Mineralogical Society, 43 members and 23 visitors being present.

Louis Moyd reported obtaining datolite, amethyst and quartz pseudomorphs after anhydrite at the Prospect Park Quarry, N.J. Chas. R. Toothaker exhibited tribo-luminescent sphalerite from the Horn Silver Mine, Tintic District, Utah. Albert Jehle exhibited limonite pseudomorphs after pyrite crystals from Oreland, Pa., and black tourmaline crystals from the Henry Avenue bridge over the Wissahickon Creek, Philadelphia. Harold Poole exhibited sphalerite from the Henry Avenue bridge, Philadelphia.

Prof. A. F. Buddington of Princeton University spoke on the "Classification of Mineral Associations and Geologic Thermometry." Minerals are sensitive to variations in temperature; quartz at 575° changes from low to high temperature quartz, and green hornblende changes to brown hornblende at 800°. In the Alaskan coast range batholith, 1000 miles long and 35 to 100 miles wide, chemical composition remains the same, but there are totally different mineral associations presumably from changes in temperature.

The talk was illustrated with specimens and blackboard diagrams and the Society gave Dr. Buddington a rising vote of thanks for his excellent presentation.

W. H. FLACK, *Secretary*

MINERALOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND

Mineralogical Society, January 24, 1935.

The following papers were read:—

(1) Notes on the occurrence of fluorite in Aberdeenshire and Banffshire. By Mr. ARTHUR RUSSELL.

Crystallized fluorite, varying in color from nearly colorless to yellow, violet, and green, has been collected recently by the author from Abergairn Lead mine, Ballater; Creag an t-Seabhaig, on the north side of the Pass of Ballater; and Na Tri Chaochain, River Avon, between Tomintoul and Inchrory, Banffshire. The fluorite and associated minerals are described.

(2) On the occurrence of chondrodite in the Glenelg Limestone of Inverness-shire. By Prof. H. H. READ and Mr. I. S. DOUBLE.

Small grains of chondrodite have been identified in forsterite-marbles from several localities in the Glenelg district. Its most common mode of occurrence is as small granules forming rims round crystals of forsterite, and it is suggested that the chondrodite has been formed from forsterite by the accession of fluorine- and hydroxyl-bearing fluids. Previous records of chondrodite in the British Isles have not been confirmed by recent work.

(3) Ankerites of the Northumberland coalfield. By Dr. L. HAWKES and Dr. J. A. SMYTHE.

Ankerite and ankeritic calcite are described from veins in the Coal Measures on the coast at Hartley, and from various seams in the Northumberland Coal field. Evidence is given that, in the portion of the coal-field examined, both minerals are of constant composition, and that the deposition of the ankerite preceded that of the calcite. The ankerites are members of an isomorphous series consisting of dolomite $MgCO_3 \cdot CaCO_3$, and ferro-dolomite $FeCO_3 \cdot CaCO_3$, with small amounts of mangan-dolomite $MnCO_3 \cdot CaCO_3$, and they may hold up to 20% of $CaCO_3$ in solid solution.

(4) Apophyllite from Traprain Law, East Lothian. By Mr. J. G. C. ANDERSON and Mr. S. ELDER.

Well-crystallized apophyllite is described from druses in phonolite. The apophyllite is associated with analcime and pectolite. Other localities for apophyllite in Scotland are mentioned.

(5) Studies on the Zeolites, Part IX. Scolecite and Metascolecite. By Mr. M. H. HEY.

Results of *x*-ray, goniometric and optical studies on analysed specimens of scolecite and of base exchange experiments are given. Vapour pressure work clearly shows that the water is divided into a more volatile group of 16 and a less volatile group of 8 mols. per unit cell. Before the whole of the first 8 of the more volatile water molecules have been expelled, transition occurs to metascolecite.

(6) A new apparatus for the determination of carbon dioxide. By Mr. H. H. HEY.

A simple apparatus is described for the collection of carbon dioxide in baryta solution, and the subsequent filtration and washing of the barium carbonate produced with complete exclusion of atmospheric carbon dioxide.

NEW MINERAL NAMES

Janite

THUGUTT, STANISAW JÓZEF: O janicie, nowym minerale z Janowej Doliny na Wołyniu (Janite, a new mineral from Janowa Dolina in Volhynia). *Arch. Mineral.* Warsaw, vol. **9**, pp. 93–98, 1933. Polish with French summary.

NAME: From the locality, Janowa Dolina.

CHEMICAL PROPERTIES: A hydrous silicate of aluminum, iron, calcium, magnesium, etc. (R_2O, RO) $R_2O_3 \cdot 5SiO_2 \cdot 5\ H_2O$; (approx.) Analysis: SiO_2 49.67,