

not far from the position of the macropinacoid. Other prisms of this series have been observed, but this one appears to be new among observed crystal forms.

A renewal of activity in the basalt quarry of the Wilson Crushed Stone Company, now operated by Mr. C. Lewis, at North Plainfield, Somerset County, has recently supplied a large number of calcite crystals with a variety of interesting forms and groupings. The study of these will be undertaken in the future. Operations have also begun to expose the zone of weathered rock where occur in vertical seams some of the zeolites including orange colored stilbite, small plates of heulandite, and groups of small natrolite crystals, showing the simple prism with the unit pyramid. The latest addition to the list of minerals from this locality is analcite, occurring in glassy transparent crystals 2 mm. in size, on stilbite. The edges of the analcite crystals, which are of simple trapezohedral form, are all modified by a narrow vicinal trapezohedron evidently produced by etching, and the crystal faces all show interesting triangular etch figures, shown in Figure 3, which represents one face only.

In the basalt quarry at Millington (Lyons Station), Somerset County, microscopic transparent analcite crystals occur on the walls of a vertical joint plane. Their form is the trapezohedron, but they show, in addition to this, occasional square faces of the cube. The rarity of cube faces on this mineral makes the discovery interesting. Natrolite crystals from Millington are quite commonly grouped in pairs in parallel position, showing a notch on each side of the crystal along the length of the prism. The crystals look like those of scolecite from Iceland and elsewhere which are twinned (since they are monoclinic). Investigation of natrolite from a number of New Jersey localities shows that this sort of grouping is quite typical of natrolite from these localities.

Grateful acknowledgement is hereby made to Mr. H. P. Whitlock of the American Museum of Natural History for the use of the goniometer and aid in identifying crystal forms.

## PROCEEDINGS OF SOCIETIES

### PHILADELPHIA MINERALOGICAL SOCIETY

*Academy of Natural Sciences, June 6, 1929.*

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Mr. Trudell, in the chair. Sixty persons were present including forty-three members.

Upon favorable recommendation of the council, the following were elected junior members: Messrs. Randall Heiligman, Harry Eissler, Jr., and Richard Archibald. Mr. Cienkowski proposed the names of Allen Bernheimer, Morris Naselaw, and Robert Williams.

Mr. Lester Strock addressed the society on "*The Spessartite Garnet of Avondale, Delaware County, Penna.*" The chemistry of garnets in general and the relation of their physical properties (specific gravity and index of refraction) to their composition was outlined, introductory to a detailed account of an investigation of the garnet of Avondale (Leiper's Quarry). An analysis showed the latter to consist of the following molecules: spessartite 61.6%, almandite 32.8%, and grossularite 5.6%.

Mr. Toothaker exhibited a rhyolitic obsidian from Oregon supposed to contain

1% Sn. Mr. Biernbaum distributed the prizes awarded to the boys at the Northeast High School for the best mineral exhibits shown there on May 23rd. Mr. Trudell described a brief visit to Ducktown, Tenn., and the Museum at the University of Alabama. Mr. Biernbaum exhibited prehnite and thaumasite recently collected at Paterson.

SAMUEL G. GORDON, *Secretary*

#### MINERALOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND

*Mineralogical Society, June 11.* Dr. G. T. Prior, President, in the chair.

MR. E. J. WAYLAND and DR. L. J. SPENCER: *Bismutotantalite, a new mineral from Uganda.* This was found in a pegmatite vein at Gamba Hill, about 35 miles N. W. of Entebbe. The large rough crystals, weighing up to a kilogram or more, are orthorhombic with a habit and axial ratios similar to those of columbite. Analyses made by Mr. W. O. R. Wynn at the Imperial Institute give the formula  $Bi_2O_3 \cdot Ta_2O_5$ , analogous to stibiotantalite ( $Sb_2O_3 \cdot Ta_2O_5$ ).

DR. L. HAWKES: *On a partially-fused quartz-felspar rock and on glomoro-granular texture.* In a partially melted granite fusion began at the quartz-felspar contacts. It is suggested that the temperature was raised above the eutectic point but not to the melting point of any of the constituent minerals, and that a granite of quartz-orthoclase-albite eutectic composition will melt completely in the dry state below 950°C. Coarse grained granites may exhibit a segregation of quartz and felspar, revealed in section by monomineralic areas of several grains in anhedral intergrowth. The name 'glomoro-granular' is proposed for this texture which may result from the normal undisturbed crystallization of the magma.

DR. P. MARSHALL: *The occurrence of a mineral hitherto unrecognized in the phonolites of Dunedin, New Zealand.* A mineral with low birefringence and low refractive index hitherto taken to be either nephelite or sodalite is shown to be distinct from these and to be nearer microsommite or davyne. It is usually allotriomorphic but also occurs as very small (0.15 mm.) hexagonal prisms. Analyses of HCl solution of phonolites containing this mineral to the exclusion of other soluble silicates, indicate that it is a sodium aluminosilicate loosely combined with sodium chloride. The mineral stains dark violet when treated with silver nitrate. The name proposed for the mineral is ameletite.

DR. G. T. PRIOR: *The meteoric stone of Lake Brown, Western Australia.* The stone, weighing when found 4.75 kg., has been known since 1919. Chemical analysis and microscopic examination prove it to be an intermediate hypersthene-chondrite of Baroti type.

MR. I. DE FINÁLY and DR. SÁNDOR KOCH: *Fülöppite, a new Hungarian mineral of the pligionite-semseyite group.* This was found at Nagybánya, Hungary, as small monoclinic crystals of the pligionite habit. Analysis shows it to be an acid member of the group with the formula  $2PbS \cdot 3Sb_2S_3$ . Associated with it is an acicular (probably orthorhombic) lead-antimony mineral with the composition  $3PbS \cdot 4Sb_2S_3$ , which is compared with the Bolivian keeleyite.

W. CAMPBELL SMITH, *General Secretary*