PROCEEDINGS OF SOCIETIES

MINERALOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND

MINERALOGICAL SOCIETY, March 7, Sir Thomas H. Holland, president, in the chair.

The following papers were read:

(1) The late Palaeozoic quartz-dolerites and tholeiites of Scotland. By DR. FREDERICK WALKER.

Dikes of these rocks and the related sills show marked resemblances both mineralogical and chemical to the Whin Sill, and appear to belong to the same period. Chemical analyses of an unaltered residual glass in one of the tholeiites shows it to be highly siliceous, and there is therefore no reason for considering the micropegmatite of the very similar quartz-dolerites to be other than magmatic. The origin of the suite is ascribed to mild contamination of the parental Carboniferous olivine-basalt magma through prolonged contact with the "sial."

(2) The role of kyanite in the "hornfels zone" of the Carn Chuinneag granite (Ross-shire). By Prof. C. E. TILLEY.

The hornfelses carry a garnet of almandine type ($Fe_{75}Mn_2$) and kyanite is developed as (1) replacement of chiastolite, (2) replacement of cordierite, (3) swarms of fine needles associated with biotite, and (4) coarser crystals in quartz-kyanite veinlets cutting the banding of the hornfelses.

(3) A critical review of the data for a revision of the enstatite-hypersthene series. By ROBERT WALLS (communicated by Prof. H. H. Read).

Many imperfections are found in the published data which have been used in constructing curves to show variations of physical properties with chemical composition. There is need for further analyses of optically investigated material. Four new analyses have been made and a corrected diagram showing changes of γ and 2V with the content of $FeSiO_3$ has been drawn.

(4) Two new bismuth minerals from South Africa. By Prof. E. D. MOUNTAIN.

A nodule of a pale grey mineral found with bismuth ores near a pegmatite outcrop 13 miles NW. of Jackals Water, near Steinkopf, Namaqualand, has a composition very nearly BiOCl. X-ray powder photographs of the material confirm its identity with artificially prepared BiOCl and distinguish it from the hydrated bismuth oxychloride, daubreeite. The new mineral, which it is proposed to name *bismoclite*, is tetragonal with cell-sides a=3.89, c=7.37Å. H=2½. Sp. gr. 7.36.

The other new mineral, *boksputite*, is opaque, pale yellow to grey-brown, and occurs in quartz-veins associated with wolframite, scheelite, and beryl on the farm Boksput, Gordonia. Its chemical composition is near $6PbO.Bi_2O_3.3CO_2$. H=3½. Sp. gr. 7.29.

The Department of Geology, Queen's University, announces the publication, of a set of mimeographed notes entitled "Introduction to Petrofabric Analysis" by H. W. Fairbairn. Approximately 125 pages with numerous figures, bound between loose-leaf board covers. Price $1.00 post paid, obtainable from the above address. Dr. Fairbairn has recently completed a two-year study of petrofabric methods in Innsbruck, Göttingen and Berlin.