

others of magnetic iron, amounting together probably to one thousandth of the mass.

It varies from a light-gray, almost white, to a fawn colour, and in some parts shows very noticeable amounts of the darker minerals, being often stained by oxide of iron to a light buff colour. Though not discernible by the naked eye, there is a nearly colourless augite present, which commonly equals the hornblende in amount, and is a rather more persistent constituent.

In thin sections of specimens that are considered typical, the essential constituents are feldspar and augite, the latter scarcely rising above accessory proportions (plate V, fig. 4). The feldspar in such specimens is wholly in the form of the interesting orthoclase-albite microperthite. The following analysis shows its composition. In comparison analyses are added of the original perthite from Ontario, cryptoperthite from Laurvik, Norway, and anorthoclase from the keratophyre of Marblehead, Massachusetts. Nos. I, IIa and V are taken from the Geology of Canada, 1863, pp. 657 and 657; III is cited in 'Igneous Rocks of Arkansas,' Vol. II, Geological Survey, Arkansas, 1890, p. 60, from "Syenite-pegmatitization," W. C. Brögger, p. 524; IV is given in Bulletin of the Museum of Comparative Zoology, Cambridge, Mass., Vol. XVI, p. 170, 'Keratophyre from Marblehead Neck,' J. H. Sears.

The microphotograph numbered IV is from a specimen taken probably from the same exposures as that analysed under No. I, while the locality assigned to Nos. II and IIa the only form of feldspar that could be found is also microperthite.

All the analyses are of feldspar only. In column I the approximate theoretical composition is given of a soda-potassium feldspar made up of albite and orthoclase molecules in the proportion of 3:2.

ANALYSES.

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| I. Feldspar—Shefford. | Analysed by Hunt. | Described by Logan. |
| II. Feldspar—Brome. | " | " |
| IIa. Feldspar—Brome. | " | " |
| III. Kryptoperthite—Laurvik. | Gmelin | Brögger. |
| IV. Anorthoclase—Marblehead Neck. | Analysed by Chatard. | Described by Sears. |
| V. Perthite—Burgess. | " | Hunt. |
| VI. Approximate theoretical composition of feldspar having the formula $Ab_3 Or_2$. | | Logan. |