and possibly leucite." He comments on the amount of analcite in the tuffs, and discusses the primary origin of the mineral. Analyses of analcite, and of blairmorite-tuff accompany his paper, and will be referred to later.

PRIMARY ROCK TYPES.

Introduction.

The mineral composition of a pyroclastic rock may or may not closely represent the composition of the pyrogenetic rock or magma from which it was derived. In proportion as the component minerals differ in specific gravity, original size, degree of comminution and reassortment, the resulting tuff or agglomerate will tend to differ from its parent magma. In drawing conclusions as to the constitution of a magma from its representation as tuffs or agglomerates, these and other facts should be borne in mind. Stress should be laid on primary rock types occurring as fragments in breccias, and on mineral associations constantly recurring in the clastic rocks. Occasionally pyroclastic rocks may simulate the appearance and composition of their parent pyrogenetic rocks very closely, and one or two instances of this kind have been noted in the present suite of specimens.

The primary rock types represented either by hand specimens of fragments from the agglomerates, or by smaller fragments recognized in thin sections, may be classified in the order of their abundance as trachytes; analcite-bearing rocks for which the name blairmorite is adopted, and latite. The tinguaite of Knight has not been noted by the present writer,[1] while the latite was not described by the former author. The minerals noted in the specimens include those mentioned by Knight with the exception of acmite, anorthoclase, diopside, and hornblende. Beside these, soda orthoclase (anorthoclase of Knight ?) magnetite, and oligoclase have been noted, and also secondary quartz.

[1]Knight's description of it is added for completeness. See p. 19.