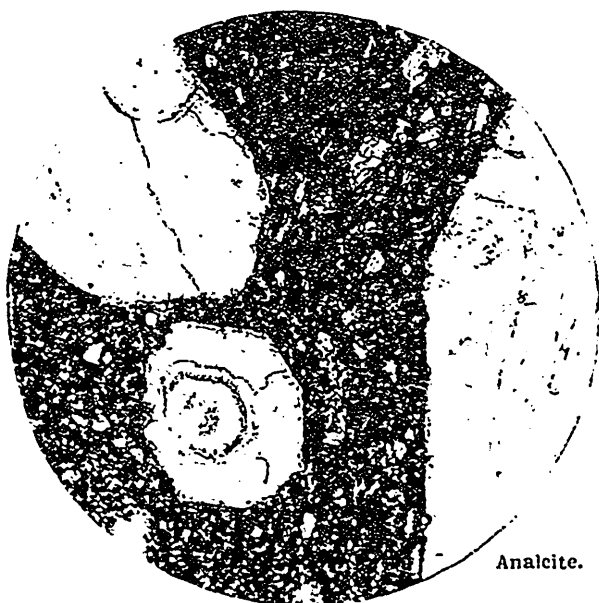


*Orthoclase* is the most abundant mineral found and is present in almost every case. It is generally fairly fresh. Twinning after the Carlsbad law is quite common while the rarer twins after the Baveno law are found in one thin section examined. The *pyroxenes*, which, with a few exceptions, are all remarkably fresh, include the interesting soda varieties mentioned above; these are recognized by their grass green color, low extinction angles—less than  $6^\circ$ —and the fact that the greatest axis of elasticity lies next the vertical axis. The aegirite-augite has of course higher extinction angles than acmite or aegirite. The *plagioclase feldspar* present is andesine, determined by the statistical method and also by measuring extinction angles on crystals twinned according to both the Carlsbad and Albite laws. This lime-soda feldspar was only found in two sections, however, and the entire series of tuffs and breccias is characteristically an alkaline one, of trachytic tendency. *Biotite* occurs, but it is rare.



Analcite.

Fig. 1. Analcite-tuff, ordinary light, actual field 2.5 mm. The large white crystals are analcite showing some of the crystal faces still preserved. Inclusions arranged parallel to the octagonal outline of the mineral are seen in the lower left hand crystal.