

siderable quantity of colourless brilliantly polarizing muscovite. The nepheline also weathers to a dull colourless mineral dimly polarizing substance which is probably kaolin.'

In amount nepheline is nearly equal to feldspar. The other minerals present no features worthy of note. The structure of the rock is hypidiomorphic with a noticeable tendency towards ideomorphism on the part of the larger and probably more basic feldspars.

Comptonite.

Comptonite. This rock is characterized in the thin section by an abundance of hornblende, always in distinct idiomorphic crystals varying in the length of prismatic sections from 2. mm. to .2 mm. In fresh crystals the colour is deep brown, with the usual pleochroism, but the greater part of the hornblende is somewhat altered, and grayish brown in colour, showing little if any pleochroism. It is studded with minute rounded or irregular grains of magnetite.

Feldspar. Feldspar, generally of a rather indistinct character, being somewhat turbid, is present in amount about equal to the hornblende. Lath-shaped individuals are, however, of quite frequent occurrence, and have an extinction angle of as much as 20° with the principal axis. Polysynthetic twinning is distinctly seen in a few cases. A little biotite and apatite are the remaining primary constituents. Secondary calcite occurs interstitially in considerable amount.

Undisturbed occurrence. An isolated occurrence of this rock was found, the position of which is indicated on the accompanying map as '151.' It is there exposed in the bed of a small stream for about one hundred feet or more, at a distance of some five hundred yards from the igneous part of the mountain. It is inclosed by mica schist, and seems likely to be a sheet rather than a dyke. It appears to differ from the other rocks of the mountain in showing no deformation, but the area exposed is too small to furnish very reliable evidence of the difference in age which its unaltered character seems to suggest.

TRACHYTES.

Light-coloured dykes. The dyke rocks that have the general characters of trachyte are uniformly fine in texture and of a light-gray, or buff, colour. When of the latter shade they pass into the bostonite type.