dark coloured portion consisted probably in greater part of mica, and to judge from the comparatively low specific gravity of the rock, little or no pyroxene or hornblende could be present. The mineralogical composition of this trap is therefore probably as follows :

Delessite	40
Mica	20
Labradorite	40
	10Ò

The 'Fluckan' which underlies the trap last described is separated from it by a small seam of clay. The fluckan itself is a fine grained, dark-red shaly rock in which pieces of a greenish blue colour are sometimes seen. Both substances are fusible before the blow-pipe and contain occasionally small grains and flakes of copper. It resembles the old *Thonstein* (claystone) of the Germans, now more properly named Felsite tuff.

The conglomerate upon which the foregoing rock rests, has acquired some celebrity on account of its being mined for copper on the property of the Albany and Boston Mining Company. The boulders and pebbles consist of various species of porphyry. One of them has a dark brown matrix with small white crystals of feldspar; another has a matrix of the same colour but with larger crystals of orthoclase, while a third variety consists principally of a fine grained mass of orthoclase with which a small quantity of a dark coloured mineral occurs in particles too small for determina-The matrix consists of a coarse grained sand of porphyritic tion. material, impregnated with calcareous matter. In many places the interstices are not at all filled up, in others calespar is the matrix. and very often in the lower part of the bed the matrix is almost pure metallic copper. Sometimes the metal completely fills the whole space between the pebbles, sometimes it is accompanied by calcspar, but much more frequently it is disseminated in fine particles through the coarse grained matrix. Sometimes a pebble is found quite saturated with copper, but it seems to have been of a more porous nature than the others and an amygdaloidal structure may be detected in it.

As above mentioned, a bed of sandstone underlies the conglomerate. It shows traces of stratification, is of a dark-red colour, and evidently consists of the same material as the conglomerate pebbles but in finer particles.

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