

A specimen of the black slate was taken about two hundred yards from the contact with igneous rocks near Douman's quarry. It is a dark steel-gray rock with a good slaty cleavage and shows a rusty colour along the joint planes. The specimen when taken was thought to be entirely unaffected by the intrusion of the mountain mass.

On the sawn surface fine light gray lines are quite apparent, which were not previously noticed, and under the microscope these are found to be crystalline feldspar. The greater part of the dark-coloured layers consists of magnetite, with possibly a little graphite, and feldspar grains. Shreds of mica, generally colourless, are also present. Besides the light coloured, feldspathic bands, the rock contains numerous rounded spots also of a lighter colour. These are so small as not to be noticeable to the naked eye. They differ from the rest of the rock in showing no banded structure, the dark minerals which are in smaller grains being evenly distributed in them. The spots are therefore regarded as an incipient form of alteration which has evidently taken place since the foliation of the rock was well advanced, if not quite completed, and hence as probable contact phenomena. The light-coloured bands appear to be only miniature veins of feldspar, such as might occur in any part of the regionally altered rocks, and are not thought to be due to contact metamorphism. Altered
slates.

Four specimens from the slate cap on the top of the mountain, which was referred to amongst the evidences of laccolitic structure, show that rock to consist of feldspar and brown mica with smaller amounts of magnetite and pyrite. In thin sections from specimens near the contact, the feldspar and mica are recrystallized and form a mosaic-like structure, the individual grains being bounded by polygonal outlines.

The oxidation of the pyrites in this mass, as in the contact previously described, gives much of the rock a reddish-brown colour.

A specimen from the light-coloured mica-schist near the base of the mountain, was taken about twenty yards from the contact near Beau-regard's corner, is similarly discoloured in streaks by the alteration of pyrites which here occurs in cubical grains about $\frac{1}{16}$ inch in diameter. The feldspar is in part little altered from its original clastic character, while in other parts it is recrystallized, presenting much the same appearance as in the previous specimen. The mica here is in shreds, Mica-schist.