

and that the lake was then immediately formed, as in the case of Euphemia. But, whatever may have been the manner in which the volcanic agent acted to produce the effect, it would be exceedingly interesting to know something of the present appearance of the district, and the distribution of the lava over the neighbouring valleys.

It has been already stated that it is not uncommon to find volcanic rocks, or at least rocks which so much resemble those now ejected by volcanoes, that few geologists doubt their igneous origin, alternating with, or enclosed by, stratified deposits. The rocks of this class are known by the generic term trap, and are specifically designated green-stones, basalts, and porphyries. The rocks of the Pic du Midi de Bigorre, for instance, and the limestones especially, are generally superposed by trap. At Christiana, in Norway, slate and the rock called grauwacke are covered by a bed of porphyry, not less than sixteen hundred feet in thickness; and at Holmestrand, the same mass passes into a fine-grained basalt. In the Island of Skye, red sandstone is traversed by a great number of trap veins, and is sometimes superposed by the same rock. At Lamlash, in the Western Isles, sandstone, conglomerate, and clinkstone, are traversed by a vein of spheroidal trap.

ACTIVE VOLCANOES.

Active volcanoes may be divided into two classes, the aerial and the subaqueous; that is to say, those which have their craters exposed to the action of the air, and those which are under the water. It will be readily supposed that there must be a considerable difference in the character of the phenomena which attend the activity under these two circumstances; a difference which has in fact some relation to the density of the medium by which the agency is restrained. Our knowledge of the phenomena which precede and attend subaqueous eruption is exceedingly limited; but still it will be necessary to consider the appearances which result from the activity of volcanoes under both circumstances.

THE PHENOMENA WHICH GENERALLY PRECEDE VOLCANIC ACTIVITY.

In every age of the world there have been some who, separating themselves in part from the common pursuits of man-