

which the connection is made must extend to a great depth. 3. When, in 1783, a submarine volcano on the coast of Iceland, ceased to eject matter, immediately another broke out 200 miles distant, in the interior of the island. 4. Were not the power deep-seated, volcanoes would become exhausted; as they sometimes throw out more matter at a single eruption, than the whole mountain melted down could supply.

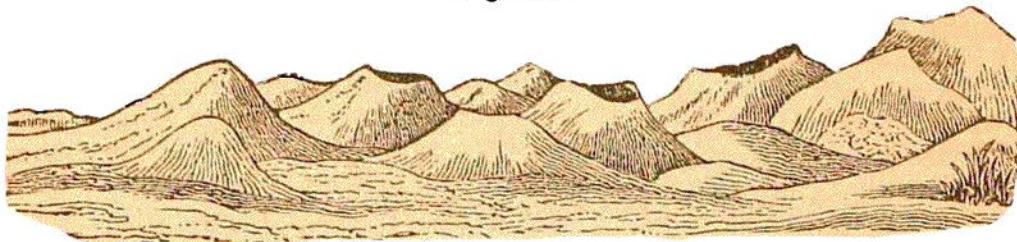
EXTINCT VOLCANOES.

Many writers maintain that there is a marked difference between the matters ejected from active and extinct volcanoes. It is said that the more modern lavas have a harsher feel, are more cellular, and more vitreous in their appearance, and also less feldspathic than the ancient. But it is doubtful whether any character will satisfactorily distinguish them, except the period of their eruption.

The extinct volcanoes are of very different ages. Some of them were active during the tertiary period, some during the drift period; and some since that time. In some instances, as a mountain called the Puy de Chopine, in Auvergne, which stands in an ancient crater, and rises 2,000 feet above an elevated granitic plain, itself about 2,800 feet above the sea, there is a mixture of trachyte and unaltered granite.

The extinct volcanoes of Auvergne, and the south of France, have long excited deep interest; and have been fully illustrated by Scrope, Bakewell, and others. Near Clermont, the landscape has as decidedly a volcanic aspect as in any part of the world; of which Fig. 121 will convey some idea.

Fig. 121.

*Extinct Volcanoes; Auvergne.*

Extinct volcanoes exist also in Spain, in Portugal, in Germany, along the Rhine, in Hungary, Styria, Transylvania, Asia Minor, Syria and Palestine. To the east of Smyrna in Asia Minor, is a region called the *Burnt District* (Katakekaumena of the Greeks), because it shows such striking marks of extinct volcanoes. In the valley of the Jordan, especially around Lake Tiberias, extending as far northwest as Safed, volcanic rocks abound, with warm springs and occasional earthquakes.

The region about the Dead Sea is decidedly volcanic; but appears more like a region of extinct than active volcanoes. Yet the destruction of the cities