

jected into irregular branching cracks; dikes have been formed by the welling upward of liquid or plastic rock in vertical or steeply inclined fissures, though obviously there is no essential difference between the two forms of structure. Sometimes the line of escape has been along a fault. In Scotland, however, which may be regarded as a typical region for this kind of geological structure, the vast major-

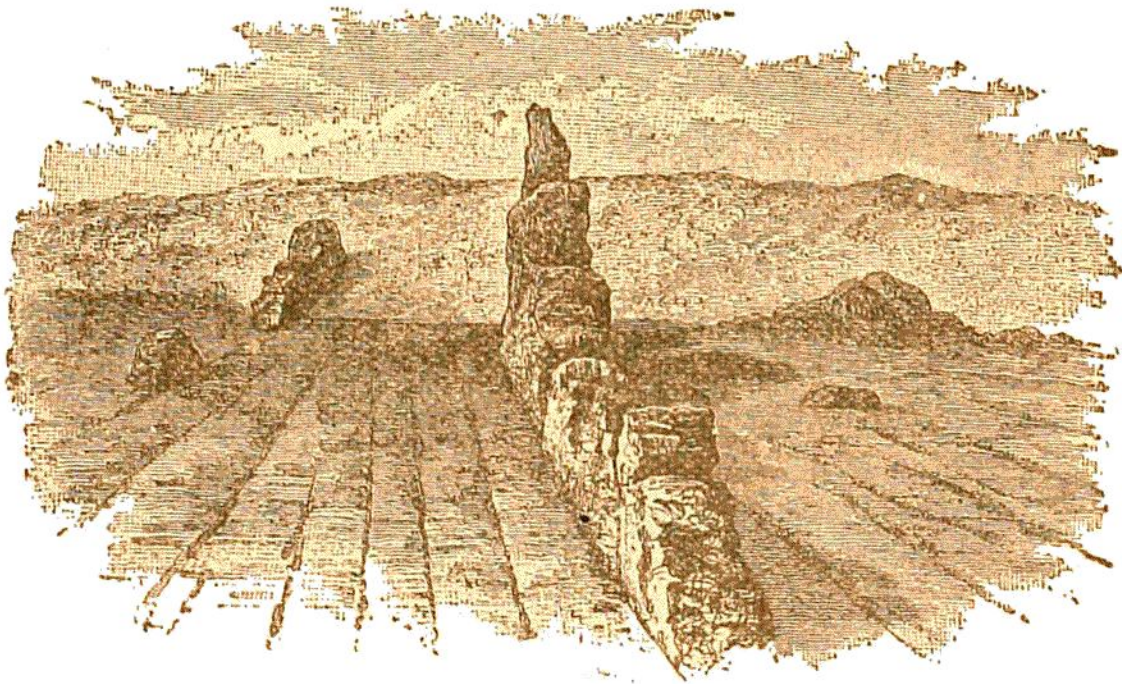


Fig. 294.—Dikes in volcanic tuff of a "neck"; shore, Elie, Fife.

ity of dikes rise along joints or fissures which have no throw, and are therefore not faults. On the contrary, the dikes may be traced undeflected across some of the largest faults in the midland counties.

Dikes differ from veins in the greater parallelism of their sides, their verticality, and their greater regularity of breadth and persistence of direction. They sometimes occur as mere plates of rock not more than an inch or two

---

ascribed to the infilling of fissures with sand from below by earthquakes acting on wet sandstone strata underground. J. S. Diller, *Bull. Geol. Soc. America*, i. 1890, p. 411.