

dience to the attraction of the sun and moon. Who can trace, even in imagination, the fearful rendings, the gigantic inundations, which would result from these movements! Who would dare to paint the sublime horrors of these first mysterious convulsions of the globe! Amid torrents of molten matter, mixed with gases, upheaving and piercing the scarcely consolidated crust, large crevices would be opened, and through these gaping cracks waves of liquid granite

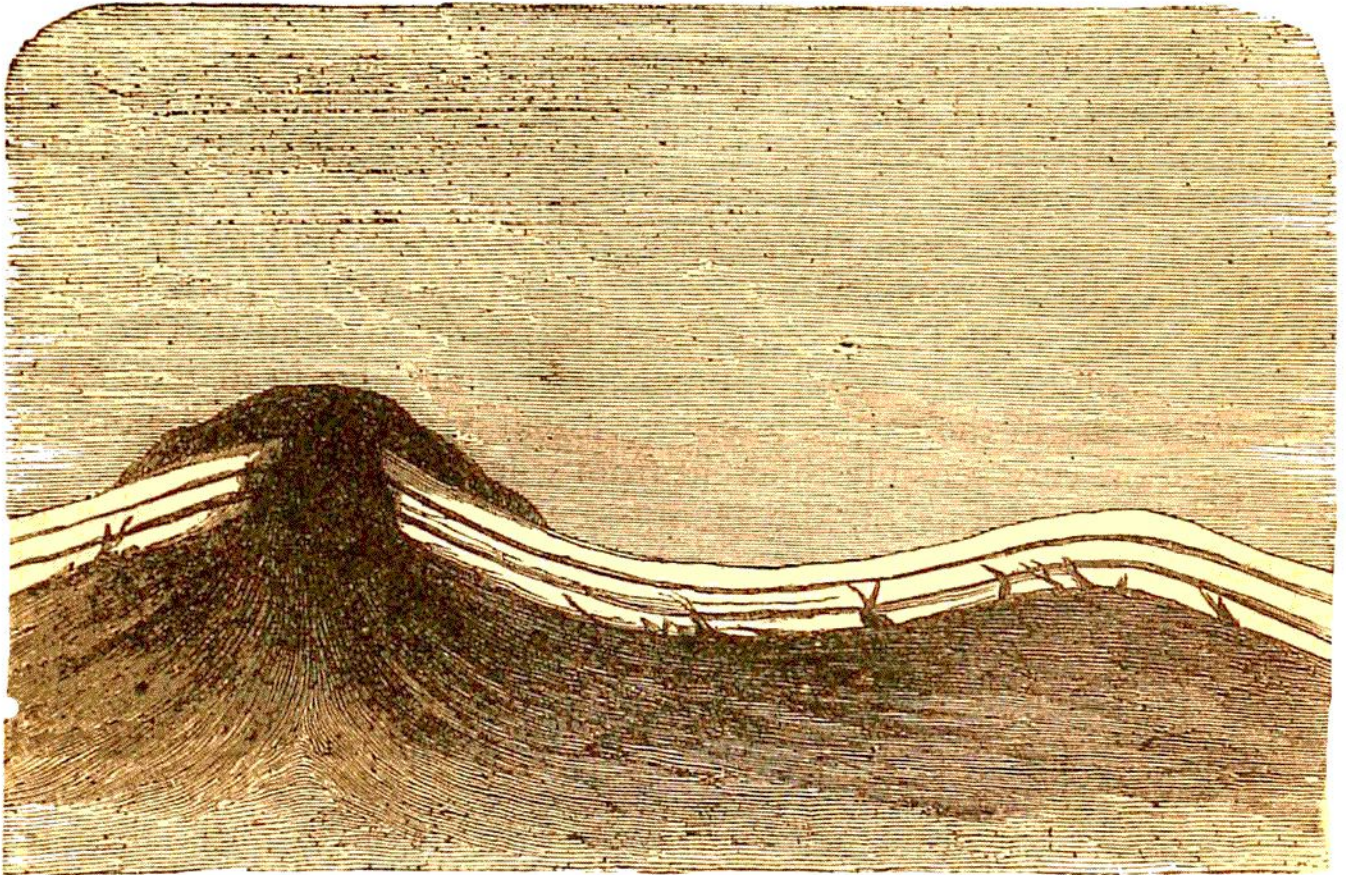


Fig. 14.—Formation of primitive granitic mountains.

would be ejected, and then left to cool and consolidate on the surface. Fig. 14 represents the formation of a primitive granitic mountain, by the eruption of the internal granitic matter which forces its way to the surface through a fracture in the crust. In some of these mountains, Ben Nevis for example, three different stages of the eruption can be traced. "Ben Nevis, now the undoubted monarch of the Scottish mountains," says Nicol, "shows well the diverse age and relations of igneous rocks. The Great Moor from Inverlochy and Fort William to the foot of the hill is gneiss. Breaking through, and partly resting on the gneiss is granite, forming the lower two-thirds of the mountain