

1,500 feet. These picturesque objects belong to a group of extinct volcanoes ; while, on the opposite side of the river, the Eifel, with its crater covered with scoriæ and cinders, and lava currents still distinctly visible, attest the wide area over which those ancient fires once extended. Unlike the district we have just noticed, the foundation rock of the country is an ancient sedimentary deposit, called *greywacke*, consisting of coarse red sandstone and slate of a peculiar character, which we shall describe hereafter, thrown into a highly inclined position. Through these beds the volcanic eruptions, consisting of trachyte, basalt, and other modifications of trap rocks and scoriæ, have forced their way. The basalt is black, very compact, and breaks into sharp fragments ; it is frequently columnar, and the separate hexagonal pillars are made use of for posts and paving, in the adjacent towns. Such, says Mr. Horner (whose interesting memoir\* has furnished the materials for this imperfect sketch), is the profusion of basaltic pillars, that the walls of the town of Linz are wholly built of these materials, placed on their sides, with the ends projecting outwards. The streets are paved with the smaller columns set on end, thus forming a miniature representation of the Giants' Causeway ; and the same volcanic product forms a large proportion of the walls of Bonn and Cologne. The greywacke is

\* On the Geology of the Environs of Bonn, by Leonard Horner, Esq. F.R.S. Geological Transactions, vol. iv. 1836.