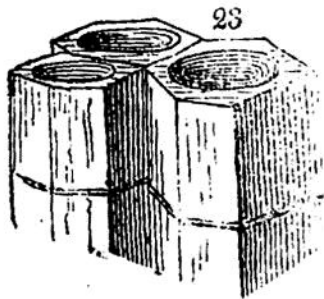


Among unstratified rocks the most remarkable and best known form is that of the divided prisms of basalt, as seen in Staffa and the Giant's Causeway. This appearance



arises from the intersection of planes rectangulated to the surface of the rock, and meeting one another in several directions, so as to insulate polygonal prisms. These prisms are

divided across, by concavo-convex surfaces, as *fig. 23*.

Much more common in these rocks is the form of an irregular polygonal prism not divided across, as in the greenstone and pitchstone of Corygills, Arran. It is interesting to observe, in vertical dykes of these rocks (as in Cleveland, Yorkshire), the prisms lying horizontally, and in other cases curved (as in Staffa), in obedience to the general law of the planes of the prismatic faces being at right angles to the bounding surface of the mass.

Many rocks of igneous origin (as greenstone, claystone, porphyry, sienite,) show this prismatic structure more or less distinctly, but none so perfectly as basalt.

A prismatic form of the masses is found also among stratified rocks, when these are very thick and of uniform composition, as in the rock-salt mines of Northwich (observed 1827), in the gypsum quarries of Montmartre, and in the thick scar limestone of Wharfedale (observed 1834).

A great variety of other appearances are presented in the stratified rocks by the various directions and intersections of the different sorts of joints.

Under particular circumstances, and especially in the vicinity of faults, anticlinal axes, and other forms of displacement, the beds of rock are frequently *cracked* in their substance; sometimes these cracks are filled with sparry substances (carbonate of lime frequently, metallic matters rarely); sometimes they are very minute chinks lined on the sides with dendritical oxide of iron or manganese, in which case they are called dry cracks.