

Looking at the general results of the erosive work of the sea, we are led on reflection to perceive that they tend to the ultimate formation of a tolerably level surface, or what geologists call a *plain of marine denudation*. As it is only the uppermost layer of the sea—the part thrown into commotion by disturbance of the atmosphere—which possesses any efficient power of abrasion, the effect must be not to cut out valleys, but to eat into the land horizontally, and reduce it to a general level under the waves. This tendency is sometimes well illustrated on a small scale on a rocky beach. To the south of Girvan, for example, the Ayrshire coast exhibits between tide-marks a smooth level platform of Silurian greywacke, indenting the line of rugged crags which run along high-water mark (Fig. 17). This platform has been cut out

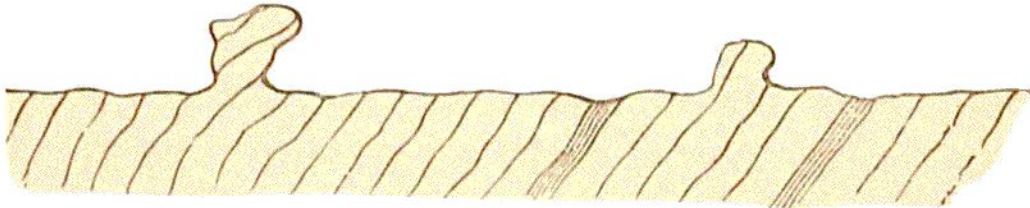


FIG. 17.—Inclined Silurian strata near Girvan, cut into a plane surface by the sea.

of vertical strata, some of which being harder than their neighbours, rise above it into fantastic knobs and bosses. It abounds in cavities lined with sea-weeds and filled with sea-water—each a natural aquarium; and in some cases, at least, it is evident that these hollows are simply *pot-holes*, like those in the channel of a river, save that the boulders which lie at their bottom have been kept whirling round in the eddies of the tide, instead of a rapid brook or river. The level platform, with its hollows and outstanding crags, is a plain of marine denudation, and illustrates, on a small scale and in detail, a process of which the more gigantic results will be considered in succeeding chapters.

But, as I have already stated, we should ascribe to the