

waves. In such a submarine plain, the influence of geological structure, and notably of the relative powers of resistance of different rocks, would make itself conspicuous, as may be seen even on a small scale on any rocky beach (Fig. 167). The present promontories caused by the superior hardness of their component rocks would no doubt be represented by ridges on the subaqueous plateau, while the existing bays and creeks, worn out of softer rocks, would be marked by lines of valley or hollow.³²¹

This tendency to the formation of a submarine plain along the margin of the land deserves special attention by

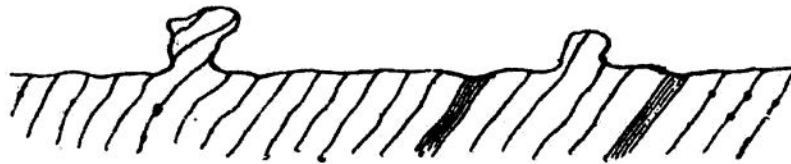


Fig. 176.—Section of rocks ground down to a plain on the beach by wave-action.

the student of denudation. The angle at which a mass of land descends to the sea-level serves roughly to indicate the depth of water near shore. A precipitous coast commonly rises out of deep water; a low coast is usually skirted with shallow water, the line of slope above sea-level being in a general way prolonged below it. The belt of beach forms a kind of terrace or notch along the maritime slope. Sometimes, where the coast-line is precipitous, this terrace is nearly or wholly wanting. In other places, it runs out a good way beyond low-water mark. On a great scale, the floor of the North Sea and that of the Atlantic Ocean, for some distance to the west of Ireland, may be regarded as a marine platform that once formed part of the European con-

³²¹ Mr. Whitaker, in the excellent paper on subaerial denudation cited on p. 753 has pointed out the different results which are obtained by the subaerial forces from those of sea-action in the production of lines of cliff.