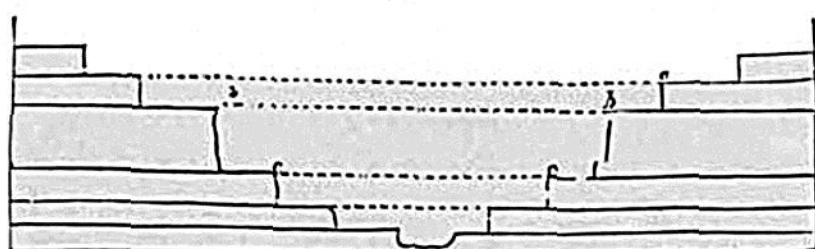


example of this configuration occurs near the town of Melilli, as seen in the annexed view (fig. 95). In the south of the island, near Spaccaforo, Scicli, and Modica, precipitous rocks of white limestone, ascending to the height of 500 feet, have been carved out into similar forms.

This appearance of a range of marble seats circling round the head of a valley, or of great flights of steps descending from the top to the bottom, on the opposite sides of a gorge, may be accounted for, as already hinted, by supposing the sea to have stood successively at many different levels, as at *a a*, *b b*, *c c*, in the accompanying fig. 96. But the causes of the gradual contraction of the valley from above downwards may

Fig. 96.



still be matter of speculation. Such contraction may be due to the greater force exerted by the waves when the land at its first emergence was smaller in quantity, and more exposed to denudation in an open sea; whereas the wear and tear of the rocks might diminish in proportion as this action became confined within bays or channels closed in on two or three sides. Or, secondly, the separate movements of elevation may have followed each other more rapidly as the land continued to rise, so that the times of those pauses, during which the greatest denudation was accomplished at certain levels, were always growing shorter. It should be remarked, that the cliffs and small terraces are rarely found on the opposite sides of the Sicilian valleys at heights so precisely answering to each other as those given in fig. 96, and this might have been expected, to whichever of the two hypotheses above explained we incline; for, according to the direction of the prevailing winds and currents, the waves may beat with unequal force on different parts of the shore, so that while no impression is made on one side of a bay, the sea may encroach so far on the other as to unite several smaller cliffs into one.

Before quitting the subject of ancient sea-cliffs, carved out of limestone, I shall mention the range of precipitous rocks, composed of a white marble of the Oolitic period, which I have seen near the northern gate of St. Mihiel in France. They are situated on the right bank of the Meuse, at a distance of 200 miles from the nearest sea, and they present on the precipice facing the river three or four horizontal grooves, one above the other, precisely resembling those which are scooped out by the undermining waves. The summits of several of these masses are detached from the adjoining hill, in which case the grooves pass all