

sandstones cumber the sides of the hills and the bottoms of the valleys in wild confusion (fig. 66, p. 329). In Switzerland the relics of old landslips are often seen on a magnificent scale ; and some of these, such as those of the Rossberg, and St. Nicholas in the valley of Zermatt, have taken place in the memory of living men.

The constant atmospheric disintegration of cliffs, and the beating of the waves on the shore, often aided by landslips, is another mode by which watery action denudes and cuts back rocks. This has been already mentioned. Caverns, bays, and other indentations of the coast, needle-shaped rocks standing out in the sea from the main mass of a cliff, are all caused or aided by the long-continued wasting power of the sea, which first helps to destroy the land and then spreads the ruins in new strata over its bottom.

It requires a long process of geological education to enable anyone thoroughly to realise the conception of the vast amount of old denudations ; but when we consider that, *over and over again*, strata thousands of square miles in extent, and thousands of feet in thickness, *have been formed by the waste of older rocks*, equal in extent and bulk to the strata formed by their waste, we begin to get an idea of the greatness of this power. The mind is then more likely to realise the vast amount of matter that has been swept away from the surface of any country, in times comparatively quite recent, before it has assumed its present form. Without much forestalling the subject of a subsequent chapter, I may now state that a notable example on a grand scale may be seen in the coal-fields of South Wales, of Bristol, and of the Forest of Dean. These three coal-fields were once united, but those of South Wales and Dean Forest are now about twenty-five miles