

countries of Europe, at present remote from any active volcanos. Such craters are found in Auvergne, on the Rhine between Bonn and Andernach, in Hungary, and along the west side of Italy, where Vesuvius alone still retains its energy. In all these instances the fact that the currents of lava and showers of ashes have descended the present vallies, proves the activity of these volcanos subsequently to the complete excavation of those vallies.

Another actual cause of change operating on the surface of the planet, is one which we can scarcely include among geological phœnomena, and which it yet seems necessary to mention in order to present a complete view of those changes : we allude to the coral reefs and islets formed in the midst of the Pacific ocean and some other seas, by the minute but combined labours of millions of marine zoophytes. The following extract from Kotzebue's voyages (as cited in the Quarterly Review) gives the latest and perhaps the best view of this interesting subject.

“ As soon as it [the ridge or reef] has reached such a height, that it remains almost dry at low water, at the time of ebb, the corals leave off building higher; sea-shells, fragments of corals, sea hedge-hog shells, and their broken off prickles are united by the burning sun, through the medium of the cementing calcareous sand, which has arisen from the pulverisation of the above-mentioned shells, into one whole or solid stone, which, strengthened by the continual throwing up of new materials, gradually increases in thickness, till it at last becomes so high, that it is covered only during some seasons of the year by the high tides. The heat of the sun so penetrates the mass of stone when it is dry, that it splits in many places, and breaks off in flakes. These flakes, so separated, are raised one upon another by the waves at the time of high water. The always active surf throws blocks of coral (frequently of a fathom in length, and three or four feet thick) and shells of marine animals between and upon the foundation stones; after this the calcareous sand lies undisturbed, and offers to the seeds of trees and plants cast upon it by the waves, a soil upon which they rapidly grow to overshadow its dazzling white surface. Entire trunks of trees, which are carried by the rivers from other countries and islands, find here, at length, a resting place, after their long wanderings: with these come some small animals, such as lizards and insects, as the first inhabitants. Even before the trees form a wood, the real sea-birds nestle here; strayed land-birds take refuge in the bushes; and at a much later period, when the work has been long since completed, man also appears, builds his hut on the fruitful soil formed by the corruption of the leaves