

sion the lime to be set free, and precipitated on the foreign bodies in the water, as stones, twigs, leaves, &c.

The substance thus deposited is termed tufa, or travertine;* and in some parts of Italy, and of our own island, it constitutes beds of stone of great extent, in which bones, shells, and the impressions of leaves and stems, are preserved. The stalactites and stalagmites of caverns have a similar origin; many of these caves are of incalculable antiquity, and beneath their stalagmitic floors, the bones and teeth of extinct carnivorous animals are found in vast quantities (*Wond.* p. 164.).

Silex, or the earth of flint, is also held in solution in large proportions, in certain thermal or boiling springs, which, on cooling, deposit the siliceous matter, (in the same manner as the travertine is precipitated from incrusting streams,) on foreign substances, and produce exquisite chalcedonic infiltrations of mosses, &c. But this operation is now only known to be in activity in the immediate neighbourhood of foci of volcanic action, as in the celebrated Geysers of Iceland, (*Wond.* p. 83.) and the boiling springs of the volcano of Tongariro, in New Zealand. But we have everywhere evidence that in former periods, the petrification, as well as the incrustation of organic bodies by silex, was carried

* *Travertine*, so called from the river *Tiber*, whose waters are loaded with calcareous earth—*Tiburtina*, *Ital. travertina*.