

wacke, which is much intermixed with green earth, and has in some parts a saponaceous feel; the agates which it contains are decomposing, and the inner concentric layers are separated from each other, and present the appearance of edges of folded paper, with small interstices between each. I examined this singular rock in 1816; it was then quarried for stone to mend the roads. In some parts of the rocks, I found masses of corallite of considerable size, enveloped in the basaltic amygdaloid. I found also, in this rock, well defined groups of prehnite, which was not then known to be an English mineral: it has since been discovered in the basalt of Staffordshire.

The occurrence of organic remains enveloped in basalt, of which there are various instances, may admit of an easy explanation, if we allow that basalt has once flowed like lava at the bottom of the ocean. Modern lavas often envelope bones and other substances that they meet with in their course.

Having before stated the phenomena presented by imbedded trap, which indicate that, in some instances, it has been protruded between regular strata laterally, it will be useful to cite an instructive example of beds of trap alternating with limestone, by successive deposition, which is stated by Dr. Daubeny, the present chemical professor at Oxford, in an interesting sketch of the Geology of Sicily. The facts seem clearly to ascertain, that beds of amygdaloidal trap, alternating with beds of limestone, have, in that island at least, been formed by successive currents of lava flowing over the bed of the sea, at intervals of time so distant, as to allow the deposition or formation of a bed of limestone, over each current of lava. A considerable district near Lentini, on the southern side of Mount Etna, and also a part of the island near Cape Passero, are composed of alternating beds of lava, with tertiary limestone abounding with organic remains of madreporites, nummulites, cerithea, and the remarkable fossil called the Hippurite. Santa Venera, the loftiest mountain in the south of the island, is capped with cellular lava; beneath it is a bed of limestone with minute shells; at a lower level, towards Lentini, there is a second bed of volcanic matter similar to the first; and two other similar alternations of beds of limestone and lava occur still lower down. Dr. Daubeny says that the cellular and semi-vitreous aspect of many of the volcanic beds associated with the beds of limestone, precludes all doubt respecting the manner of their formation: the character of other portions presents strong analogies to rocks of the trap family; "they are compact, and have a stony fracture; they contain crystals of olivine, and the cavities are filled with calcareous spar or zeolites, like the amygdaloids of more ancient strata. In some of the beds, a tendency to a columnar arrangement is discernible."

This account of Dr. Daubeny's, affords additional proof of the close connection of ancient volcanic rocks with trap rocks,—may we not add, of their perfect identity? It is beside highly illustrative