hornblende, with grains of quartz. In this rock are numerous globules composed of concentric coats of hornblende and felspar, varying in diameter from one inch to three or four inches. In the centre of each globule there is a particle of hornblende. The globules appear intimately united with the rock in which they are imbedded, and cannot be detached from it. The orbicular granite takes a more even polish than the porphyry, and is one of the most beautiful granitic rocks.

## ON FRESHWATER FORMATIONS.

DR. MACCULLOCH has claimed the merit of being the first writer who directed the attention of geologists to the circumstance, that some species of marine animals can live when removed into fresh water. But, in the second edition of this work, published in 1815 (p. 461 and 462), I stated my opinion that the evidence of certain species of shells being marine, or freshwater, rested on too slight a foundation; and that I was informed by Mr. Leckie of a circumstance which proved that marine animals have greater facilities of adaptation than naturalists generally suppose.

"The lake of Lentini in Sicily is stocked with a sea fish called the Cefalo—a species of mullet caught in the Mediterranean, and thrown into the fresh water of the lake, where they not only live, but increase greatly in size and improve in flavour, and are a considerable article of luxury in the island. This lake has no communication with the

sea, and is chiefly filled with rain water."

The evidence of certain geological formations being marine or freshwater, cannot rest securely upon the occurrence of a few species of marine or freshwater shells, but on the general character of the assemblage of organic remains. If shells belonging to species or genera that are known at present as inhabitants of rivers or lakes, occur with abundant remains of terrestrial animals and vegetables in particular strata, and no marine species are mixed with them, we can have little doubt that such strata were deposited in fresh water: nor would the freshwater origin of the strata be invalidated by the admixture of a few individuals of marine species; because we might with probability infer, either that the animals were capable of living in fresh water, or that they had been drifted by high tides or inundations. The character of the formation must be taken, as before mentioned, from that of the assemblage of organic remains.

FURTHER OBSERVATIONS ON THE INTERMIXTURE OF HUMAN BONES WITH THOSE OF BEARS, IN THE CAVERN OF MIALLET.

The remarkable intermixture of human bones with those of bears, in the cavern of Miallet, in the department of Gard (see p. 307.,) has received further elucidation by a subsequent examination of M. Tessier, of which an account was read to the Geological Society of