

an ox, which he had treasured up, with great care, as it was obtained from a deep excavation on the side of a hill of sandstone, near Nottingham. As this sandstone belongs to the more ancient of the secondary strata, the red sandstone and marl, (see Chap. XI.) and as the bone was placed deep under the surface, and the workmen declared there was no fissure or opening near to where the bone was found, the specimen was regarded as affording a remarkable exception to a general law in geology. Knowing from the structure of the rock, that it is, almost every where, intersected by deep vertical fissures, I was persuaded that the true position of the bone, had not been correctly stated by the workmen; and, on carefully examining the cave, a deep fissure, extending to the surface, was discovered, close to the situation where the bone was found. There can be no doubt that the bone had fallen into this fissure, and was thus introduced into a lower stratum of sand rock.

When we consider the violent convulsions and overturnings to which the crust of the globe has been subjected, it is truly surprising that remains of the higher orders of animals, if they had previously existed, should not have been frequently buried in the lower ancient strata. Perhaps the bones of small terrestrial animals in the calcareous slate of Stonesfield may have been carried thither, during the tertiary epoch, by subterranean streams of water; as such underground streams and rivers are of frequent occurrence in many limestone countries.

In the long ages of change and disturbance, during which the solid surface of our planet was approaching to its present state, we may reasonably believe that the earth was not fitted to be the residence of man and the higher order of animals. Even those geologists who deny the progressive development of organic life, admit that man is a recent inhabitant of the globe; but if, as they maintain, the essential conditions of the earth have been the same as at present, during an indefinite series of ages; if the same causes have always been in operation, without any increased intensity of action; if the earth, from the remotest imaginable epoch, had islands and continents, rivers and seas, enjoying a similar temperature to the present, though placed in different latitudes: if such, I repeat, were, from the remotest epoch, the condition of the globe, no assignable reason can be imagined why it might not have been inhabited by man. If only such changes as we at present observe were then taking place, or even supposing them to be more extensive in their operation, yet the human race might still have flourished in

"Some safe retreat in depth of woods embraced,
"Some happy island in the watery waste."

But the more ancient strata present evidence of such overwhelming changes and mighty convulsions, elevating mountain ranges, breaking the solid crust of the globe, and scattering the fragments in every