

Norfolk and Suffolk; loam and chalk conglomerate in Brighton cliffs; and in clay off Harwich and Herne Bay, and on the coast of Western Sussex.

Secondly. Terrestrial quadrupeds, imbedded with fresh-water shells; in strata that have been formed during the same epoch as the above, at the bottom of fresh-water lakes; such are the fossil bones of the lacustrine marls of the Val d'Arno.

Thirdly. Similar remains in superficial detritus, spread over the surface of rocks of all ages; as in beds of gravel near London; Petteridge Common, Surrey; near Eastbourn, Sussex, &c.

Fourthly. Osseous remains of carnivorous and herbivorous animals in caverns and fissures of rocks which formed part of the dry land, during the later period of the same epoch. The caverns of Gaylenreuth, Kirkdale, &c. are examples.

Lastly. The relics in the osseous breccias that occur in fissures of limestone on the shores of the Mediterranean, in the Ionian Isles, in the rock of Gibraltar, at Plymouth, and in the Mendip hills.*

Before I direct your attention to the fossils before us, which have been collected from the alluvial deposits under examination, and from various localities, it will be necessary to review the leading principles of that science which explains the structure of animal existence. Thus while in our preceding investigations we referred to Astronomy to dissipate the obscurity which shrouded the earliest

* Dr. Buckland's Bridgwater Essay, p. 94.