

parts then decomposed, and the skeletons and detached bones were imbedded in the silt, sand, or shingle.

In this manner alone can be explained the occurrence of bones and teeth of the mammoth, rhinoceros, hippopotamus, &c. so common in the alluvial or drifted deposits of this country; for these relics, although extremely friable, and buried in shingle, boulders, and other transported materials, are not waterworn, but in numerous instances remain as sharp and perfect as when recent. In the ancient shingle of Brighton cliffs (*Wond.* p. 102.), I have found fossil bones of horse, deer, ox, whale, &c. lying in the midst of quartz and granite pebbles and boulders, the bones, though crumbling to pieces if not very carefully removed, being quite perfect, and the whole mass held together by calcareous spar, deposited by water that had, during the lapse of ages, percolated through the chalk rubble above.

The cavities of the long-bones of mammalia, and the cancellated structure, (that is, the little cells or pores of the bone,) are often filled, or lined with crystallized carbonate of lime; as for example, in the bones found in caverns in England and Germany; and in the breccia of Gibraltar, and the conglomerates of Ava, and the Sub-Himalaya mountains. I have never seen silicified bone, except in two or three fragments of fish-bone, and a vertebra of the *Mosæsauros*, from the Sussex chalk.