

The bones most frequently found in caves are those of the Carnivora of the Quaternary epoch: the Bear, Hyæna, the Lion, and Tiger. The animals of the plain, and notably the great Pachyderms—the Mammoth and Rhinoceros—are only very rarely met with, and always in small numbers. From the cavern of Gailenreuth more than a thousand skeletons have been taken, of which 800 belonged to the large *Ursus spelæus*, and sixty to the smaller species, with 200 Hyænas, Wolves, Lions, and Gluttons. A jaw of the Glutton has lately been found by Mr. T. McK. Hughes in a cave in the Mountain Limestone at Plas Heaton, associated with Wolf, Bison, Reindeer, Horse, and Cave Bear; proving that the Glutton, which at the present day inhabits Siberia and the inclement northern regions of Europe, inhabited Great Britain during the Pleistocene or Quaternary Period. In the Kirkdale cave the remains, as we have seen, included those of not less than 300 Hyænas of all ages. Dr. Buckland concludes, from these circumstances, that the Hyænas alone made this their den, and that the bones of other animals accumulated there had been carried thither by them as their prey; it is, however, now admitted that this part of the English geologist's conclusions do not apply to the contents of all bone-caves. In some instances the bones of the Mammals are broken and worn as with a long transport, *rolled*, according to the technical geological expression, and finally cemented in the same mud, together with fragments of the rocks of the neighbourhood. Besides bones of Hyænas, are found not only the bones of inoffensive herbivora, but remains of Lions and Bears.

We ought to note, in order to make this explanation complete, that some geologists consider that these caves served as a refuge for sick and wounded animals. It is certain that we see, in our own days, some animals, when attacked by sickness, seek refuge in the fissures of rocks, or in the hollows of trunks of trees, where they die; to this natural impulse it may, probably, be ascribed that the skeletons of animals are so rarely found in forests or plains. We may conclude, then, that besides the more general mode in which these caverns were filled with bones, the two other causes which we have enumerated may have been in operation; that is to say, they were the habitual sojourn of carnivorous and destructive animals, and they became the retreat of sick animals on some particular occasions.

What was the origin of these caves? How have these immense excavations been produced? Nearly all these caves occur in limestone rocks, particularly in the Jurassic and Carboniferous formations, which present many vast subterranean caverns. At the same