

vain. Here, therefore, we have evidence of an entire limb not having been washed in a fossil state out of an older alluvium, and then swept afterwards into a cave, so as to be mingled with flint implements, but having been introduced when clothed with its flesh, or at least when it had the separate bones bound together by their natural ligaments, and in that state buried in mud.

If they were not all of contemporary date, it is clear from this case, and from the humerus of the *Ursus spelæus*, before cited, as found in a floor of stalagmite, that the bear lived after the flint tools were manufactured, or in other words, that Man in this district preceded the cave-bear.

A glance at the position of Windmill Hill, in which the caverns are situated, and a brief survey of the valleys which bound it on three sides, are enough to satisfy a geologist that the drainage and geographical features of this region have undergone great changes since the gravel and bone-earth were carried by streams into the subterranean cavities above described. Some worn pebbles of hematite, in particular, can only have come from their nearest parent rock, at a period when the valleys immediately adjoining the caves were much shallower than they now are. The reddish loam in which the bones are embedded is such as may be seen on the surface of limestone in the neighbourhood, but the currents which were formerly charged with such mud must have run at a level seventy-eight feet above that of the stream now flowing in the same valley. It was remarked by Mr. Pengelly, that the stones and bones in the loam had their longest axes parallel to the direction of the tunnels and fissures, showing that they were deposited by the action of a stream.*

It appears that so long as the flowing water had force enough to propel stony fragments, no layer of fine mud could

* Pengelly, *Geologists*, vol. iv. p. 153, 1861.