

XII. *A farther account of fossil bones discovered in caverns inclosed in the lime stone rocks at Plymouth.* By JOSEPH WHIDBEY, Esq. *In a Letter addressed to Sir EVERARD HOME, Bart. V. P. R. S.*

Read February 8, 1821.

DEAR SIR,

Bovisand Lodge, near Plymouth,
11th Nov. 1820.

IN November 1816, I sent to Sir JOSEPH BANKS, some fossil bones found in the lime stone quarries at Oreston, near Plymouth, which bones were submitted by him to your examination; and as you considered them to be of some importance, a description of them was laid before the Royal Society, on the 27th of February, 1817.

I now take the liberty of sending you some more bones that have been subsequently found, nearly similarly situated, and not far from the place where the others were discovered, and I beg you will please to make use of these in any way you may think proper for the benefit of science.

These bones were lately found in a cavern one foot high, eighteen feet wide, and twenty feet long, lying on a thin bed of dry clay at the bottom; the cavern was entirely surrounded by compact lime stone rock, about eight feet above high water mark, fifty-five feet below the surface of the rock, one hundred and seventy-four yards from the original face of the quarries, and about one hundred and twenty

yards, in that direction, from the spot where the former bones were found in 1816.

All this quarry had been worked by blasting through the solid rock, with here and there a few small caverns similar to that where the bones were discovered, but none of them had the smallest appearance of ever having had any opening to the surface, or connection with it whatever, or with each other. The caverns here spoken of were quarried many feet below the bottom of them, and nothing was found but hard solid lime-stone, in which the quarrying ceased, and the workmen proceeded on in an horizontal direction.

Many caverns have been met with in these quarries, the insides of which have been crusted with stalactite; but there was no appearance of this kind in the cavern where the bones were found, every part of it being perfectly dry, and nearly clear of rubbish, a circumstance which clearly proves it had no connection with the surface, as in that case water would have found its way into it, the dropping of which would have formed stalactite, as in other instances.

I also send you some other bones, found about the same time, four yards distant from those just mentioned, and I have reason to believe on the same level, and under exactly similar circumstances.

To this account Sir EVERARD HOME has added the following description of the bones, and the names of the animals to which they appear to have belonged.

1. The fourth grinder from the front, on the right side of the upper jaw, of the single horned rhinoceros.
2. The hindermost grinder but one, on the left side of the lower jaw, of the black or brown bear.
3. The hindermost grinder but one, on the right side of the upper jaw, of the black or brown bear.
4. Tusk of the left side of the lower jaw.
Tusk of the left side of the upper jaw of the brown or black bear.
5. Portions of two tibiæ, apparently of the same animal.
6. One lumbar? vertebra.
Portion of the os innominatum?
Portion of the sacrum.
Head of the os femoris.
Two portions of cannon? bone of an animal of the deer kind.
Portions of two dorsal vertebræ.
Small portion of the pelvis, with part of the acetabulum.
Part of the ulna.
Part of the body of the os femoris.
All apparently of the same animal, which is of the size of a bear.

The bones are deposited in the Museum of the Royal College of Surgeons.