

FLINT IMPLEMENTS FROM THE DRIFT.

BY JOHN EVANS, ESQ. F.S.A., F.G.S.

At the Annual Meeting of the Society, held at Aylesbury on the 5th of January, 1860, Mr. Evans exhibited a number of the flint Implements from the Drift, which have of late attracted considerable attention among both Antiquaries and Geologists. He remarked that the "drift" was a term applied to a number of superficial deposits varying considerably in character, some being clay and some sand and gravel, but all due to the "drifting" action of ice or water. The beds from which the flint implements have been procured, are of fresh-water origin, and have been referred by Geologists to the so called Post Pliocene period. Mr. Evans then considered the subject under three heads—

FIRST—Are the flints really implements?

SECOND—Under what circumstances have they been found?

THIRD—At what period were they deposited where found?

In considering the first point, he showed from the general similarity of form, the nature of the chipped edges and their analogy to a certain extent with weapons of a later period, that there could be no reasonable doubt as to their having been really formed by the hand of man. An objection had been raised by some that these forms could not have been chipped out by a people unacquainted with the use of metals, but he had himself experimented upon this point, and had produced the form of one of the implements with precisely the same character of edge, by chipping one out of a block of flint by means of a rounded pebble. The forms found in the "drift" are three—1: flakes of flint, apparently intended for knives or arrow-heads—2: pointed implements usually terminated at the base, possibly used as spear or lance-heads—3: oval or almond shaped implements, with a cutting edge all round, possibly intended either for axes or sling stones.

The first form was so simple, and the flakes so closely resembled those of a much later date, that much importance did not attach to them ; but both the other classes of implements were peculiar, and varied considerably from the well-known stone implements of the so called Celtic period, of which specimens were also exhibited. These latter are usually ground at the edge, if not all over, and are made to cut at their broad end, whereas those from the "drift," which approach nearest in form, are made to cut at the narrow end, and are never ground. They are also made of various materials, as greenstone, basalt, &c. ; whereas those from the "drift," as far as has hitherto been ascertained, are exclusively of flint.

With regard to the circumstances of their discovery, Mr. Evans observed, that implements apparently fashioned by the hand of man, had been found in the late excavations conducted under the auspices of the Royal and Geological Societies, in a cave at Brixham in Devonshire, and similar discoveries had also been made some years ago in Kent's Hole, near Torquay. This called the attention of English Geologists to the point, and Mr. Prestwich, distinguished for his long-continued exploration of the "drift," having heard reports of similar discoveries made near Abbeville, determined to investigate them on the spot. It is due to M. Boucher de Perthes, a distinguished French savant at Abbeville, to say that as much as ten years ago he had made the discovery of these implements in the "drift" near that town, and communicated it to the world in his book entitled "Antiquités Celtiques et Antédiluviennes." His discovery had been treated with unmerited doubt and neglect, but the researches of Mr. Prestwich at Abbeville, where he had been joined by Mr. Evans, convinced them of the truth of many of M. de Perthes' views ; and at Amiens, some thirty miles distant, this conviction was strengthened by the sight of one of these flint implements still *in situ* in a perpendicular bank of gravel. It was firmly embedded in it, at a depth of eleven feet from the surface, and the strata above it were entirely undisturbed. They consisted of gravel, sand and clay, or brick-earth, which latter contained the delicate remains of fresh-water shells—so that it was quite impossible for the implements to have been introduced from above at any time subsequent

to the formation of the beds. It therefore followed that they had been washed into the gravel with its other constituent parts at the time of its deposit. Large numbers of the implements had been found in this pit, near Amiens, which was excavated in table-land, at an elevation of about a hundred and eighty feet above the sea, and about eighty feet above the River Somme, at that place. Some animal remains were found in the same pit, but in a continuation of the same gravel at a little distance, many bones and teeth had been found of the mammoth, rhinoceros, hippopotamus, and other animals now extinct. Since the visit of Messrs. Prestwich and Evans, many other Geologists, including Sir Charles Lyell, had been there, and in several instances had themselves found implements of flint in such situations that they were perfectly satisfied that they were still in the very spots in which they had been left by the water to whose action the "drift" was due.

But it was not only along the valley of the Somme that such implements had been discovered. On returning to England Mr. Evans had noticed an account of some flint implements discovered at Hoxne in Suffolk, in 1797, published in the Thirteenth Volume of the *Archæologia*, and from the account there given of the circumstances of their discovery by Mr. Frere, it was evident that it was an analogous case to those at Abbeville and Amiens. He had in consequence visited Hoxne in company with Mr. Prestwich, and investigated on the spot, the discoveries recorded by Mr. Frere. They had also caused excavations to be made, and in the gravel thrown out from a trench, sunk under their own directions, Mr. Evans had found an implement of the spear-head form, which had come from a seam of gravel at a depth of eight feet from the surface. Mr. Frere had recorded the finding of curious bones in this pit, and of late years bones of the mammoth and other animals had been found there, and as far as could be ascertained, in close proximity to the flint implements. The deposit at Hoxne is also of fresh-water origin, roughly stratified, and overlying the boulder clay. It must have been deposited at a time before the face of the country at that point had received its present configuration. A large number of the implements had been found in the pit in former years, but of late they had been rather

scarce, only two having been found during the previous winter. Another implement of the spear-head form, and precisely similar to those from Hoxne, is preserved in the British Museum, and was recorded to have been found nearly two hundred years ago in Gray's Inn Lane, in company with the tooth of an elephant!

Such were the circumstances of the discovery of these implements, and there could be no reasonable doubt that those who made them must have been contemporaries on earth with the mammoth, the rhinoceros tichorrhinus, the great cave bear, and other animals long since extinct. The same waters which had carried away their carcasses and bones had also at the same time inhumed these relics of a higher order of beings. But at what date this took place was still a mystery. It was a question whether the age of these extinct animals was not to be brought down to a period nearer our own time than has commonly been supposed, rather than that the age of man should be carried back through untold centuries. There could, however, be no doubt, that a very long period must have elapsed since those who used these weapons and implements had existed—our only means of judging of the time that had elapsed was by the changes that had taken place on the earth's surface since their deposit, and these were such as would apparently require a longer period than that embraced by our ordinary chronology. At Amiens these weapons had been caught up by rushing water, together with the bones of extinct animals, and deposited in beds of gravel. Above this gravel, in comparatively tranquil water, thick beds of sand and loam have been deposited, containing the delicate shells of fresh-water mollusca, and where all this took place, is now table land at an elevation of one hundred and eighty feet above the sea—this too in a country whose level is now stationary, and the face of which has but little altered since the days when the Gauls and Romans constructed their sepulchres in the soil overlying the beds of "drift" containing these far earlier relics.

In conclusion, Mr. Evans suggested a careful examination of all gravel-pits in which mammalian remains are found, with a view of ascertaining whether other traces of the primeval race of men who formed the implements, could not be found in fresh localities.