



CELT. GROUND AT THE POINT. 1/2 SIZE.



SCRAPER. 1/2 SIZE.



FABRICATOR.
OR ARROW FLAKE.
FULL SIZE.



SCRAPER. 1/2 SIZE.



ARROW HEAD. FULL SIZE.



ARROW HEAD. FULL SIZE.



TRIMMED FLAKE. FULL SIZE.



CHISEL. GROUND AT BOTH ENDS. 1/2 SIZE.

FLINT IMPLEMENTS.

NEOLITHIC FLINT IMPLEMENTS FOUND AT BAYLHAM, SUFFOLK.

BY EDWARD LINGWOOD.

It is the intelligence of man that has enabled him to form weapons, armed with which he has obtained a mastery over animals swifter and stronger than himself. Some sort of weapons were always necessary to him. These implements enable us to form some estimate of the intelligence of a race. What we know of pre-historic man is of necessity derived from his remains. Implements of the stone age have been found in nearly every part of the world; and among certain savage nations the use of stone has come down to our own time. In England such remains are abundant, in the river-gravels, in caves, and upon the surface. With stone man ground his corn: he fought with stone weapons, he prepared the wood and bone required for his weapons of the chase with stone, and sharpened his darts with points of flint.

The working of flint requires a very sure hand. At Brandon we have, perhaps, the oldest industry in the world. The manufacture of flint has been carried on there almost continuously since Neolithic times, and the river gravels there are the richest in Palæolithic implements. The flint knapper first quarters his stone, and then with a sharp blow with an iron hammer flakes off a piece of flint, one shows the exterior face of the block—the other has a somewhat flat surface with a bump at the place where the blow was given called the "bulb of percussion," the edge of the next flake probably cuts the flat surface on the core, and leaves a ridge, and then flake after flake is taken off, until the upper surface has none of the outside crust upon it, but the ridges left by the removal of former

flakes. After the flakes are taken off the remaining piece is called the core. The pre-historic flint implements are sometimes made from the flake, and sometimes the core.

Where the ground is covered with flakes and spalls, it is evident the implements have been worked, and probably at least for a time pre-historic men had their dwelling. A field of about three acres in the parish of Baylham, is towards the river Gipping, covered with such pieces of flint; the majority bear the same relation to an implement that carpenter's chips do to the table, or whatever he is making. Still I have found a considerable number of implements here. Some of these are ground tools, and amongst them is a flake of one highly ground, in which are no traces of the original chipping. The majority of the tools are large flakes with a secondary working at the edge; others are simple flakes formed by a single blow. From the presence of the cores and hammer stones it is evident that they were formed on the spot. The chalk in this locality has very few flint stones in it, and the implements are formed of stones from the gravel.*

These flints belong to the Neolithic period.

We have little to help us in forming an opinion as to their age. And as it is of course impossible to take a remote time, and reckon onwards as we do in history, it seems best to take some distant historical date, and working backwards, endeavour to leave an impression of the length of time that has elapsed since the stone age.

When Cæsar invaded Britain he found the inhabitants in a higher state of civilization than is perhaps generally supposed: at any rate they were acquainted with iron. Cæsar explored but a corner of Britain, and wrote chiefly from hearsay: but he says, in the interior were a people born in the island itself, while those on the coast had crossed from the country of the Belgæ. These latter were Celts, fair, tall

* This land is very light soil, and is called the warrens, for a long while it was probably uncultivated, lately it has been ploughed much deeper than had previously been the case, when I exhibited the flints before the Ipswich Scientific Society, the effect of this was shown by the Rev. Barham Zincke, who showed us the flints found in his garden at the depth of four feet, mentioned in Darwin's book on the "Earth Worms."

men, who had invaded Britain towards the close of the Neolithic period from Gaul. They probably arrived in successive hordes, and some of the latter, who would be in touch with the civilization of Rome, brought a knowledge of the use of iron; for a long period they were unacquainted with the use of this metal, and employed bronze. They made ornaments of jet, amber, and gold, and were even acquainted with the potter's wheel. Such stone implements as remained in use were probably highly finished, such as the perforated axes, and some of the most exquisitely worked arrow heads, and of course flint flakes and scrapers.

These light Celts probably subjugated a former race of short dark men of Iberic stock, who were the newer Stone Folk—Neolithic man. In the Fens have been found some evidences of lake dwellings, and at least two manufactories of flint implements have been examined, one at Cissbury, and the other at Grimes Graves, near Brandon. In these places they probably lived in the holes which they excavated in order to procure flints. An examination of these, and of caves in the south of England, enables us to learn something of their habits, food, and weapons.