DIPTERA

Mr. Chaplin Bennett secured a specimen last September in the Swincombe Valley, of the so-called 'New Forest Fly'—a misnomer. A further misnomer of this species and its near relations is the term 'tick.' It belongs to the family *Hippoboscidae* whose members are winged but in many cases, wingless. They are, it is true, like diptera, but often like ticks. The New Forest Fly, from its occurrence in the New Forest especially, is known scientifically as *Hippobosca equina* from its propensity to 'bite' the horse and live in the soft folds of the leg muscles. Bird ticks are common, being found on the Swallow (*hirundinis*); birds generally and fowls (*ornithomyia, avicularia, fringillaria*). *Melophagus ovinus* resembles the sheep tick so common in the animal's wool, but is distinct from the true tick.

The morphology and reproductive system should be studied in Sharp's *Insects, Pt. II, Camb. Nat. History*.

I have a specimen taken from a horse stabled at Ivybridge, 1904.

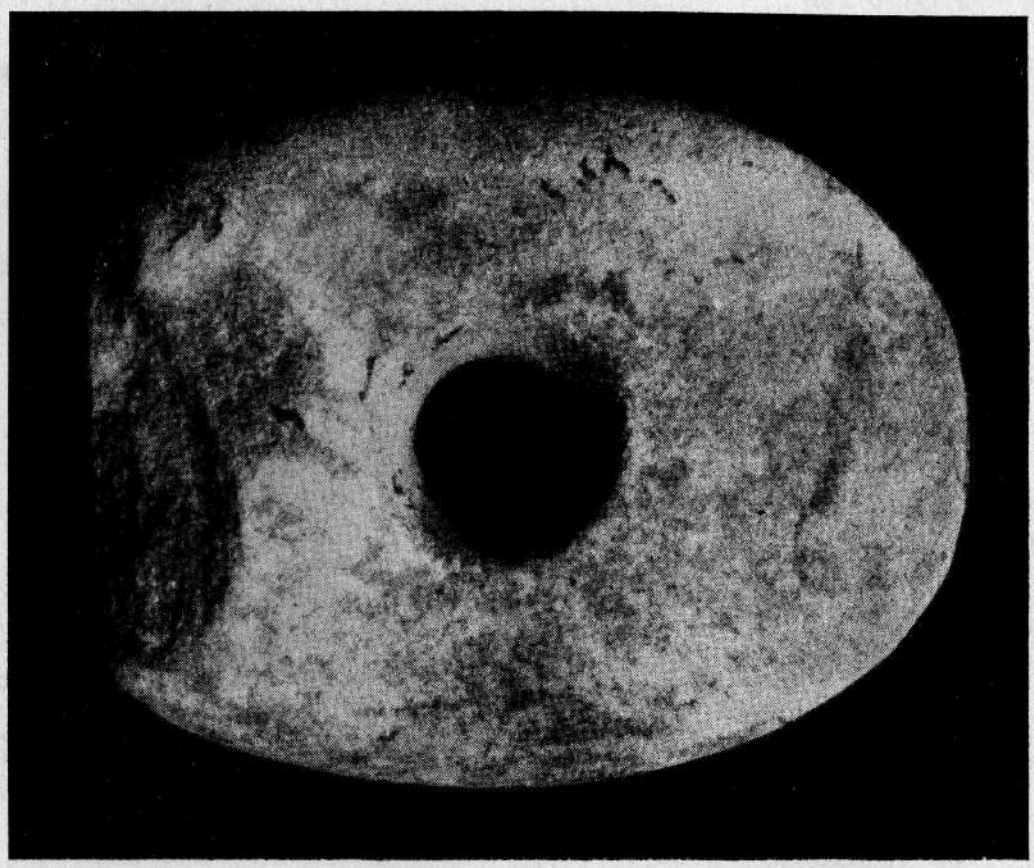
C.W.B.

ARCHAEOLOGY

STONE IMPLEMENT FROM BRAUNTON, N. DEVON

I am permitted by Dr. F. R. Elliston Wright to describe a stone implement found at a depth of six feet in the Cemetery, next to the Churchyard at Braunton, in old river gravels. The material is a grit from the carboniferous beds of North Devon, and the stone a pebble, of present length $3\frac{7}{8}$ inches (probable original length $4\frac{1}{4}$ inches), 3 inches in width, and 1 inch in thickness. The sole formative work has been perforation by use of a sand drill, the perforation being $1\frac{1}{16}$ inches diameter at either end, rapidly diminishing to $\frac{11}{16}$ inch in diameter at the centre. Presumably by use, a piece has been broken off one end of the stone. Pebbles similarly pierced have been found at other places in N. Devon and on Dartmoor, and are for the more part incomplete, having been broken across the perforation.

Such implements have been variously described as mace-heads, hammers and hoes. EVANS describes similarly perforated ovoid pebbles as hammer-heads. All that can be safely said is that the implements were hafted, and were used for striking blows, as evidenced by the wear and breakage which they have sustained. The weight of the implement now described is, in its present condition, 10.1 ounces. It may date from either the Neolithic or the Bronze Age.



R. H. Worth.

FIG. 1. STONE IMPLEMENT, Braunton, N. Devon.

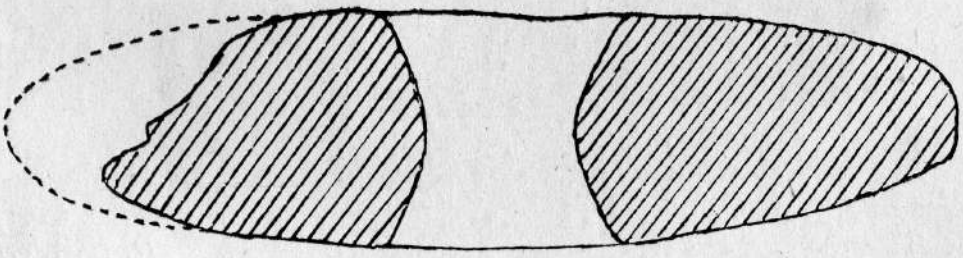


FIG. 2. SECTION.

Scale for both figs. 100/127 (app. 4/5).

Plate 2, fig. 1 is from a photograph, scale 4/5 natural; fig. 2, gives a longitudinal section of the implement, to the same scale as the photograph.

R. H. WORTH

A GROUND STONE IMPLEMENT FROM BRIXHAM

Mr. J. Evans recently found a small ground stone implement in the soil of his garden at the "Tythings," Belmont Road, Brixham, and by the intermediary of Mr. E. N. Masson Phillips I have had an opportunity of examining it.

The implement is small, the material a very fine-grained quartzose grit. It has been roughed into shape by such flaking as the nature of the material permitted, and subsequently ground with care to a cutting edge, and on two faces. From the rest of the surface all sharp edges left by the flaking have been smoothed and ground, but much of the surface of the original flaking has been left.

The length of the implement, $2\frac{13}{16}$ inches, its greatest width is $1\frac{1}{8}$ inches and its greatest thickness $\frac{23}{32}$ of an inch. The width of the almost straight cutting edge which forms one end is $\frac{15}{16}$ of an inch, the width at the butt is $\frac{7}{8}$ of an inch, the butt is flat and bears no sign of having received any blows in use. The weight is 2 oz. 22 grns.

I have said that the cutting edge is practically straight; it is also bevelled at a greater angle on one of its sides, somewhat in the manner of a modern plane-iron. Plane facets bound either side of the tool; and, in place of the rounded contours which are commonly presented by a stone celt, there is a constant use of plane surfaces. The cutting edge shows signs of use on the side which presents the steeper angle. The tool is so shaped and the irregularities of its surface so ground away that it can be held firmly and comfortably in the hand.

From its size, and the other features which I have described, I should class this implement as a hand chisel, with which some at least of the work of a plane could readily be accomplished; it would need no handle, which, indeed, would be very difficult to fit. Plate 3 gives views of two faces and one side of the tool.

I am much indebted to Mr. Evans and Mr. Phillips for the opportunity to examine and describe the implement.

R. H. WORTH

BRONZE CELT AND STONE CELT, FROM BOVEY TRACEY

Mr. E. Cahen has recently found two celts in his garden at Bovey Tracey; one celt is bronze and was found during

excavation, while the other is a stone implement and was found on the surface.

It is possible that the stone celt has been part of a collection made by a former occupier of the premises, but this is by no means certain, and there is nothing in its form or material that suggests the possibility. It has been thought best to place both implements on record.

(1) The bronze celt is socketed and looped, and is of a late type; it is a little unusual in that there is no bead around the mouth of the socket; in this and in general contour it is more than usually graceful in outline. The overall length is 9.84 cms. ($3\frac{7}{8}$ inches), the breadth of the cutting edge is 4.44 cms. ($1\frac{3}{4}$ inches), and the mean outside diameter at the socket is 3.97 cms. ($1\frac{9}{16}$ inches). The section of the body is rectangular with chamfered edges.

Externally there is a seam at the junction of the two parts of the mould in the plane of the cutting edge. Internally the seam is in a plane at right-angles to this. The weight is 216.6 grms. (7.64 ounces).

(2) The material of the stone celt is chert, superficially mottled cream and buff. The buff colour is due to weathering in the soil, it extends but a little depth into the stone, and it is not accompanied by any loss of the surface polish. A recent chip at the cutting edge (which will be seen in the illustration) shews the slight depth to which the stain extends, and also that it is darker just below the surface.

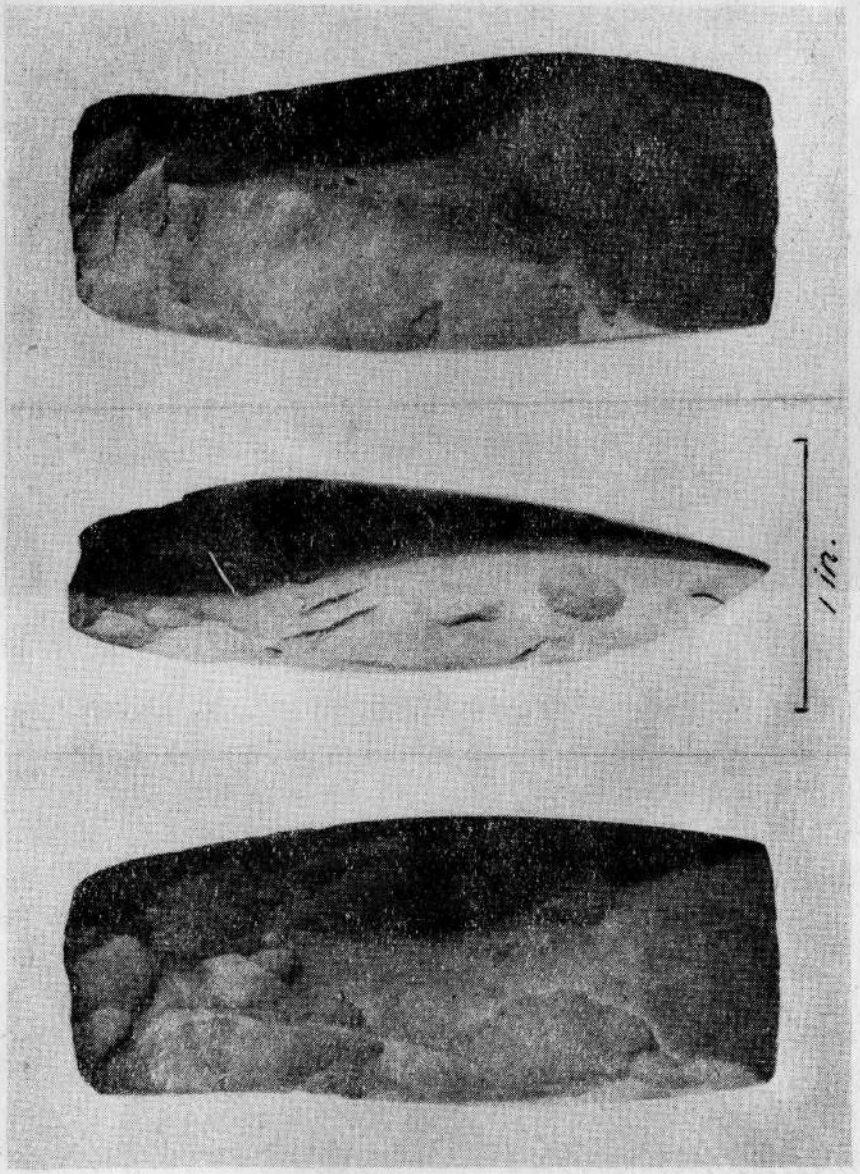
The surface of the implement is not completely ground, but the trace of many of the flakes remains from the first stages of its manufacture. In longitudinal section the butt has been ground to much the same contour as the cutting edge, but has been deliberately blunted by grinding to a flat edge, one tenth of an inch in width.

The overall length of the implement is 14.13 cms. ($5\frac{9}{16}$ inches), the greatest width at the cutting edge is 5.87 cms. ($2\frac{5}{16}$ inches), the width near the butt is 4.13 cms. ($1\frac{5}{8}$ inches), and the weight is 345.4 grammes (11.83 ounces).

A celt from Houndiscombe, Plymouth, now lost by enemy action, was made from a very similar flint or chert, but lacked the mottled surface.

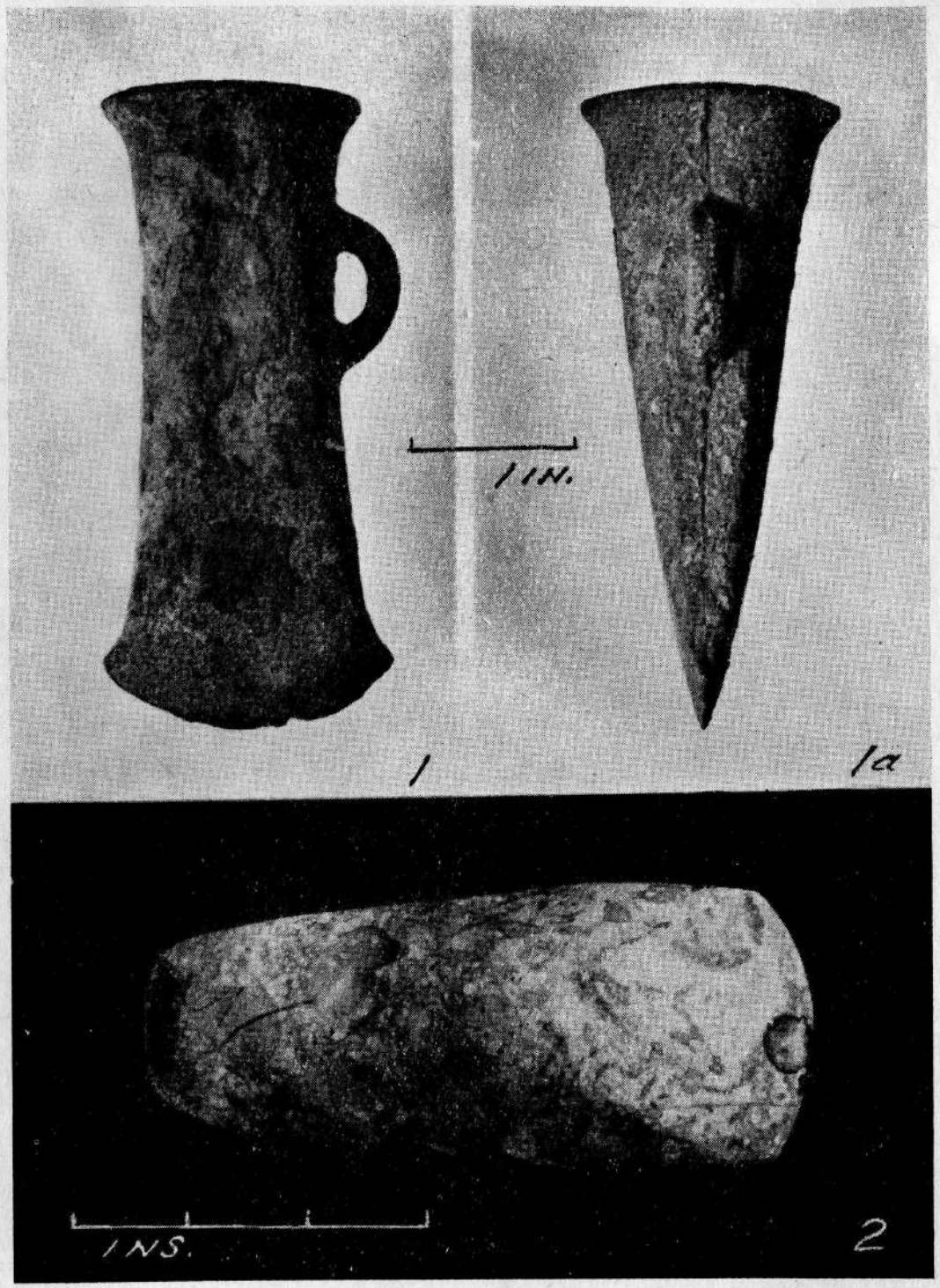
Two views of the bronze celt are given on plate (4) figs. 1 and 1a, and the stone celt is figured on the same plate, fig. 2.

R. H. WORTH



R. H. Worth

STONE IMPLEMENT, Brixham.



R. H. Worth.

FIGS. 1, 1a. BRONZE CELT, Bovey Tracey.

FIG. 2. CHERT CELT, Bovey Tracey.

Scientific Memoranda—*To follow Plate 3*