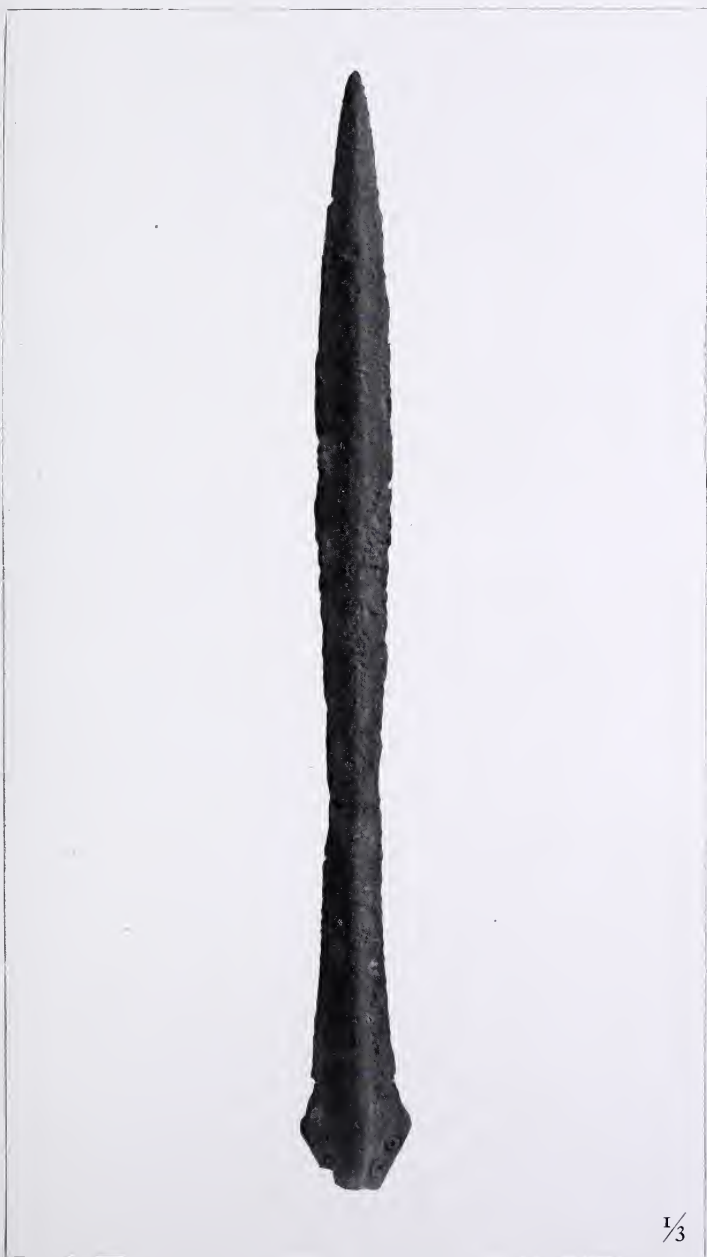


Bronze Sword found on Pitney Moor, Somerset.

BY H. ST. GEORGE GRAY.

THE subject of this short paper is a bronze sword of the late Bronze Age, a weapon which is somewhat rarely discovered in Britain; but they are much more frequently found in Ireland, the Royal Irish Academy at Dublin possessing a great quantity of specimens.

The bronze sword (*see* accompanying plate, one-third size, linear) was found in November, 1901, by a labourer, in ploughing on Pitney Moor, Somerset, three and a-half miles, as the crow flies, north-east of Langport. Unfortunately the hilt-plate and pommel portion was not preserved by the finder, who declares that there was another piece attached to the sword, but as it broke in two, he threw it away! However, the larger portion—the blade and top of handle—is of considerable interest as a relic of the late Bronze Age, and is worthy of record. The surface is somewhat corroded and the cutting-edges jagged, as shown in the illustration. There is nothing remarkable about its shape, being of the typical narrow leaf-shaped form of the period, adapted for thrusting and stabbing, rather than cutting. It has a fairly well-marked median ridge, with a slight fluting between it and the cutting-edges, that the weight might be diminished. It is difficult to say, in its present condition, whether this sword had a bevelled cutting-edge. Like the majority of swords of this type, the upper part of the hilt-plate has two rivet-holes on



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BRONZE SWORD, PITNEY MOOR, SOMERSET.

either side, which still contain some of the material which formed part of the rivets. The grip of this sword probably consisted of some perishable material—such as horn, bone, or wood—the rivets being used to fasten it to the bronze hilt-plate.

The length of the sword, as it is, is 444 millimetres (17·4 ins.); its breadth at point of junction of blade with the hilt, 45 m.m. The blade's narrowest width of 22 m.m. is at about 5·2 ins. from the hilt, from which it swells gradually to its greatest width of 31 m.m., at 11½ ins. from the hilt, from which again it tapers gradually for 5 ins. to the point. As usual, the true edge of the blade is cut off at about ¾ in. above the junction of the blade with the hilt; the greatest thickness of the median ridge of the sword at this point is 9·5 m.m. Its weight is 10·5 ozs. (Troy). This sword has been deposited in Taunton Museum, through the kindness of Mr. H. C. Price, of Drayton.

On first seeing this sword, I was struck by the difference between the colour of the bronze of the sword itself and the metal which fills the rivet-holes; I thought it very possible that this latter material might be iron, not only from its appearance, but from the fact that iron was just coming into use at this period, and from the strong possibility of finding iron-rivets associated with bronze blades at the end of the Bronze Age or in the very early Iron Age. As the Stone and Bronze Ages overlapped, so did the Bronze and Iron Ages; there was, in most countries, no doubt, a transition period between the Bronze and Iron Ages, of greater or less duration. The excavation of 2000 graves in the neighbourhood of Halstatt, Austria, furnishes an excellent example; they yielded many swords both of bronze and iron, in the form and character of which there was absolutely no difference, except in the metal. Knowing that iron-rivets would be a very interesting discovery in a bronze sword of this shape, although by no means an improbability, as this form itself was copied in iron to some

extent, I asked Mr. Henry Balfour, M.A., Curator of the Pitt-Rivers Museum, Oxford, if he would get the rivets chemically examined at the University Museum, and this he has very kindly done. Mr. W. W. Fisher tested a piece of rivet but does not find any iron reaction, and he does not think that any iron can be present; Prof. H. A. Miers thinks that the different colouring might be due to the separation of the carbonates from the oxides of copper. It is, at any rate, probable that the blade and the rivets consist of alloys of different composition, in which case galvanic action might have been set up at the point of junction, which would account for the difference in the colour of the two bronze alloys.

Several bronze swords of the form of the Pitney one have been recorded in *Evans'* "Bronze Implements," 1881, chap. 12. Two very similar were found in Lanarkshire¹; one, somewhat similar, was found in the Thames at Battersea²; another similar sword was found at Cranborne, Dorset³; another at Islay⁴; and another at Fulbourn, Cambridge.⁵ A bronze sword of somewhat similar form to the Pitney one, but in far better preservation and having the hilt-plate intact was found near Midsomer Norton in 1873, but it is not in the Taunton Museum, however (see *Proc.*, Som. Arch. Soc., vol. 22, 1876, p. 70). The chief difference between this and the Pitney specimen, is that instead of having small circular rivet-holes at the top of the hilt-plate, it has a slot, for a large rivet or pin, on each side, produced in the casting and not subsequently drilled or made.

It will be well to repeat here, what has often been recorded, that the handles of these bronze swords are very short and could not have been held comfortably by hands as large as

1. Arch. Assoc. Journ., vol. xvii, pl. 20, figs. 10, 11.
2. Op. Cit., vol. xiv, pl. 24, fig. 5.
3. Op. Cit., vol. xv, pl. 23, fig. 2.
4. Proc. Soc. Ant. Scot., vol. xxx, p. 354, fig. 1.
5. Archæologia, vol. xix, p. 56, pl. iv.

ours, "a characteristic much relied on by those who attribute the introduction of bronze into Europe to a people of Asiatic origin."

It is almost impossible to draw any precise demarcation between the bronze sword, dagger, and knife; the difference is mainly one of dimensions. Taunton Museum contains a very fine long and narrow bronze dagger, which is hardly large enough to be classed as a sword. It was found in the turbaries near Edington Burtle, west of Glastonbury, Somerset, and is briefly quoted by Sir John Evans.⁶ It is of an uncommon type, cast with rather deep rounded notches in the base to receive the rivets for fixing the perishable portion of the handle, instead of having holes drilled or cast in them. The blade has a well-marked median ridge like the Pitney sword, but the spaces between the ridge and the cutting-edges are more fluted and less shallow than in the case of the sword. The total length of the dagger is 298 m.m. ($11\frac{3}{4}$ ins.); width at base of blade 35 m.m.; weight 3.55 ozs. (Troy).

The Bronze Age, roughly speaking, extended from 1200 B.C. to 200 B.C. The Pitney sword may, therefore, be safely assigned to 200 B.C., or slightly later, and probably at least 100 years before the Roman invasion. At this latter time swords made of iron were in general use in Britain, but the Late-Celtic sword was no longer leaf-shaped, but slightly tapering with the edges almost straight.

6. *Anc. Bronze Implements*, 1881, p. 249.