

CLASSIFICATION OF BRONZE ARROW-HEADS.



Fig. 1.



Fig. 2.



Fig. 3.



Fig. 4.



Fig. 5.

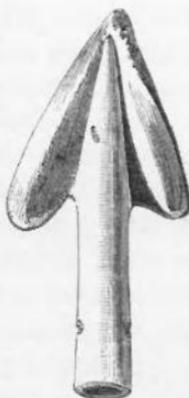


Fig. 6.



Fig. 7.

Specimens preserved in the British Museum.

REMARKS ON THE CLASSIFICATION OF BRONZE
ARROW HEADS.

ON a former occasion,¹ I ventured to suggest that bronze celts might be classified according to the progressive development evinced in their forms, from a simple wedge-shaped axe to a socketted instrument, more appropriate for the use intended, graceful in its proportions, and often tastefully ornamented. The line of argument there pursued applies with equal fitness to bronze arrow heads; and, as in the former case I adopted the stone or flint celt as the normal type of the bronze implement, so I shall now regard the flint or stone arrow head as the type of those formed of bronze.

So far as I have had opportunity of examining, I think that bronze arrow heads may be divided into five classes.

First, the simple leaf-shaped weapon, without barbs, or the barbing slightly developed; the blade of an equal thickness throughout, and the edges often blunt. The tongue for insertion into the shaft thicker than the blade, sometimes blunt, as if cut off by a blow, or rounded and bulbous, as if the unwrought end of a small bar of bronze, which by hammering had been made to assume the form of an arrow head (Figs. 1 and 2). This weapon would require the shaft to be split to secure it, and all subsequent tying would be insufficient to prevent the head from being driven into the wood of the arrow.

In like manner as in celts of the first class (formerly proposed), this tendency of the weapon to split the shaft was a constant and fatal objection to its use; and accordingly we find the arrow heads of the second class (Fig. 3), in which the tongue for insertion is much longer than in the former example, and is tapered from the blade suddenly in a succession of flattened shoulders or edges, thus offering a succession of flat surfaces, which, when pressed by the shaft (doubtless notched to secure them), offered a considerable resistance to a blow. The blades of this class of arrow head are more delicately shaped than in the former, the barbs are well

¹ See *Archaeological Journal*, vol. iv., p. 1.

marked, and a central raised rib runs along the entire length of the arrow.

This attempt to obviate the splitting of the shaft not being found to answer well, a *stop-ridge* appears to have been introduced, and this peculiar feature would constitute the third class (Fig. 4). This stop-ridge, in the example represented, is a small triangular projection in the blade, at the springing of the barbs, and directly in a line with the tongue of the arrow. Against this the shaft would be pressed, and by this contrivance the subsequent splitting of the shaft would be rendered difficult, if not impossible. This arrow head has a deep groove cut on each alternate side of the blade; what this was for, unless it might be intended to receive *poison*, it is difficult to say.

The contrivance of a stop-ridge, in the formation of arrow heads, may probably have been coeval with the introduction of the stop-ridge in celts of the second class, as proposed in the memoir before cited;² and that this feature is observable in both weapons is certainly curious.



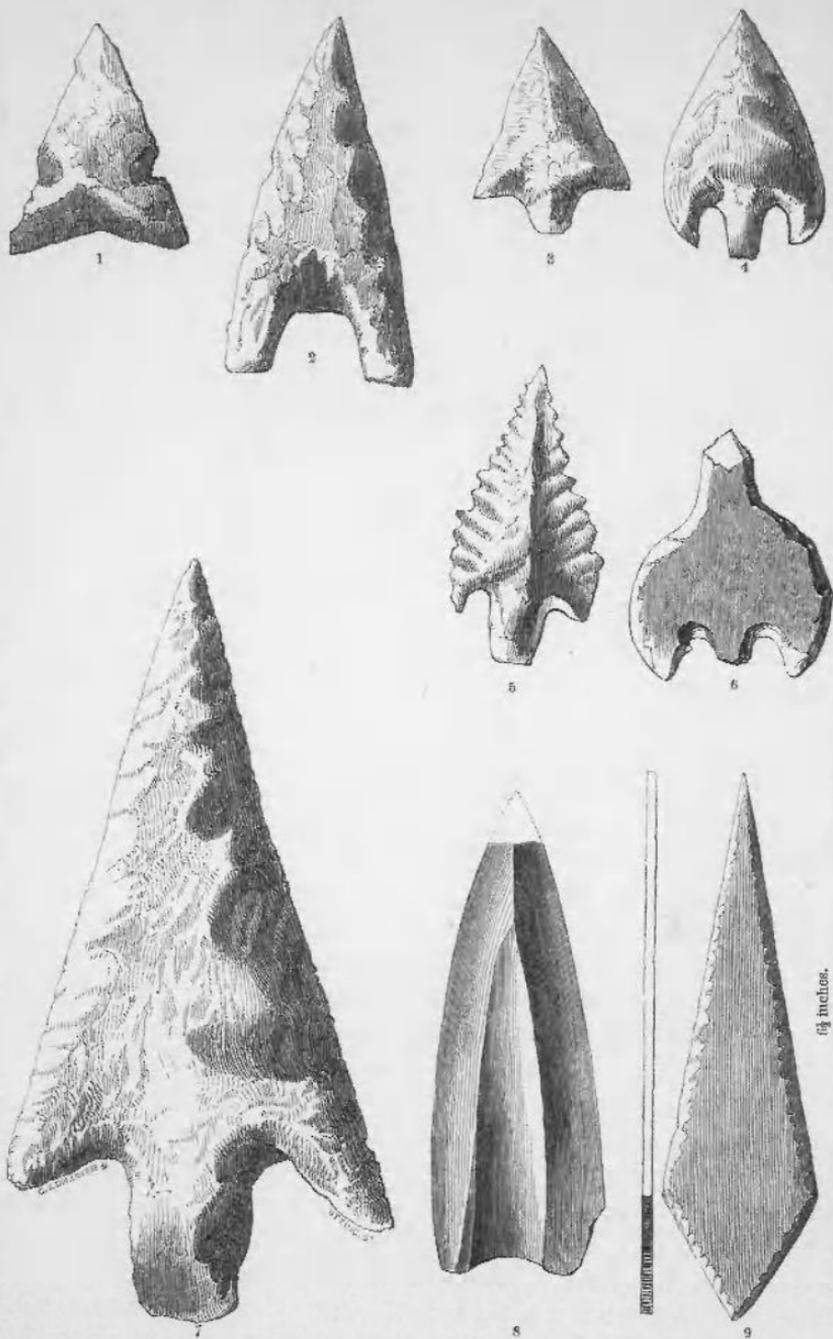
Fig. 8. Bronze arrow head found near Clonmel, Co. Tipperary. Orig. size.)

We next come to the fully developed socketted arrow head, forming the fourth class (Figs. 5, 6, 7). These, at first, were very rude, the socket being, as it would appear, uselessly long, as in Figs. 5 and 6; but these defects were no doubt soon obviated; and in Fig. 7 we have a good example of the fully developed, highly wrought, and gracefully formed bronze arrow head.

The fifth class is well represented by that beautiful arrow head (Fig. 8) which, in connection with a socket to receive the shaft, is provided with a single loop at each side, on a line with the blade. The probable use of these loops was to assist in fastening the head to the shaft by tying. When weapons of this type are found of many inches in length and sometimes more than a foot, they would appear to be javelins or hand arrows; and it has been suggested, that these side loops were to receive the end of a string which was coiled loosely in the hands of the thrower; and thus, when the javelin struck the object aimed at, it would

² Archaeological Journal, vol. iv., pp. 2, 4.

CLASSIFICATION OF ANCIENT ARROW-HEADS.



Flint Arrow-heads, in the Museum of the Royal Irish Academy.

be recovered and again used. The introduction of a loop in celts of the third class, and in arrow heads of the fifth, as proposed, would argue a similarity of date and origin between them.

In flint arrow heads we find many varieties in form, but from the nature of the material it was necessary that the shaft of the arrow should in every case be split to receive them ; and hence, I think, we may safely class them under one head, although the development in their forms may indicate a difference of age.

These suggestions may possibly be modified in some particulars by a more extended examination of specimens of the interesting class of weapons under consideration.

GEO. V. DUNOYER.

NOTICES OF FOREIGN SEPULCHRAL BRASSES,

ESPECIALLY OF A REMARKABLE EXAMPLE AT GHENT.

IN considering the results of the careful investigation of Sepulchral Antiquities, pursued in recent years with singular assiduity, especially in connection with the attractive class of engraved portraiture on metal, we are struck by the very national character of that series of medieval memorials. After an interval of six years, since a concise essay on this branch of archaeological inquiry was brought before the readers of the *Journal*,¹ it is remarkable to observe how many interesting examples of sepulchral brasses previously unknown have been brought to light, and described or illustrated in various attractive publications. The most remote parts of the kingdom have been searched, many hundreds of these curious memorials enumerated, and collections of facsimiles extensively formed, comprising a mass of authentic information fully appreciated by the student of costume or heraldry, the local historian, and the genealogist. Nor has the inquiry been limited to our own country ; it has been prosecuted through most parts of Europe ; and we regard with surprise the singular fact, that Germany and Italy, countries in which the calcographic art was so early and rapidly developed, have added little to the history of the

¹ *Archaeological Journal*, vol. i., p. 197.