

NOTES

I. A PERFORATED STONE IMPLEMENT FROM GLEN FRUIN, DUNBARTONSHIRE

In September 1963, when visiting Mr and Mrs Robert Borland at Duirland Farm, Rhu parish, Dunbartonshire, I was given the perforated stone figured here (Pl. LVI). Mr Borland informed me that he had found the object in a shed, buried beneath the old floor which he was digging up to relay. He thought the shed (at NS297871) would be the original farmhouse,¹ not far to the SW. of the present building. Actually the relic is a particularly fine example of these prehistoric antiquities called mace-heads. As such, and therefore a rare specimen from the W. of Scotland, particularly the Loch Lomond drainage whence so few stone artifacts have been recorded, the relic deserves the notice of the Society.

Remarkably symmetrically formed and holed, the implement speaks highly for the craftsman who so carefully shaped, or modified, and bored it in a cobble or piece of dark, speckled rock. In its outlines the specimen might be considered a spheroid flattened at top and bottom, but more properly it could be regarded as a zone. The accuracy of the workmanship appears from the measurements. Overall these are $3\frac{7}{8}$ in. (0 m. 098) by $3\frac{11}{16}$ in. (0 m. 093) and 2 in. (0 m. 051) at its thickest in the middle. Here the opening through the stone for the reception of a shaft has been made in the short axis from the top and bottom. Forming at both a perfect circle and feeble bell-mouth, 2 in. (0 m. 051) in diameter, it decreases uniformly to $1\frac{1}{8}$ in. (0 m. 03) in the centre.

Near the middle of the shaft-hole a very small part of the wall, though regular, is not quite so smooth as the rest of the implement. Otherwise the surface is uniform, all the constituents of the rock, including felspar and hornblende, being evenly planed. The holing was probably achieved by preliminary pecking at the desired spots, followed by boring. This second operation was performed, I think, with a rotating bit consisting of a stone, a hollow bone or piece of wood put into motion by means of a strung drill-bow. These instruments were of course used in conjunction with sand as an abrasive and water, even as the two last would serve with a grinding-stone for bringing the stone to shape and smoothness.

I am grateful to Professor T. N. George and Dr D. R. Bowes, Department of Geology in the University of Glasgow, for kindly identifying the rock represented by the mace-head from Glen Fruin.² This is a basic diorite such as occurs in places at Garabal Hill, $1\frac{1}{2}$ miles NNW. of Ardlui at the head of Loch Lomond, and 8 miles S. of this in small masses in the vicinity of Arrochar. The localities in question are some 19 and 11 miles respectively due N. of Duirland. As foreign to this part of Dunbartonshire, and as a fragment, it was no doubt borne southward with other erratics by moving ice which in its final phase ponded a lake formed in this area by the melt-waters.³ Being so different in appearance from the usual grey stones that strew the bed of the Fruin Water, or are washed out of the local glacial deposits and lie scattered on the ground, this specimen of dark rock credibly attracted a man in some stage of well-advanced Bronze Age cultural development, who

¹ If in fact the site of the discovery was the old farmhouse, then we are possibly confronted with an item of folk-lore interest. For it may be that, following a widely prevalent custom in country places, an earlier finder buried the perforated stone as a talisman of good luck and health and/or a preservative against lightning.

² Letter dated Glasgow, 9th January 1964.

³ Charlesworth, J. K., 'The Late-Glacial History of the Highlands and Islands of Scotland', in *Trans. Roy. Soc. Edin.*, LXII, pt. iii (1954-5) [769-928], 835.

lived or chanced to be in the district. However, the possibility cannot be ruled out that as a finished article the mace-head may have been brought into the valley. The place where the material was worked may remain obscure, but if it ever be discovered it must add evidence to that glimpsed by me at two sites on Loch Lomondside¹ where local rocks served in flaking industries.²

Many types of artificially holed stone implements are figured and described in archaeological works. Several are illustrated with details in the *Catalogue of the National Museum* published in 1880. Before and since, specimens found in Scotland have been referred to in our *Proceedings*. Indeed, some of those mentioned therein so appealed to Sir John Evans that he reproduced woodcuts of them in his great work.³ Not only the literature of prehistory, but also that of ethnography shows how perforated stones have been employed by man from the earliest times on all the continents.

Apart from the naturally holed stones used without working as beads and pendants, many larger specimens have been observed to bear dressing along the edges or to be flaked over their surfaces. Again, in some the actual opening has been enlarged or otherwise treated. The intentional boring of stones for use otherwise than as personal ornament was much practised in the Mesolithic Age, and the process continued in prehistoric industries until stone gave way to metal for implements and weapons. For the purpose of this note it is unnecessary to do more than mention the simply made light examples thought to be net-sinkers and those which are shapely and carefully made hammers, axes or combinations of both.

So heavy a stone, on which much work was expended, would surely not have been used or risked as a common weight to keep down a net. This consideration then restricts the number of conceivable purposes that one can suggest for the implement discussed here. That this specimen was never used as a hammer is plain because it bears no signs whatever of utilisation on any part of its surface. Nor is it possible that such a very finely executed piece was meant to poise a digging-tool of the crude sort that comparative ethnography can show. It seems therefore that we have to regard the perforated example from Duirland as the main part of a weapon or ceremonial staff, a thick wooden shaft being fitted firmly into the hole. In either case the designation *mace-head* would be applicable. Taking account of its weight, 1 lb. 6 oz. (639 grammes), we see the stone at the end of an inserted stick, formidable as the first and impressive as the second.

The closest match to the Duirland mace-head that I can trace is an orange-sized but smaller example fashioned in very dark chloromelanite at La G  lie (Charente).⁴ Admit-

¹ 'Aspects of Intentional Fracture (being notes on the flaking of some rocks other than flint as exemplified by some Scottish artifacts)', in *Trans. Glas. Arch. Soc.* (1940), n.s. ix, Pl. iv [313-41], 318-24 and fig. 2; *The Stone Age in Scotland*, London (1954), 194-5 and fig. 76.

² The rocks are quartz, schist, Balmaha jasper, epidiorite and lamprophyre. On the third, fourth and fifth our Fellow Dr S. M. K. Henderson and one of his tutors in geology, the late Dr Geo. W. Tyrrell and distinguished petrologist in the University of Glasgow, kindly pronounced. The second-named gentleman recognised in some flakes the lamprophyre belonging to the Inverbeg Complex on Loch Lomondside a few miles from the principal place where I found the products of prehistoric flaking. {Anderson, J. G. G., 'The Arrochar Intrusive Complex', in *Geol. Mag.*, lxxii (1935), 263-83; 'The Inverbeg Lamprophyre', in *Geological Survey Summary of Progress for 1928*, pt. 2, 29-35; idem, and Tyrrell, G. W., 'Xenolithic Minor Intrusions in the Loch Lomond District', in *Trans. Geol. Soc. Glas.*, xix (1935), pt. iii, 374 and 377. This identification (op. cit., 1940, 323 and 341) has since been disregarded for a porcellanite of Irish origin with all its implications! Cf. Stone, J. F. and Wallis, F. S., 'Second Report of the Sub-Committee of the South-Western Group of Museums and Art Galleries on the Petrological Identification of Stone Axes', in *Proc. Prehist. Soc.*, xiii (1947) [47-55], 52 and 55.}

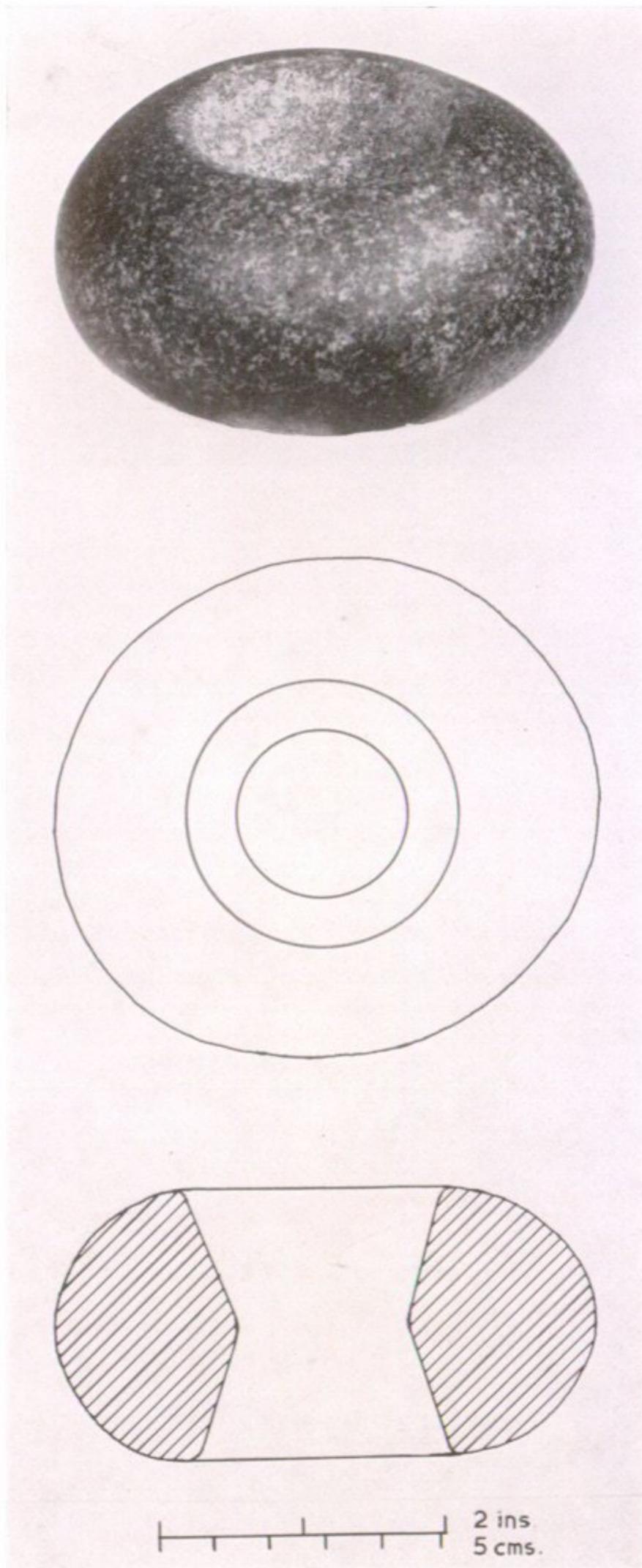
³ *The Ancient Stone Implements, Weapons and Ornaments of Great Britain*, 2nd edition, London (1897), 217-33, *passim*.

⁴ Goury, Georges, *L'Homme des Cit  s Lacustres*, Paris (1931), 1, 293-4 and fig. 107.

tedly, a smooth tool made in this rock is of most pleasing appearance, but not more so than one of diorite with its inclusions of various light hues and glinting particles of mica. The implement from SW. France attracted much attention in 1873 when, at the meeting at Lyons of the Association Française pour l'Avancement des Sciences, G. Chauvet exhibited it with two flaked stone axes among other grave-goods he had discovered in a Neolithic rock-shelter burial.¹ That the rocks just named and others, beautifully spotted or veined, went to the making of choice implements is evident from the inspection of any comprehensive collection of ground and polished stone tools. In none, I believe, does this appear more clearly than in the perforated spheroids which, as a form of prehistoric artifact and as exemplars of craftsmanship in stone, are rare but widely distributed.

While Mr Borland, of Duirland Farm, is of course to be congratulated on his find of the mace-head near his home in Glen Fruin, he and his wife have my warm thanks for putting the specimen my way. For the measured drawings of the specimen I am indebted to Mr E. J. Whittington in the office of the Chief Engineer of the Wellcome Foundation Limited, Dartford.

A. D. LACAILLE



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Dunbartonshire