

From the *Transactions* of the
Bristol and Gloucestershire Archaeological Society

Artifacts of Graig Lwyd Rock from Nailsworth, Glos

by A. D. Lacaille
1955, Vol. 74, 5-14

© The Society and the Author(s)

ARTIFACTS OF GRAIG LWYD ROCK
FROM NAILSWORTH, GLOS.

by A. D. LACAILLE, F.S.A.

INTRODUCTION

A FLAKE of Graig Lwyd rock found in the parish of Nailsworth, Glos., and preserved in the Wellcome Historical Medical Museum, London, is mentioned in two reports¹ of the Sub-Committee of the South-western Group of Museums and Art Galleries on the petrology of stone axes. Identified by the late Dr H. H. Thomas as struck in the characteristic augite-granophyre from the screes of Penmaenmawr, Caernarvonshire, carefully studied by Mr S. Hazzledine Warren,² the specimen was not the only one from Nailsworth that the present author acquired for that institution from the finder, the late J. G. Marsden, of Acton. For, searching in the locality, which lies in the heart of the Cotswolds, this indefatigable and discerning worker had picked up many artifacts fashioned in the well-known northern Welsh material, as was noted in 1935 in a paper³ dealing with the distribution of implements of Graig Lwyd augite-granophyre. Other places in Gloucestershire, besides Nailsworth, are credited with implements of Graig Lwyd augite-granophyre (map, FIG. 1).

¹ First Report of the Sub-Committee of the South-western Group of Museums and Art Galleries on the Petrological Identification of Stone Axes. By Alexander Keiller, Stuart Piggott and F. S. Wallis, *Proc. Prehist. Soc.*, vol. VII, 1941, no. 171 in table on p. 63.

Third Report of the Sub-Committee of the South-western Group of Museums and Art Galleries on the Petrological Determination of Stone Axes. By J. F. S. Stone and F. S. Wallis, *ibid.*, vol. xvii, 1951, no. 171 in table on p. 143.

² 'A Stone-Axe Factory at Graig-lwyd, Penmaenmawr,' in *Journ. Roy. Anthropol. Inst.*, vol. XLIX, 1919, pp. 342-65.

'Excavations at the Stone-axe Factory of Graig-lwyd, Penmaenmawr,' in *ibid.*, vol. LI, 1921, pp. 165-99.

³ T. A. Glenn, 'Distribution of the Graig-Lwyd Axe and its Associated Cultures,' in *Arch. Camb.*, vol. xc, 1935, p. 215.

There are reported an axe from Upper Swell,¹ another probably also from the Stow-on-the-Wold locality,² and the fragment of a third from Sapperton near Cirencester.³

Unfortunately Mr Marsden did not publish his Nailsworth finds, which included well-defined tool-forms, some remarkable. I therefore resolved to bring the assemblage to notice when I had examined the ground; and, as a result of visits to Nailsworth, I have been able to make additions to the group. The finding-area (National Grid reference 1 in. Sh. 156, 852983) is the southern part of a field, $\frac{1}{4}$ mile north-north-east of Barton End Farm,⁴ on the 600 ft. contour, $\frac{3}{4}$ mile due south of Nailsworth.

THE MATERIAL

The group is interesting for reasons other than that it affords evidence of the carriage by man of Graig Lwyd rock from North Wales by a well-known route that links Wessex with the north, for the traces of workmanship upon the specimens show how this material responded to techniques similar to those adopted in the elementary working and trimming of flint. The rock is a lava, close-grained and greenish in shade.⁵ In all the specimens described, whether improvised tools or finished implements, the minimum treatment consistent with requirements was applied. Owing to their regularity and simplicity the signs of dressing are usually distinguishable from those of wear, or from the scars of injury commonly found on the surfaces and edges of stone artifacts damaged over the centuries by agricultural implements, wheels, horses' shoes, etc.

At Penmaenmawr the proportion of rudely, or even comparatively finely bifacially flaked tools, including axe-forms, to

¹ Keiller, Piggott and Wallis, *op. cit.*, 1941, p. 63.

² *Idem.*

³ Stone and Wallis, *op. cit.*, 1951, p. 120.

⁴ The farmhouse is in Horsley parish, but the field where the artifacts were found is in Nailsworth parish, which was formed only in 1891 out of parts of Avening, Horsley and Minchinhampton (F. A. Hyett and Rev. Wm. Bazeley, *The Bibliographer's Manual of Gloucestershire Literature*, Gloucester, 1896, vol. II, p. 247).

⁵ K. P. Oakley, *Man the Tool-maker*, British Museum (Natural History), London, 1949, p. 21.

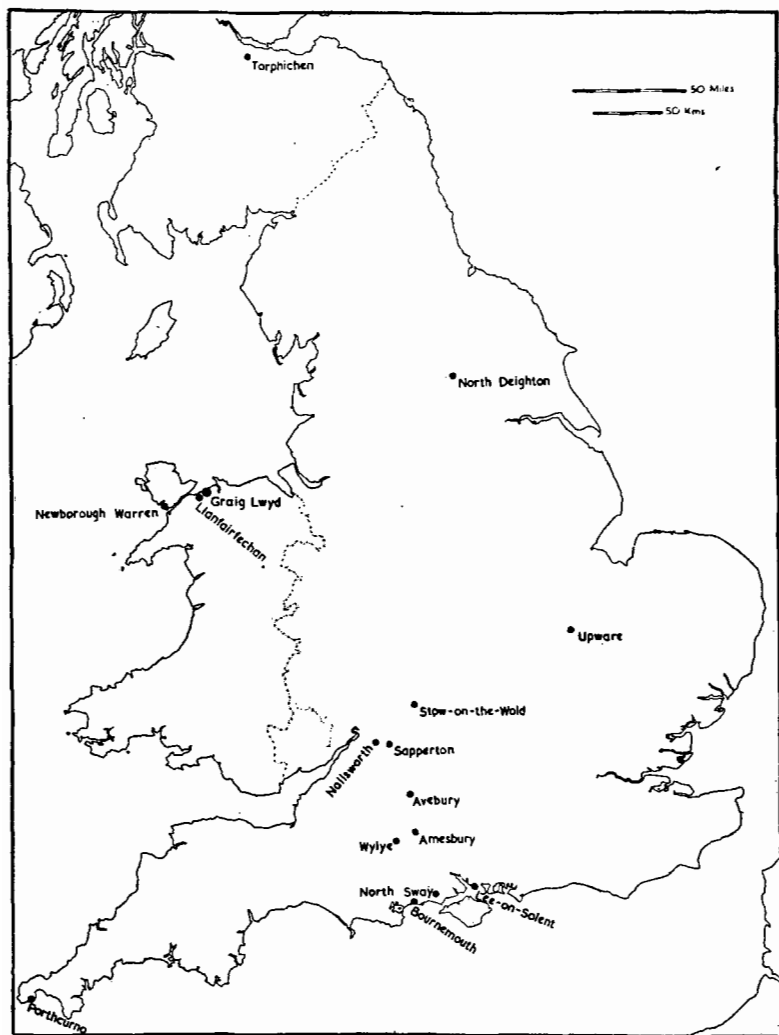


Fig. 1. Map showing the principal finding-places in Britain of artifacts of Graig Lwyd augite-granophyre (based on Stone and Wallis, 1951).

flake-implements is large, as appears from the articles that have been published on the discoveries at the great factory in North Wales. It is curious therefore that on the lands of Barton End Farm, near Nailsworth, flakes and pieces, slightly and well-worked, are far better represented than other kinds of artifacts in the clutch of augite-granophyre products. While this might be at least partly explained if it could be shown that only such lighter objects as scrapers had been brought here from North Wales, it is yet a fact that so far not a single complete axe flaked in augite-granophyre has been picked up at the Gloucestershire site. Also, while there are no sure pointers to the existence here of a working-floor in the full sense, chippings of the Penmaenmawr rock yet indicate that, if some of the material was not brought to shape here, it was trimmed and finished at Barton End Farm, and the occurrence of thick and scarred core-like lumps suggests that some knapping in augite-granophyre had been practised.

The distribution of artifacts made in Graig Lwyd rock, which constitute Group VII as established by the Sub-Committee of the South-western Group of Museums and Art Galleries set up to study the petrology of stone-axes, is remarkably like that of worked epidotized tuff belonging to the Borrowdale volcanic series, as represented in the products of the Great Langdale Group. This, it is recalled, the Sub-Committee assembled as Group VI, as best typified in the output of the factory on the screes of the Pike of Stickle in the Lake District.¹ Besides the discovery of specimens made in these two rocks in the basin of the Forth, in the West Riding of Yorkshire, and in East Anglia, there is a similar concentration of artifacts of Graig Lwyd and Borrowdale materials in Wiltshire, and the same sparse spread of examples of both kinds to the Hampshire shores of the English Channel.²

The selection (PLATE 1) described here is representative of the score of specimens from Barton End Farm, which constitutes

¹ Brian Bunch and Clare I. Fell, 'A Stone-axe Factory at Pike of Stickle, Great Langdale, Westmorland,' *Proc. Prehist. Soc.*, vol. xv, 1949, pp. 1-17.

² Stone and Wallis, *op. cit.*, 1951, FIG. 3 (maps), and pp. 115-21.

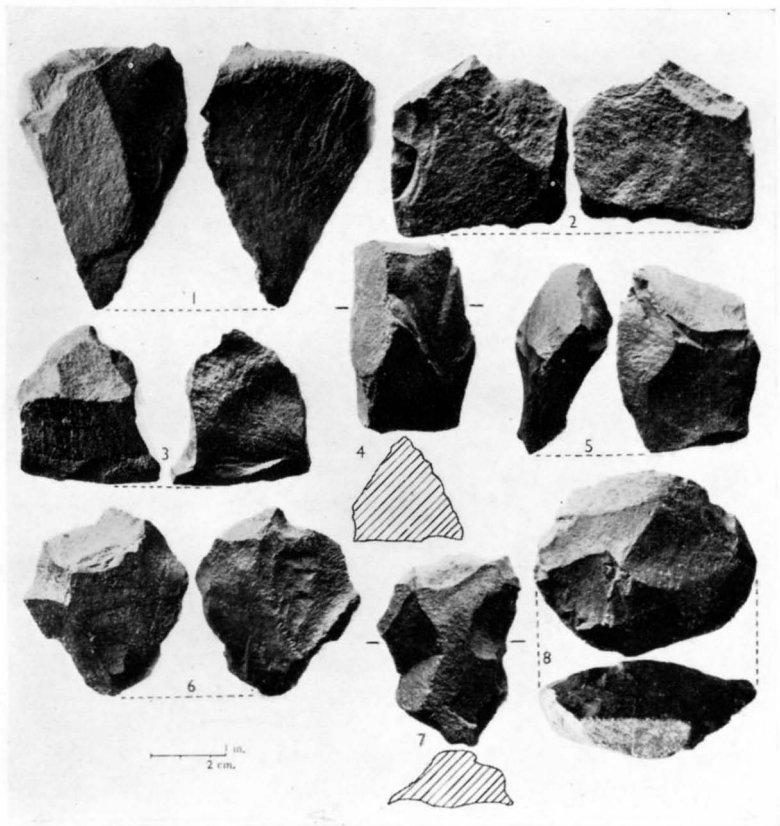


PLATE I. Artifacts of Graig Lwyd augite-granophyre
from Barton End, near Nailsworth, Glos.

up till now the largest collection of Graig Lwyd augite-granophyre artifacts found away from the factory at Penmaenmawr. The implement-bearing area has also yielded a few patinated pieces of flint bearing marks of workmanship. All the discoveries result from the close examination of the surface after ploughing. In the course of this and other agricultural operations stones are turned up which exemplify a variety of rocks. The foreign augite-granophyre, when much weathered, is not easily distinguishable from the lumps of other grey materials of local oolitic origin contained in the arable soil and scattered in profusion over the farmland.

THE COLLECTION

If the foreign augite-granophyre was not worked into tools at Nailsworth, then it is difficult to regard the flake (PLATE 1, No. 1) as an implement more useful than any thin long-edged piece of stone. Technologically, however, the specimen is interesting, as the material has broken away from the parent in a hinge, as so often happens with flint. That it was struck from a prepared lump is evident from the medial ridge and from the characteristic scars, large and flat on the right, narrow and steep on the left intersecting with another like it and obliterating what must have been a pronounced swelling of percussion. Rough marginal working along the outer side of the hinge was perhaps applied as treatment of the edge which could thus have served in scraping.

Nos. 2 and 3 closely resemble each other as pieces severed from larger flakes and lightly treated in places along the edges. Both bear an unusual record of the original breaking of the material from the blow of a pointed hammer, the method producing much the same results as the modern flint-knapper's cutting of flakes with the narrow edge of his steel hammer.¹ This is shown in the prehistoric specimen by the prominent knot, seen in the photograph of No. 2 as a short projection from

¹ Sir Francis H. S. Knowles and Alfred S. Barnes, 'Manufacture of Gun-flints,' in *Antiquity*, XI, 1937, pp. 205-7.

the long edge at the bottom. In No. 3 a negative, that is a small pit, appears instead along the long right edge. As only the upper part of the flake is involved, the feature of the bulb of percussion is absent from No. 2, though a secondary hollow of percussion from the removal of a short trimming-flake is present near the tip. A well-defined hollow of percussion, however,

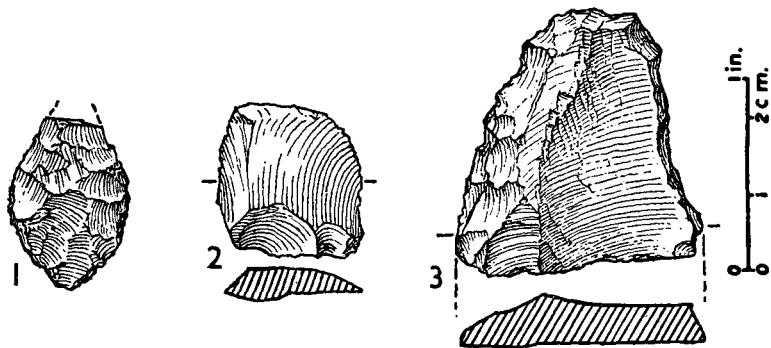


Fig. 2. Flint artifacts from Barton End, near Nailsworth, Glos.

remains in No. 3 from the primary working down of the material. While it is unlikely that these two specimens were intended to be long-edged scrapers, it may be that their blunt points were the important parts, and the hollows at the sides of the points may also have served. These augite-granophyre objects (Nos. 2 and 3) are the counterparts of some of the many flint and chert forms devised in the prolific stone industries which arose early in the Neolithic period¹ and continued into those of the Metal Ages on both sides of the Channel. While this is evident in the great numbers of implements collected in the region of the Chalk with its unfailing supplies of flint, the question of the equivalent artifacts made elsewhere in rocks other than flint has not received the attention it deserves.

¹ E. Octobon and M. A. Chainet, 'Documents pour servir à l'Étude du Néolithique. III. La Station de Ségur (Charente-Inférieure),' in *Bull. Soc. Préhist. Franç.*, XXIX, 1932, pp. 354-407.

The facets and scars on the core (No. 4) reveal the structure of the material and its response to blows intentionally applied. As in quartz and in many of the less tractable rocks used by prehistoric man in the manufacture of implements, a distinct notch accompanying the negative or hollow of percussion may be noted at the point where the hammer struck the edge. It is curious to observe that the upper end bears short transverse scars. Their purpose is clear when the artifact is turned down with its long flat side lowermost, for this working is then seen to give the specimen a rounded end. The piece could therefore have served admirably as a heavy, keeled end-scraper, but the sharp right edge could also have been used, primarily to cut, when the steep left side opposite would afford a firm grip.

No. 5 is a good example of a small chopper, the working-edge of which has been achieved by bold elementary bifacial flaking. Like its companion (No. 4), it has a steep side opposite the cutting-edge. This steep side and the two conveniently wide faces provide a good hold. The square ends are characteristic and in keeping with many tools, bifacially and otherwise treated, from the Graig Lwyd factory.

Although no complete axe of augite-granophyre has been found at Barton End Farm, a fragment of a bifacially flaked narrow example can be figured in No. 6. The piece, however, is not large enough to permit of a correct estimate of the size of the tool when whole. Presumably this was a thin ovate type, of which Mr Hazzledine Warren mentions complete and broken examples in his analysis of the Graig Lwyd output.¹

No. 7 is a compound scraper with working-edges, crenelated at the curvilinear end but fairly regular along the right side. The dressing was executed by bold flaking and some added finer trimming, which together lend further interest to the tool. Fashioned on a thick flake, this implement has a wide butt which retains scars from the primary work expended on the parent material. On the left the specimen is deeply indented by a truncated flake-scar of the original blocking-out of the stone.

¹ *Op. cit.*, 1919, p. 350, and FIGS. on pp. 351, 352, 354; *op. cit.*, 1921, pp. 177-8 and examples in FIG. 9.

Sharing technological interest with No. 7, the heavy side-scraper (No. 8) is a remarkable addition to the list of flake-implements made in the augite-granophyre of Graig Lwyd. The working-edge involves a little more than half the circumference of a circle, thereby giving the user considerable range, while the thick butt and width of the implement afford a perfect hold in the grasp. While the large flake used for the tool evidently came from prepared material, the main scars on its surface are due to work on the piece itself after it was detached, as is shown by the hollows where they merge into the edge. On the upper surface a few traces of secondary dressing appear, and on the nether surface there are some fine scars which in this rock suggest retouch rather than wear. This implement therefore quite matches the larger scrapers, which, made in an ancient tradition, reappear strongly in industries from Neolithic onward.

The well-defined augite-granophyre tools among the artifacts described above may have been used for some purposes peculiar to the place, for they are much heavier than the general run of flint implements from this locality, which lies outside the fringe of the flint-bearing region of the Chalk. These flint implements are as well-made as any found elsewhere in the country, as may be seen by comparison with the series in the regional museums and in private collections.¹ On the ground yielding the augite-granophyre specimens at Barton End Farm Mr Marsden picked up some specimens that demonstrate this. The flints include a broken, finely made, patinated leaf-shaped arrow-head (FIG. 2, No. 1) and a small, square plain flake (No. 2). Here also I found a patinated fragment of an edge-retouched flint blade (No. 3). Enough is left, however, to show that by facies and trimming the artifact can be ranked with the arrow-head, and is therefore assignable to ordinary late Neolithic workmanship rather than to a developed technique of the Bronze Age. This is in keeping

¹ These are considered in a masterly paper that has appeared since my notes were written: E. M. Clifford, D. A. E. Garrod and H. S. Gracie, 'Flint Implements from Gloucestershire', in *Antiq. Journ.*, xxxiv, 1954, pp. 183-7, and FIG. 4.

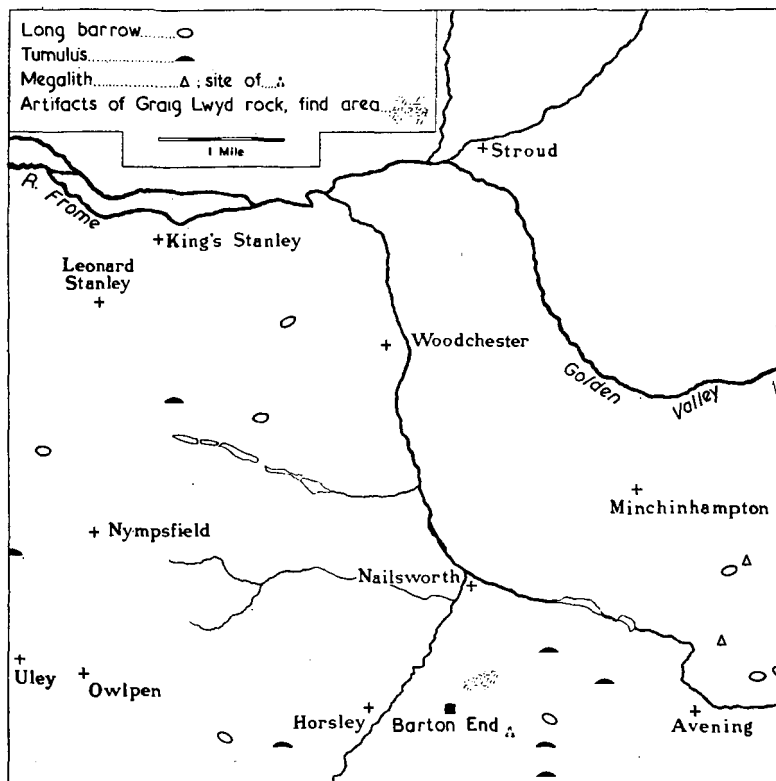


Fig. 3. Map showing the finding-place of the augite-granophyre artifacts at Barton End in relation to regional prehistoric monuments.

with the character of the large and heavy artifacts of Graig Lwyd augite-granophyre, which, as is well-known, have been referred to late Neolithic handicraft from the time they were first recognized at Penmaenmawr. This opinion has been upheld by later discoveries,¹ as their associations have generally betokened, while at Windmill Hill and Avebury a late Neolithic dating of specimens is confirmed. Since at Barton End Farm the concentration of augite-granophyre objects occurred along an ancient high-ground trackway, and in the midst of a locality celebrated for long and round barrows and other megalithic monuments (map, FIG. 3),² the same ascription seems to be perfectly valid for the relics considered in this communication.

ACKNOWLEDGMENTS

The writer wishes to record his thanks to Mr R. T. Blackwell for allowing him to explore the ground at Barton End Farm. To Miss Charlotte A. Simpson, Painswick, he is much indebted for information on local topography, and for having drawn his attention to sundry literary references. He is grateful to Dr E. Ashworth Underwood, Director of the Wellcome Historical Medical Museum, London, for facilities granted to study the series of stone artifacts described in these notes. Finally, the writer recalls with pleasure the time spent in the field with Mr J. G. Marsden, owing to whose zeal in the first place an interesting addition has been made to archaeological knowledge of the Cotswold-Wiltshire area.

¹ W. F. Grimes, *Guide to the Collection illustrating the Prehistory of Wales*, National Museum of Wales, Cardiff, 1939, pp. 23-4.

² See for examples O. G. S. Crawford's *The Long Barrows of the Cotswolds*, Gloucester, 1925, pp. 67-146; Mrs E. M. Clifford, 'The Excavation of Nymphsfield Long Barrow, Gloucestershire,' in *Proc. Prehist. Soc.*, vol. IV, 1938, pp. 188-213.