The need to import from areas as far away as Langdale, Craig Llwyd, East Yorkshire and East Anglia would impose a severe economy on the use of tools. It might therefore be expected that a fair percentage of broken tools would be trimmed for re-use. Large tools in particular lend themselves to recovery processes and could be retrimmed more than once.

The purpose of this brief note is to illustrate a few examples of this re-use (fig. 3):

a. The butt end of a large polished axe of greenstone, transversely fractured about halfway along its length. Two large areas of polished surface are visible. The extreme end of the butt has had chips removed until a fairly good chopping edge exists. Sectioning shows that it is probably of the Langdale group.

b. A fragment from a large axe of variegated greenstone fractured longitudinally. It appears as a thin wafer or sliver, showing clearly the fractured surface on one side and the polished surface extending the full length on the other. The lower edge on the fracture side has been chamfered and polished for about half an inch up to produce a good cutting edge at an acute angle. Not sectioned.

c. The butt end of an axe of similar proportions to (a) with the greenstone highly polished. The fracture occurred transversely leaving slightly less than half of the original tool. The rounded butt has been left in this case, the retrimming having taken place along the fracture line. Not sectioned.

d. A rod-like piece of greyish-white flint has the profile of one face of an axe, highly polished. It has been trimmed to a rough triangular section terminating in a chisel-like edge at the lower end.

(a) and (b) are in the Elton collection in the Derby Museum and (c) and (d) from Gratton Moor and Bonsall sites under investigation are in the writer's possession.

A SCYTHE-STONE INDUSTRY ON BEELEY MOOR

By M. PLANT

MANY bumps and hollows on Beeley Moor were made when the moor was an important source of millstones, paving-stones and grindstones. Many more or less regular shallow depressions are centred on SK 288675, some with a low surrounding bank, and near these depressions are several perfect "saddle querns" (plate IVa). These give the appearance of prehistoric settlement remains.

A detailed survey of the area around the hollows and querns revealed that many of the larger surface stones that litter the area were covered with random marks made by quarriers' or masons' picks, and in the immediate vicinity of the querns were a considerable number of gritstone blocks measuring roughly 10 in. by 2 in. by 2 in. These gritstone blocks can be divided into a sequence of four stages of manufacture, beginning with rectangular rough-out blocks 8 in. by 4 in. by 2 in., which when divided longitudinally by a deep notch, form the second stage. The third

stage produces pieces about 8 in. by 2 in. by 2 in. dressed on the long sides with deep narrow pick marks. Finally there are pieces showing signs of abrasion and normally broken (plate IVb).

The depressions are from 12 to 20 ft. in diameter and up to 2 ft. deep. The occasional surrounding banks are of earth with some rubble. Under the turf in the bottom of the depressions there are signs of shallow quarrying and pieces of gritstone similar in section to stage one. The gritstone is hard, compact and fine-grained grit on this part of the moor. It seems that the stone from which the rectangular blocks originate is from these pits, and was quarried for its particular properties.

Probing has revealed no evidence of a prehistoric origin for these hollows and "querns", and clearly the hollows are the result of getting stone for the manufacture of articles which were processed through the four stages recorded above, culminating in the grinding down of the final object on the "saddle quern". Farey has described scythe-stone making on Morley Moor, near Derby, on the same gritstone outcrop:[1]

> "The dexterity displayed in cleaving out and forming scythe-stones . . . is rather suprising. The workmen use very sharp pointed picks, which require sharpening every quarter of an hour, and a number of very small wedges and a hammer. A proper block of stone being selected, two or three of these small wedges are set in a row, by gentle blows with the hammer, which are successively repeated, until the stone splits in two . . . and the stone cleaved again; a race or nick being first scratched with the point of the pick, where the wedges are to enter . . . until a piece remains large enough to make two scythe-stones, each 1½ inch square and 11 or 12 inches long; this stone the workman holds nearly upright in his left hand, and with the point of his pick races a deep nick down the middle of first one side and then the other, and then with a slight blow of his pick in the nick, it is separated into two rough scythe-stones, which is so dexterously performed, that seldom more than three or four are broken in the 120, in cleaving. Those intended for round rubbers are then reduced to an octagon nearly, by the point of the pick, and are then handed over to women and boys, who grind or rub them with water in a notch in a hard stone until quite round: the square ones are ground in a like manner on a flat stone, and have their arriss taken off, and the ends ground flat to the proper length; when they are sold at 10s. per long hundred (120):"

Those on Beeley Moor are the square type of scythe-stone and the fact that none have their ends ground flat suggests that they were broken in course of manufacture or unfinished. The remark "that seldom more than three or four are broken in the 120", together with the fact that so many "wasters" litter the moor, indicates a quite considerable industry. The proximity of several packhorse tracks leading across the moor towards

[1] J. Farey, *A general view of the agriculture . . . of Derbyshire*, 1811, I, 438.

Chesterfield and Bakewell indicates the probable means of transport for the finished product.

Farey lists the following places of scythe-stone manufacture, as distinct from whetstone and other stone products: Belper, Birchover, Breadsall, Coxbench, Darley East Moor, Duffield, Heage, Holbrook, Horsley, Little Eaton, Melbourne, Morley North-West Moor and Harthill in South Yorks. The exclusion of Beeley Moor from this list may indicate a pre-1811 date for the industry in this particular area. He also notes that at Alton in Ashover strips of wood with sand glued to them were sold as "scythe-sticks" and in 1811 were made with coarse emery powder at Melbourne. No evidence has been found for the beginning of the scythe-stone, but in its latest mass-produced form it is probably not earlier than the 18th century. The use of emery powder at Melbourne was part of the beginnings of the modern abrasives industry which brought to an end the Derbyshire scythe-stone industry.

THE ORIGIN OF ARBOR LOW HENGE MONUMENT

By J. RADLEY

THIS note, in fact, has little to say about Arbor Low itself, but is the result of posing the question: why is Arbor Low where it is? Fieldwork has revealed two features at and near the barrow called Gib Hill, which lies close to Arbor Low (fig. 4), which permit a tentative reconstruction of the events which led to the construction of Arbor Low.

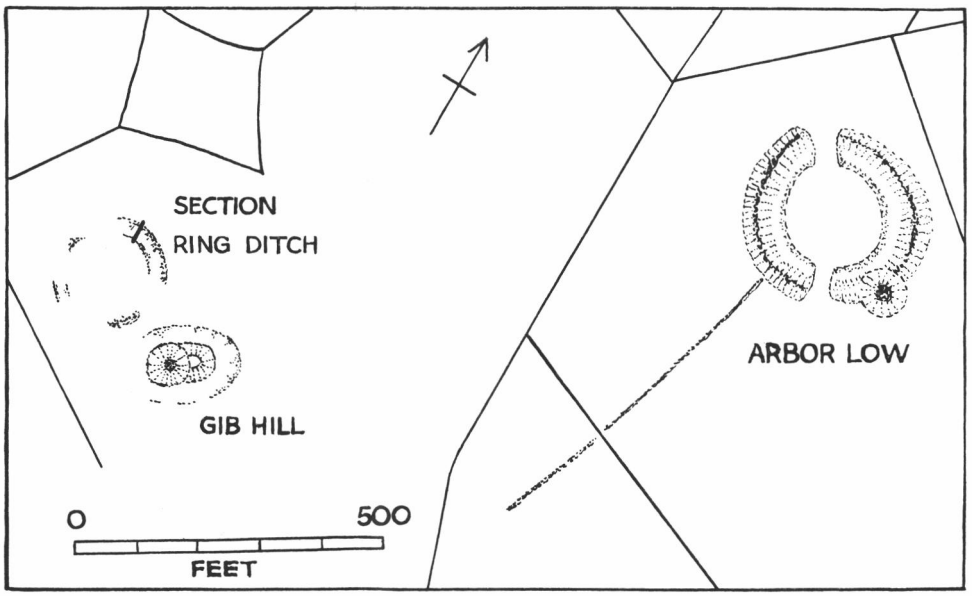

FIG. 4. Location of the ring ditch near Arbor Low.