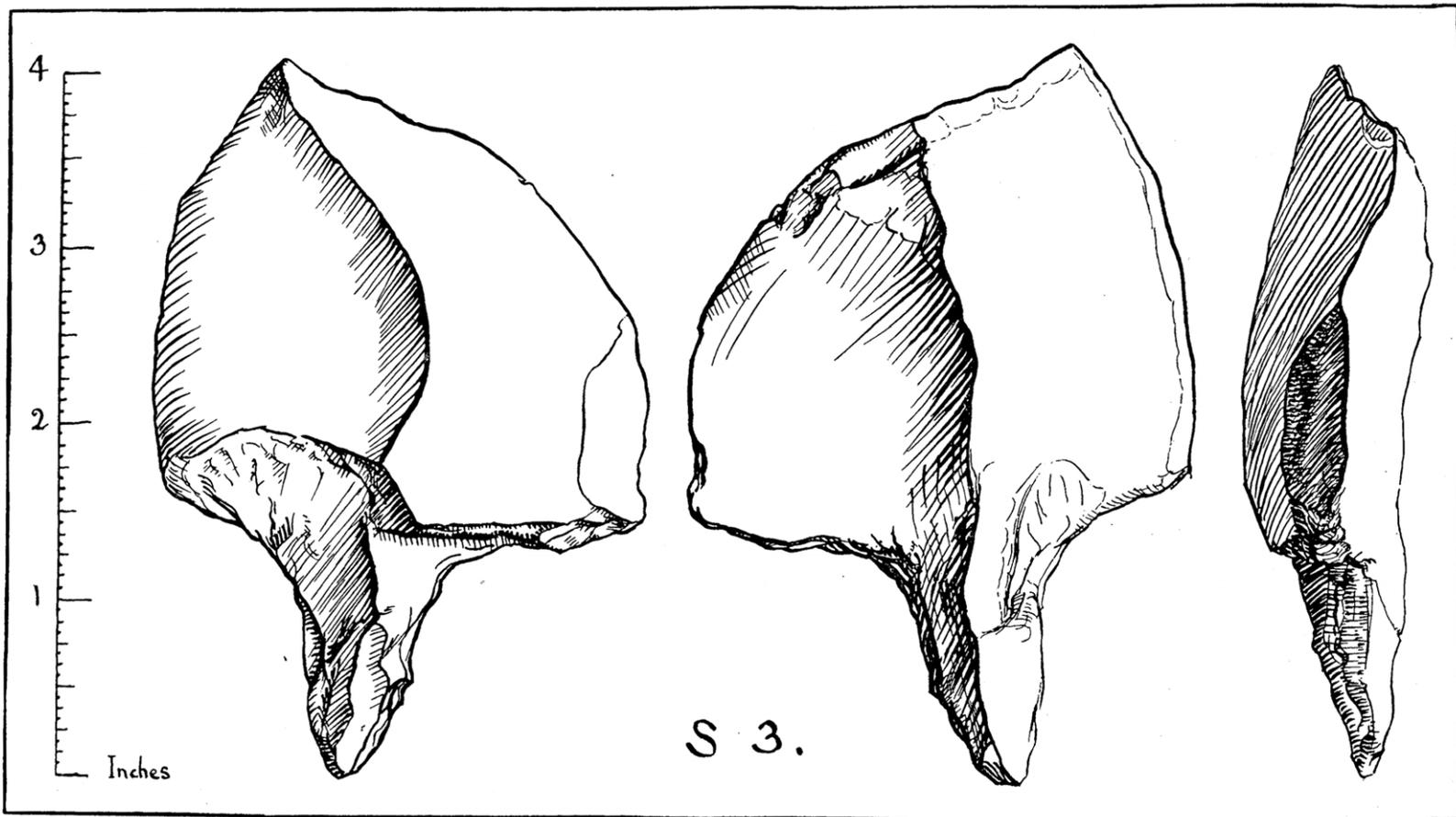


ART. XVI.—*A Prehistoric Settlement on Walney Island,*
Part II. By MARJORIE CROSS.

SINCE publishing our first report on the Walney Settlement, we have had the privilege of consulting Dr. Dunham (of the Geological Survey), who has been surveying the island. He rejects the suggestion that the flint pebbles on the 25 ft. beach are the natural residue of the Cretaceous Period, giving as his reason that no trace can be found of flints in the glacial drifts, the composition of which is well known from natural exposures and from many bore holes in the Furness district. Flints lying about on the pre-glacial land surface of the Lake District and Furness would certainly have appeared in the glacial deposits. The flint pebbles lie only on the surface of the 25 ft. beach. Actually on the inhabited areas, so far observed, the shingle is only one stone deep, but in other parts of the island it has a depth of many feet, and there are no flint pebbles below the surface in the mass of ice-borne and sea-rolled material of which it is composed.

He inclines to the opinion that the flint pebbles have been imported by human agency as raw material, probably by boat, to be worked up on our shores; but, though he considers it unlikely, he does not rule out the possibility of their having been cast up by the sea from a disintegrating chalk formation beneath the Irish Sea. It is difficult to account for the presence of so much flint in the beach gravels of the Cumberland coast by human agency.

I must also correct the statement that the flint picked up in Newland Beck, Ulverston, was an unworked pebble. It was a core, showing the narrow, parallel scars usually referable to a Mesolithic blade industry.



To face p. 263.

FIG. 1.

Dr. Dunham demonstrated that our "black flints" (Nos. 1, 29, 53, 54 and 62) are not made of flint at all but of local black chert, of which he pointed out an exposure in carboniferous limestone at Acorn Bank Quarry, Dalton. It also comes to the surface north-west of Sandscale at Housethwaite Hill, ready to hand for the maker of the black double end-scraper (No. 76) found on the mainland on Sandscale Haws by Mr. George Carruthers.

Dr. Dunham also showed us white chert in the cliff-face by Dalton C. of E. School, and some pink at Oxenclose Hill, near Roanhead, but both are too poor in quality and too full of fossils to have been used for tool-making, so that all our colours except the black are true flint.

Proceeding chronologically from geology to archaeology, I will mention first those objects which, without necessarily implying occupation of the island in Mesolithic times, may be said to have Mesolithic affinities.

MESOLITHIC AFFINITIES.

Tanged Flake.

The stone piece numbered S 3 (Fig. 1), measuring 4 ins. \times $2\frac{3}{16}$ ins. \times $\frac{7}{8}$ in., has been coldly received by many as a naturally fractured pebble; but Dr. Grahame Clark, Mr. Reginald Smith and Mr. Kendrick all claim it as the work of early man. Dr. Grahame Clark writes: "The stone piece has *undoubtedly* been worked by man, but has subsequently been rolled, presumably on the beach . . . Until more is known locally, one cannot say whether this piece belongs to the Neolithic or Bronze Age industries—in which case its resemblance to early types would be of little significance as an isolated piece—or whether it really belongs to a separate industry with heavy tanged flakes." Mr. Kendrick suggests an Asturian connection. The material is identified by the Natural History Museum as silt- or grit-stone, probably local. There is a quantity of the same stone on the beaches, breaking diagonally in a

manner that might quite possibly produce the upper portion of the implement by natural fracture, but I have never yet found a natural facsimile of the "tang." Although the soft material would make it inadequate as a pick, hafted on a stick as a heavy point it could be effectively used for digging eels, etc., out of sand, and it must not be forgotten that the Riverford folk of Ireland used a soft clay-slate for their fishing-tools. In connection with the rolling observed by Dr. Clark, it is worth mentioning that it was found wedged edgewise in the shingle, broadside on to the present wave-line, in a position suggestive rather of having been accumulated with the beach than dropped upon it or sifted down out of a sandhill. The much battered and rolled polished stone axe, S 1,* approximately dated by the British Museum to B.C. 2500, was found in exactly the same position. Assuming the 25 ft. Beach to have been completed before Campignien times,† a true Neolithic axe is an incompatible ingredient to find in it; but Dr. Mahr did state in his Presidential Address to the Prehistoric Society, 1937,‡ that "the art of stone-polishing is now recognised as antedating the so-called Neolithic Age quite considerably"; so that it is not absolutely beyond the bounds of possibility that both tanged flake and axe should have been brought by the waves from an earlier inhabited land-surface, related to the Submerged Forests and destroyed by erosion when they were submerged. A similar destruction is inferred at the mouths of Rottington Beck and Pow Beck.§

Hollow Scrapers.

Flint No. 74 (Fig. 2) is a pale grey flake with heavy white patina, identified by Dr. Mears of St. Andrew's

* N.S. xxxviii, p. 161, pl. VIII.

† Mem. of the Geol. Surv. of Eng. & Wales; Maryport district; Eastwood, Dixon, Hollingworth and Smith, 1931, p. 119 *et seq.*

‡ Proc. Pre. Soc. N.S. vol. III, part 2, p. 307.

§ Mem. of the Geol. Surv. of Eng. & Wales; Whitehaven and Workington district, p. 257 *et seq.*

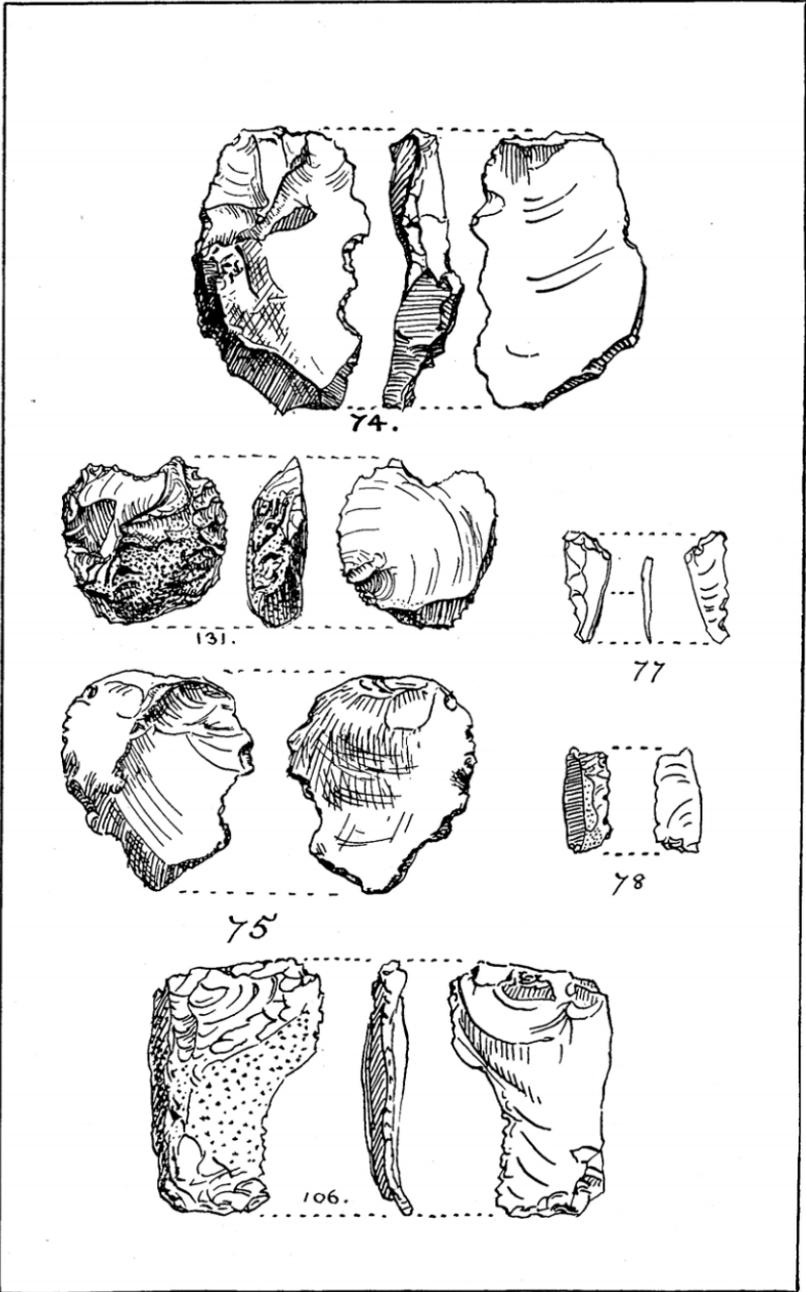


FIG. 2 $\frac{1}{2}$.

University as a double hollow scraper for smoothing arrowshafts. Mr. Kendrick also labels this "conceivably Mesolithic." The two notches, minutely chipped, recall some of the notched flakes from Dryburgh Mains,* but we have not yet found any of the other recognised types of a true microlithic industry.

No. 131 (Fig. 2) of grey flint patinated white, with brown crust, was at first a scraper delicately chipped with the technique of No. 60 (Fig. 4). Subsequently a portion of the crust was broken off and the part thus thinned was minutely chipped into a shaft-smoother.

No. 75 (Fig. 2)† is a rolled and heavily patinated flake of pale brown flint, which suggests use as a hollow scraper in its youth and which was quite certainly struck from the core before it became rolled.

Other specimens with a rolled appearance are Nos. 85 and 86, thick blades (Fig. 5) and No. 96, a scraper (Fig. 5).

Nos. 77 and 78 (Fig. 2), measuring $\frac{9}{16}$ in. \times $\frac{7}{32}$ in. \times $\frac{1}{12}$ in. and $\frac{1}{2}$ in. \times $\frac{1}{5}$ in. \times $\frac{1}{10}$ in., are not true microliths. In each case, one long edge has been sharpened and serrated and the short edge has been blunted by chipping, but the backs are blunted by a single stroke and lack the characteristic chipping by which the backs of true microliths are blunted.

NEOLITHIC (AND VARIOUS).

Axe.

Dr. Goodchild found the corner of the cutting edge of a second polished greenstone axe, S 4 (Fig. 3). The curve has been flatter than that of S 1.‡ Like it its damage-scars have been rolled.

Arrowheads.

No. 72 (Fig. 4)§ is a leaf arrow-head of true birch-leaf

* P.S.A.S. vol. XLI, p. 318: A Collection of Tardenois Implements from Berwickshire, by J. G. Callander, Fig. 4, Nos. 4 and 8-12.

† "Nothing definite. Seems water-worn" (J.G.D.C.).

‡ N.S. xxxviii, p. 161, pl. VIII.

§ Found by Miss Clare Fell.

type, worked on both faces, of white flint heavily patinated.

No. 73 (Fig. 4)* is a single-barbed point of pink flint. Dr. Grahame Clark derives this type from the petit tranchet arrow-head,† placing it in Class H of these derivatives, which “came into use at the close of the Neolithic period and was common in the Bronze Age.” The method of hafting is shown by the dotted lines, and in

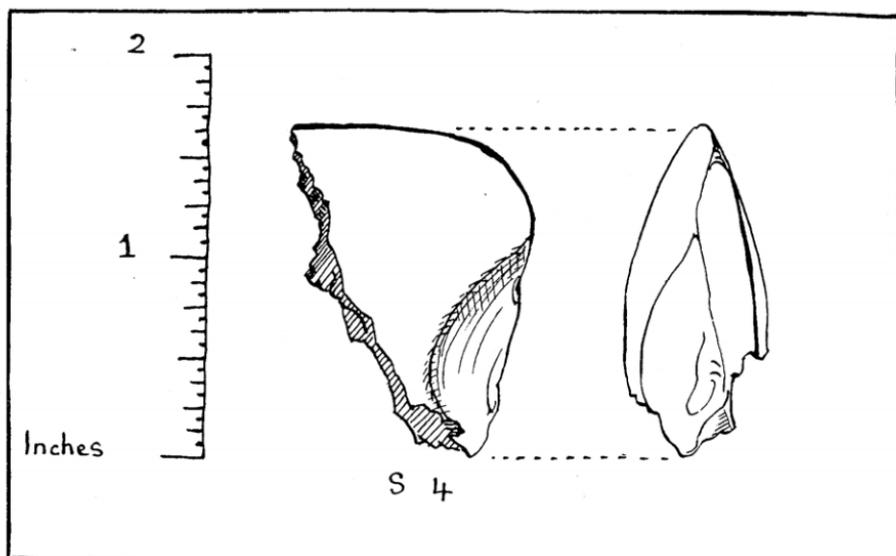


FIG. 3.

this specimen the point that was sunk in the shaft is noticeably fresher than the two exposed points of the working edge.

No. 64 (Fig. 4)‡ appears to be an incipient lozenge-shaped arrow-head of the type described by Col. North from Yealand in 1936.§ It is of opaque blue and white flint.

* Found by Mr. George Carruthers.

† Arch. Journ. XCI (1934), pp. 32-58.

‡ See note to No 65.

§ N.S. xxxvii, pp. 155f, Fig. 3.

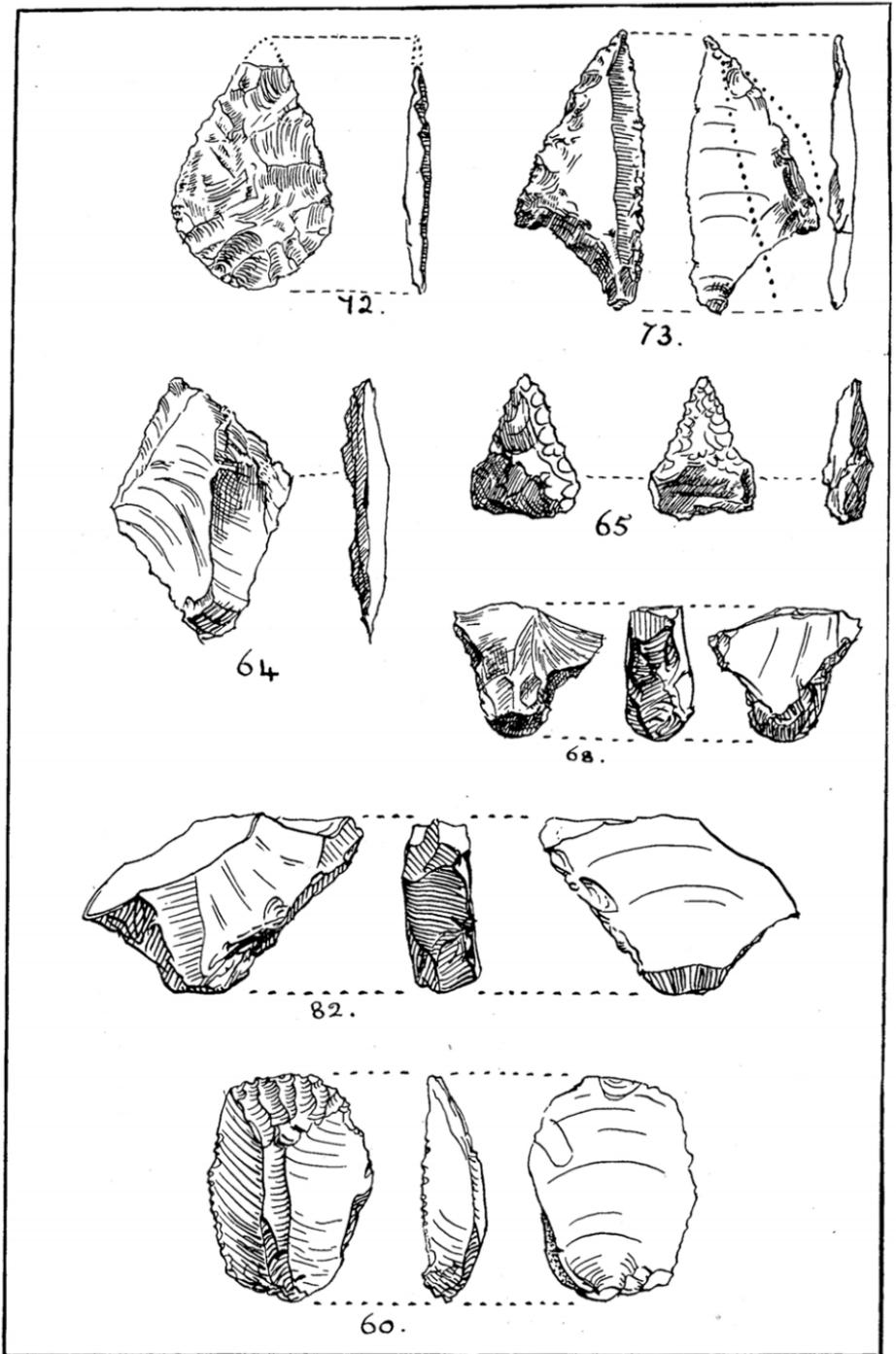


FIG. 4 1.

No. 65 (Fig. 4)* is a broken pear-shaped arrow-head, of honey-coloured flint with a piece of crust adhering. It is pressure-chipped on both faces.

Nos. 68 and 82 (Fig. 4) are under suspicion of being the broken tangs of Bann River points. The width of the tangs is $\frac{3}{8}$ in., the thickness $\frac{1}{8}$ in. Both are of flint heavily patinated white, the broken surface of 82 showing the original colour to be pale grey very similar to that of some Bann River flakes. No. 68 is water-worn.

No. 60 (Fig. 4) is a beautifully made end-scraper, of pale bluish flint with heavy cream patina. It is percussion-flaked with narrow parallel scars, and one long edge is minutely serrated.

Serrated Flakes.

No. 106 (Fig. 2) is a heavily patinated flake of cream flint with darker crust, trimmed on two short edges. The hollow curve is serrated and very glossy as if from much use.

Nos. 105 and 111 (Fig. 5) are poorly serrated flakes, the point of No. 111 worn.

Better serrations occur on No. 141 (Fig. 6), an irregular blade of pale grey flint, little patinated and not at all rolled.

Blades.

Of the blades No. 86 (Fig. 5) is the most heavily patinated and also the most rolled. No. 85 (Fig. 5) less so. No. 67 (Fig. 6),† much thinner, is fresh and unpatinated. No. 142 (Fig. 6) is patinated but not rolled.

All the long flakes are of grey or blue flint.

BRONZE AGE (AND VARIOUS).

Arrowheads.

We have two more beautifully worked tanged and

* Found by and in the possession of Mr. R. B. Dean, Oakdene, Walnut Creek, Contra Costa Co., California, U.S.A.

† In Col. O. North's collection in Lancaster Museum.

barbed arrow-heads of Beaker type: No. 62 (Fig. 7),* of black chert, and No. 63 (Fig. 7)† of flint patinated white.

No. 69 (Fig. 7),‡ of white flint heavily patinated, the flake surface scarcely worked, and No. 70 (Fig. 7), of white flint, burnt, with a rust-coloured crust, are later than the Beaker type.§ So also is No. 71 (Fig. 7), of cream flint worked on one face only.||

Knife-edged Tools.

No. 91 (Fig. 7)¶ is a well made knife, with faceted striking platform and trimming down both edges. It is of honey-coloured flint patinated grey and white and measured $1\frac{7}{8}$ ins. \times 1 in. \times $\frac{1}{4}$ in. before it lost its tip.

Other knife-edged flakes are Nos. 144 (Fig. 6), 155 (Fig. 8), 83 and 84 (Fig. 8). Nos. 83 and 84 have two facets only, tapering from striking platforms $\frac{1}{2}$ in. and $\frac{3}{8}$ in. wide to a cutting edge at the intersection of the flake-surfaces.

Graving Tools.

I have referred before to the absence of orthodox burins. When the Walney people wished to grave, they picked up any likely shaped piece of flint and improved its point. In No. 150 (Fig. 7) the only secondary working is some trimming on the back.

The point is trimmed in No. 153 (Fig. 7) and its shape suggests that its maker had seen a micro-burin without learning how to make one.

No. 154 (Fig. 7) has two points finely trimmed.

These three are all heavily patinated.

No. 156 (Fig. 8) and No. 159 (Fig. 11) are three- and four-sided blocks of flint with the point trimmed.

Nos. 87 (Fig. 5) and 143 (Fig. 6) are finely pressure-flaked points of blue flint patinating white.

* In Col. O. North's collection in Lancaster Museum.

† In the possession of Mr. Myles Archibald, Rusland Hall, Satterthwaite.

‡ Found by Mrs. Ballantine Dykes.

§ Dr. Clark.

|| "Looks unfinished," J. G. D. C.

¶ Found by Dr. Goodchild.

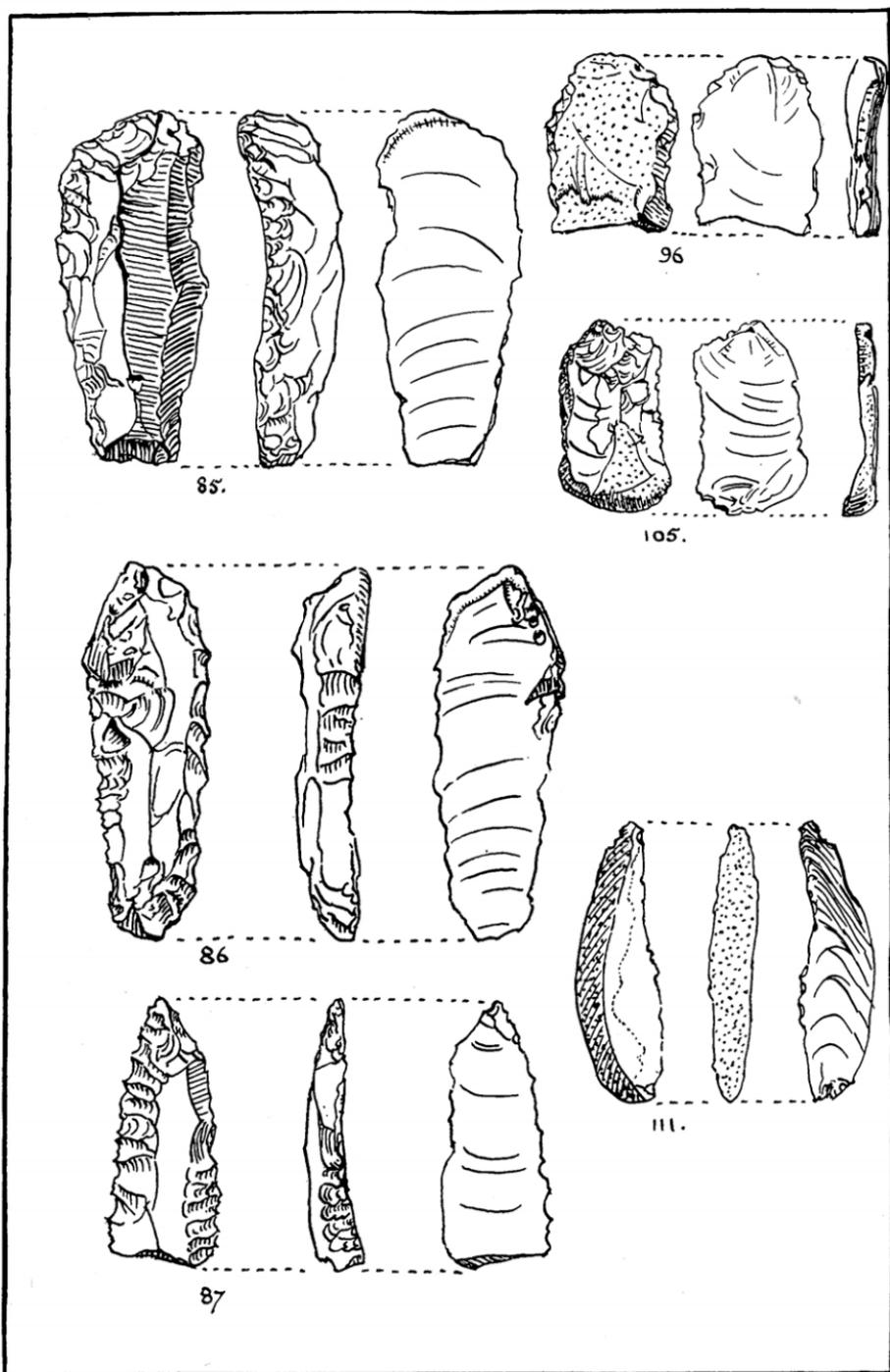


FIG. 5 †.

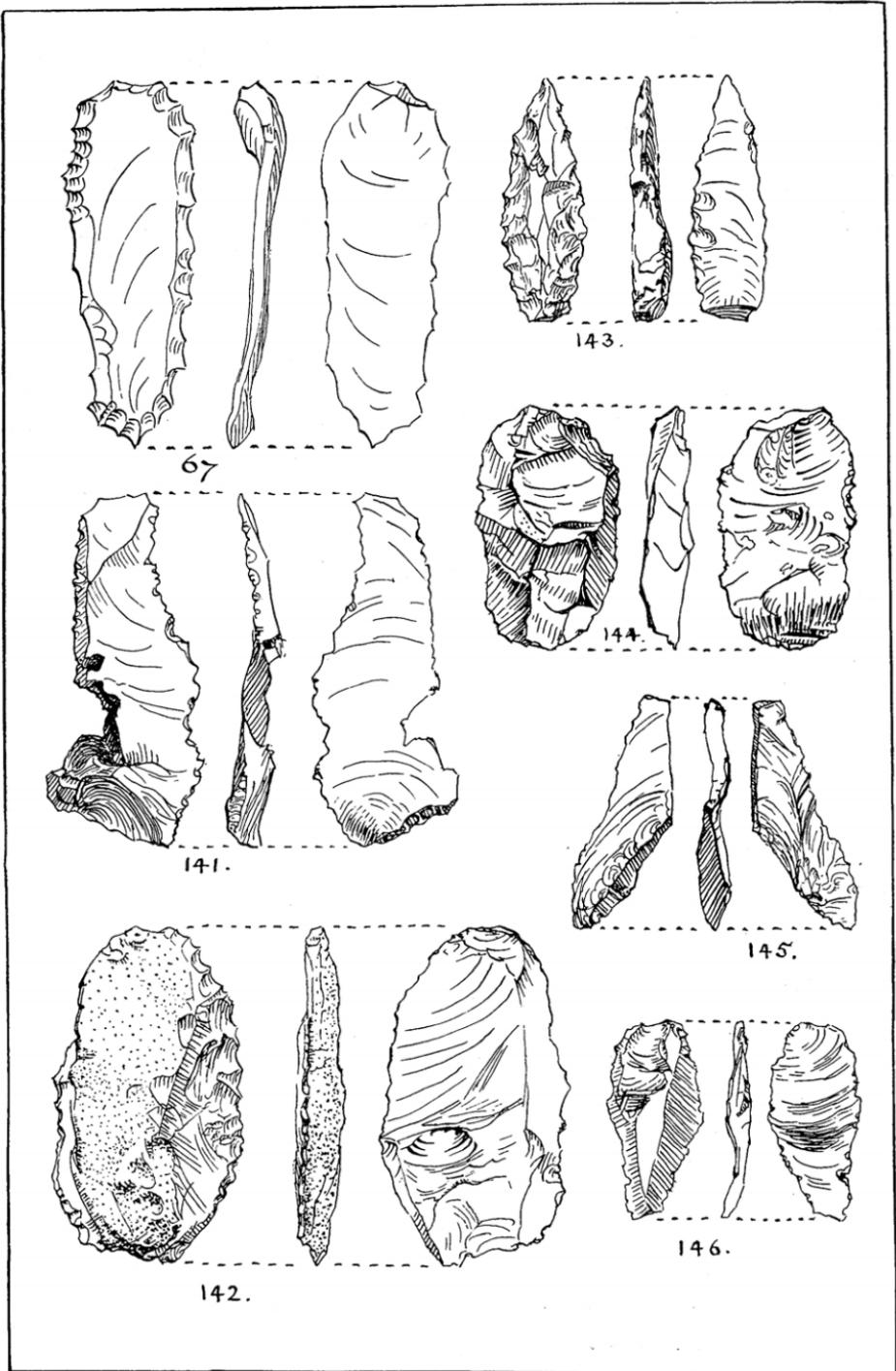


FIG. 6 ½.

Nos. 145 (Fig. 6) and 132 (Fig. 8) are curiously shaped flakes suggestive of barbs for hafting in a composite harpoon.

Cores.

Nos. 79, 80 and 81 (Fig. 8) are cores of a suggestive type, but the neat little microlithic blades which should have been struck from them are not forthcoming, and Dr. Clark considers that these cores merely denote a "poverty industry" in which every scrap of flint had to be used up. No. 120 is quite a different type of core, from which lumps of flint have been struck in all directions, presumably for scrapers.

Scrapers.

Scrapers as usual outnumber all the other implements. Many sizes and shapes are shown in Figs. 9, 10, 11 and 12.

No. 76 (Fig. 12), of dark grey chert, was found on Sandscale Haws, the only implement so far found on the mainland.*

BRONZE.

One small convex fragment of bronze was found,† with an engraved line upon it (Br. 1, Fig. 12).

POTTERY.

Two types of pottery have been found, the older, No. 2 Pot, being found last.

No. 2 Pot.

No. 2 Pot was found‡ in small fragments on the surface and in the upper six inches of the sand, and excavation to a depth and radius of three feet around the spot produced no more than a few fossil ox-bones and some minute pieces of charcoal, from which we inferred that the vessel had been a cooking-pot. A section of one of the rim fragments

* In the possession of Mr. George Carruthers, the finder. No. 66 is in Col. O. North's collection in Lancaster Museum. No. 98 is in the possession of Dr. Goodchild.

† By Mrs. Goodchild.

‡ By Mrs. Ballantine Dykes.

is given in Fig. 12. The width of the rim varied from $\frac{1}{2}$ to $\frac{5}{8}$ in. The neck had been, in places, a groove $\frac{3}{8}$ in. deep, below which the profile appeared to swell out to a full shoulder curve. In one fragment the rim projects inwards instead of outwards. I quote Mr. Stuart Piggott's report on these fragments: "The ware of No. 2 Pot" (coarse, reddish brown) "with its large angular grits, would suggest a Neolithic, or at least native (as opposed to intrusive Beaker) culture. The flat-topped rim would support this too. On the other hand the fragment of an uncompromisingly flat base makes me put it chronologically into the Bronze Age. The best suggestion I can make is that it represents the native tradition of pot-making surviving side by side with the intrusive Bronze Age cultures, from which it has acquired the refinement of a flat base." As far as could be judged in its fragmentary condition, the pot had been about five inches wide.

No. 1 Pot.

No. 1 Pot was found* in large fragments just emerging from the sand. It was standing right way up on a sandstone cobble and had been full of shell-fish (periwinkles, mussels, cockles, limpets and oysters); the fish were still in the shells with the valves joined. Beside it on the cobble were some bones of ox.† We came to the conclusion that this spot had been a larder. Mr. Stuart Piggott very kindly examined these sherds also, and I quote him again: "The large reddish vessel," ($\frac{1}{2}$ to $\frac{3}{4}$ in. thick, with a quantity of crushed shell in the paste), "with flat base and finger-pinching, must be Early Bronze Age—call it 'sub-Beaker' or 'Domestic Beaker' or what you will. That smooth ware, pinkish red outside and black inside, is typical of the Early Bronze Age wares,

* By Mr. George Carruthers, in whose possession the fragments remain.

† Kindly identified for Mr. Carruthers by the Natural History Museum, who also identified the bones of sheep or goat, deer and porpoise from other parts of the settlement.

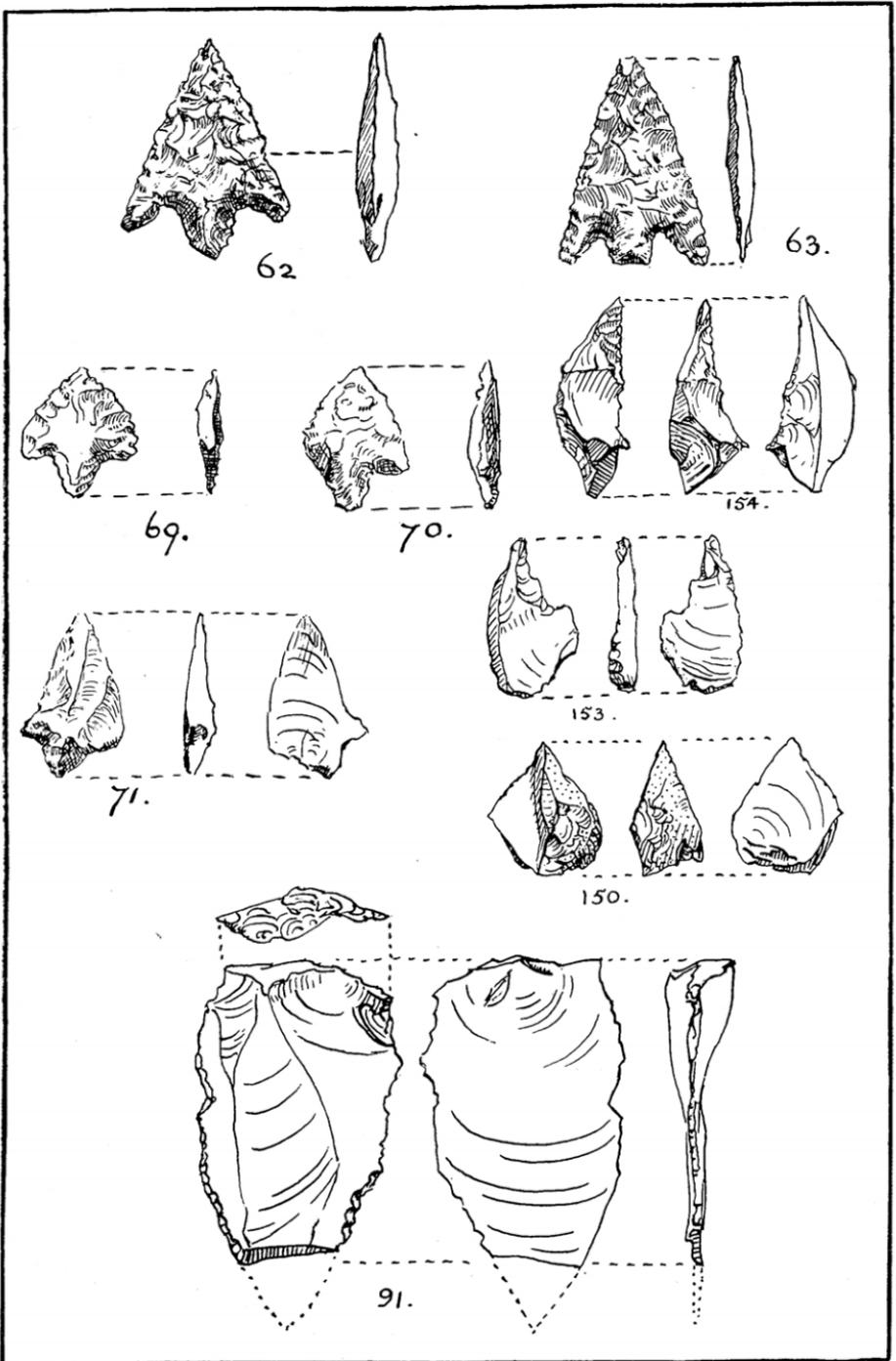


FIG. 7 1/2.

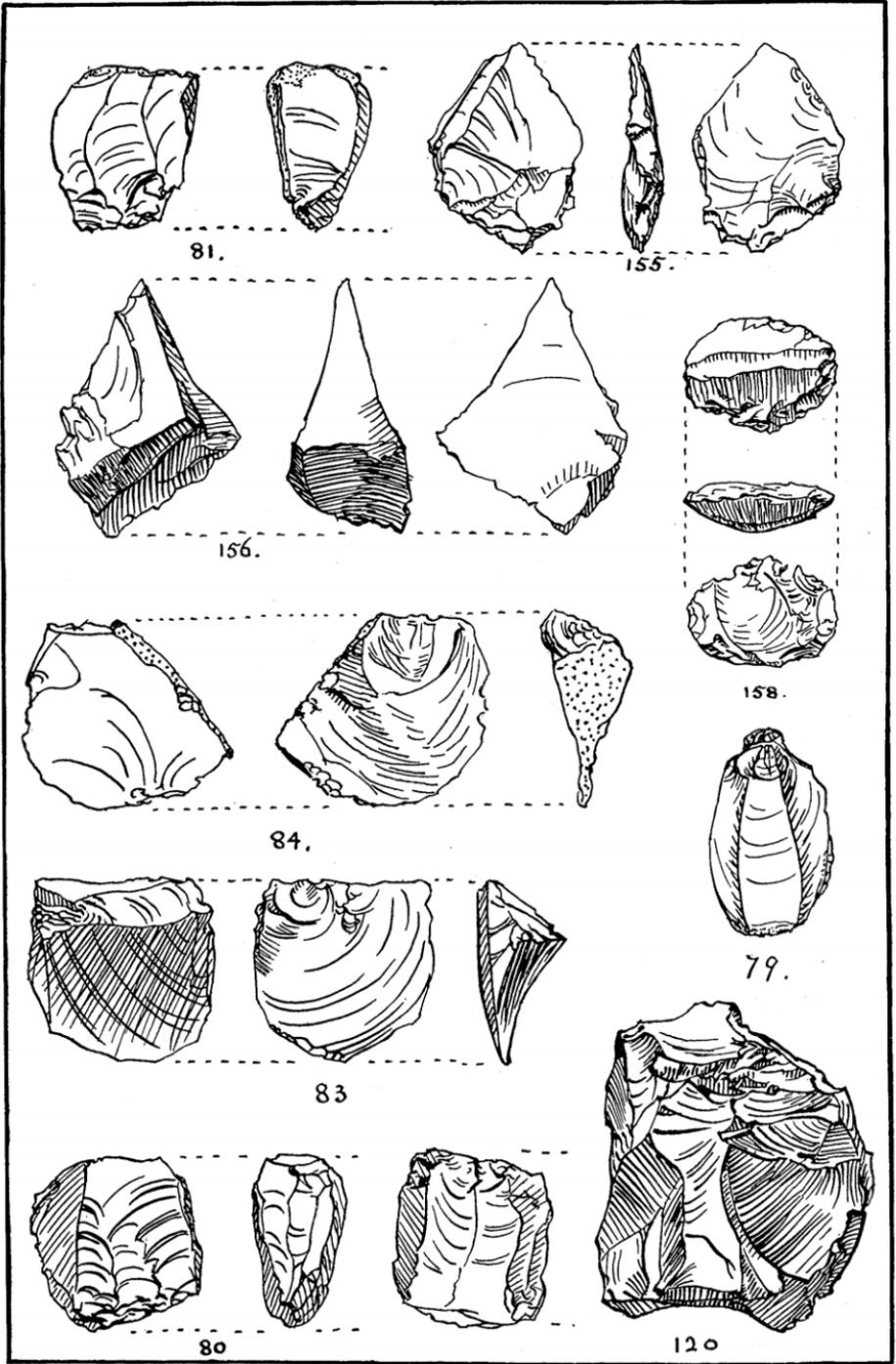
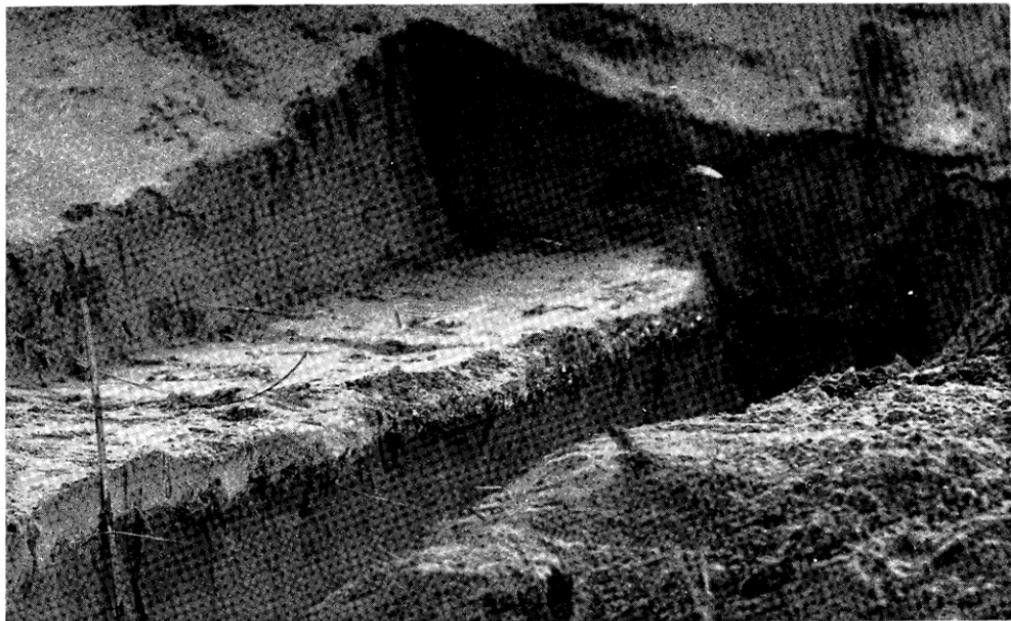


FIG. 8 f.



To face p. 277.

PLATE I.—Midden near Pot No. 1.

Photo. by G. Carruthers.

and it survived into the Cinerary Urns in a rather debased form." Two fragments are illustrated in Fig. 13. The pattern had consisted of a band of alternate circular finger-prints and downward jabs either with a very long finger-nail or with a shell. Below this was a grooved line. The exact pattern does not figure in Abercromby's 'Bronze Age Pottery,' nor have I met it in a museum. The diameter of the base had been roughly six inches and at the level of the pattern it had been about eight inches.

MIDDENS.

Four separate sites of middens have been located, of which one only has been partially explored. This one was alongside the "larder" in which No. 1 Pot was found. The midden layer runs right into one of the highest sandhills. A trench was dug along the exposed margin and the deposit was found to be only about two inches thick (Plate I). It consists chiefly of comminuted shells, animal bones and charcoal, and contains fragments of the same shelly ware as No. 1 Pot.

SHELLS.

Dr. Wilfrid Jackson, of Manchester University, very kindly examined samples of the midden material and of the shells found with Pot 1. He reports that the shells were those of *Ostrea edulis*, *Mytilus edulis*, *Cyprina islandica*, *Littorina littorea*, *Patella vulgata*; in other words exactly the same shell-fish as are still common round our coasts.

BONES.

Of the bones, those of ox were commonest, occurring over the whole settlement area five times to one each of pig, sheep or goat, deer and porpoise. Three of the five oxen were small or young.

CHARCOAL.

The charcoal was sent to Mr. Cecil Maby, who identified it as oak and hazel brushwood, mature, senile wood, poorly grown.

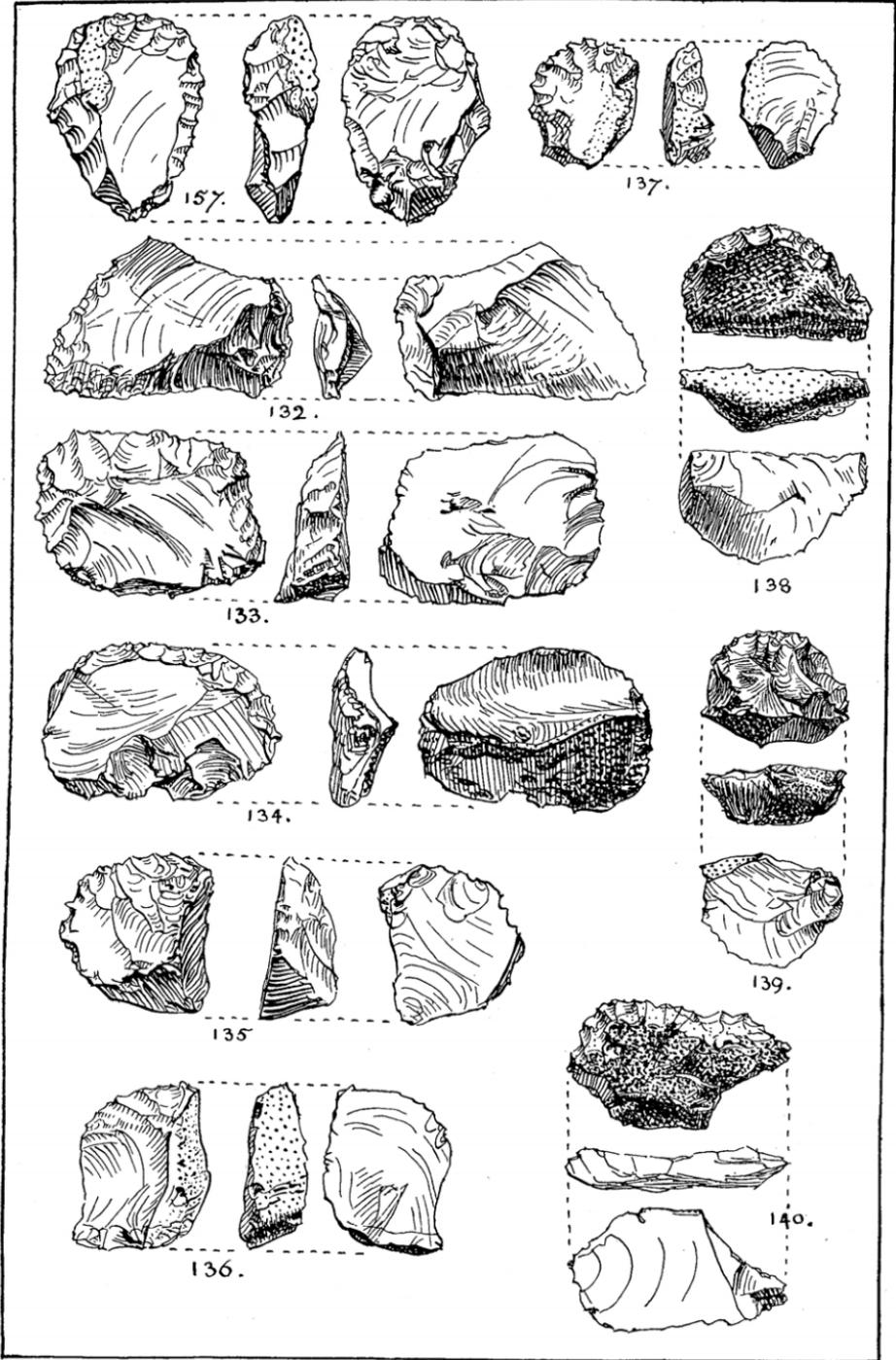


FIG. 9 f.

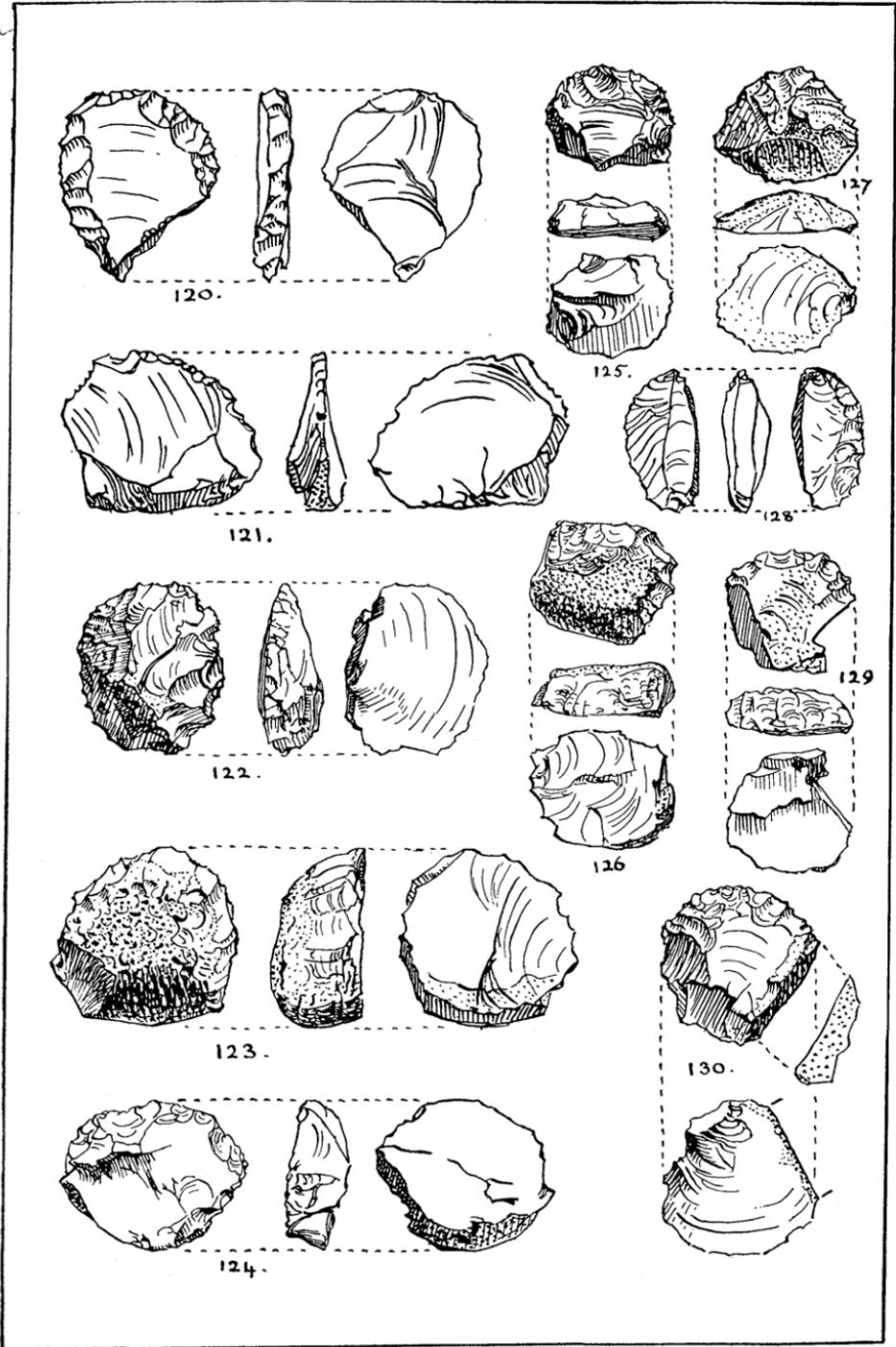


Fig. 10 1/2.

As in the Scottish sandhills, on all the occupation sites, there are in the sand two lines of dark earth with a few inches between them, but considering the rate at which the levels of the sand change at the present day, the lines can have little chronological value.

Unless otherwise noted, all the objects mentioned in this report will shortly be deposited in Barrow Town Museum with the other material from the site.

I am deeply indebted to a number of people for help and advice, and wish in particular to thank the following: Mr. Reginald Smith and Mr. Kendrick, of the British Museum, Dr. Dunham, of the Geological Survey, Dr. Grahame Clark, Mr. Stuart Piggott, Dr. Mears, of St. Andrews and Dr. Wilfrid Jackson, of Manchester.

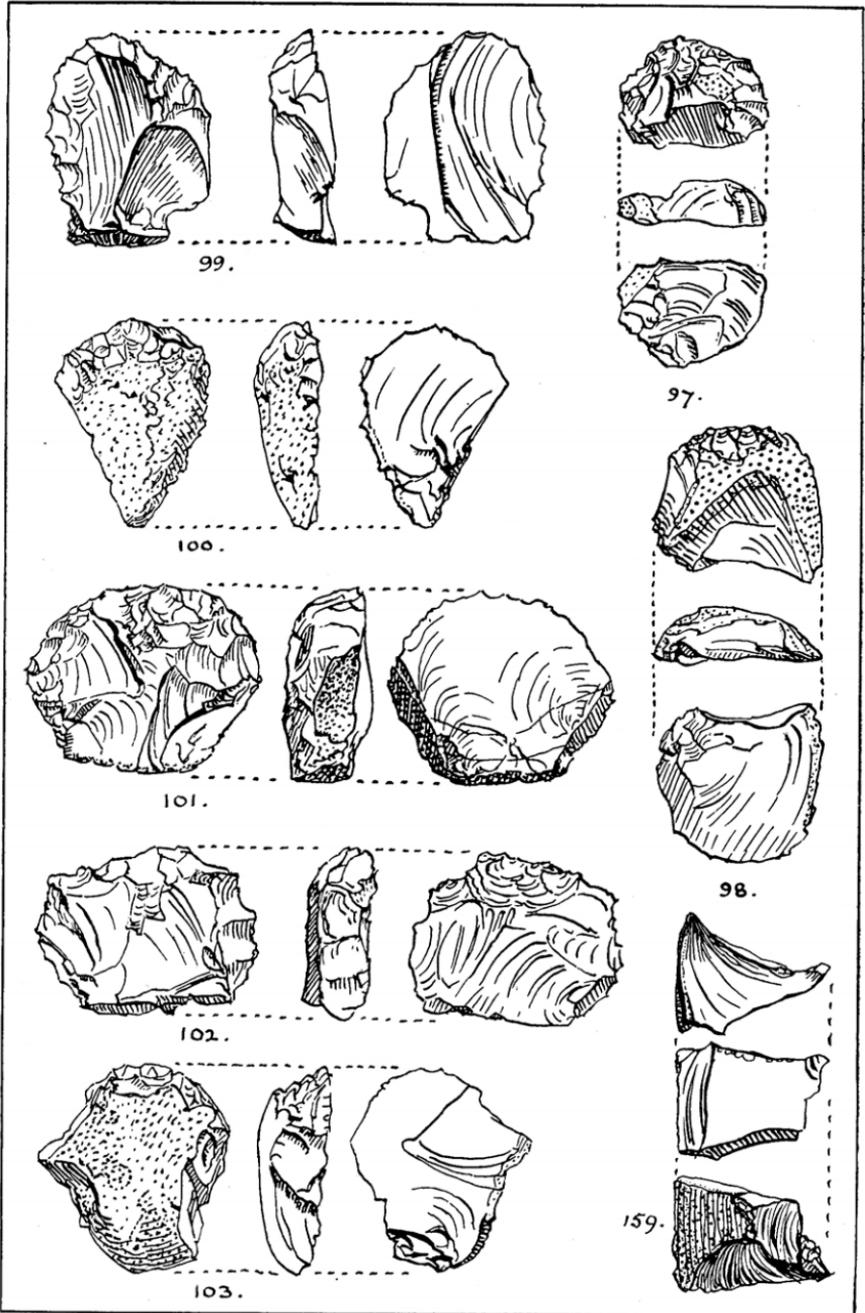


FIG. II †.

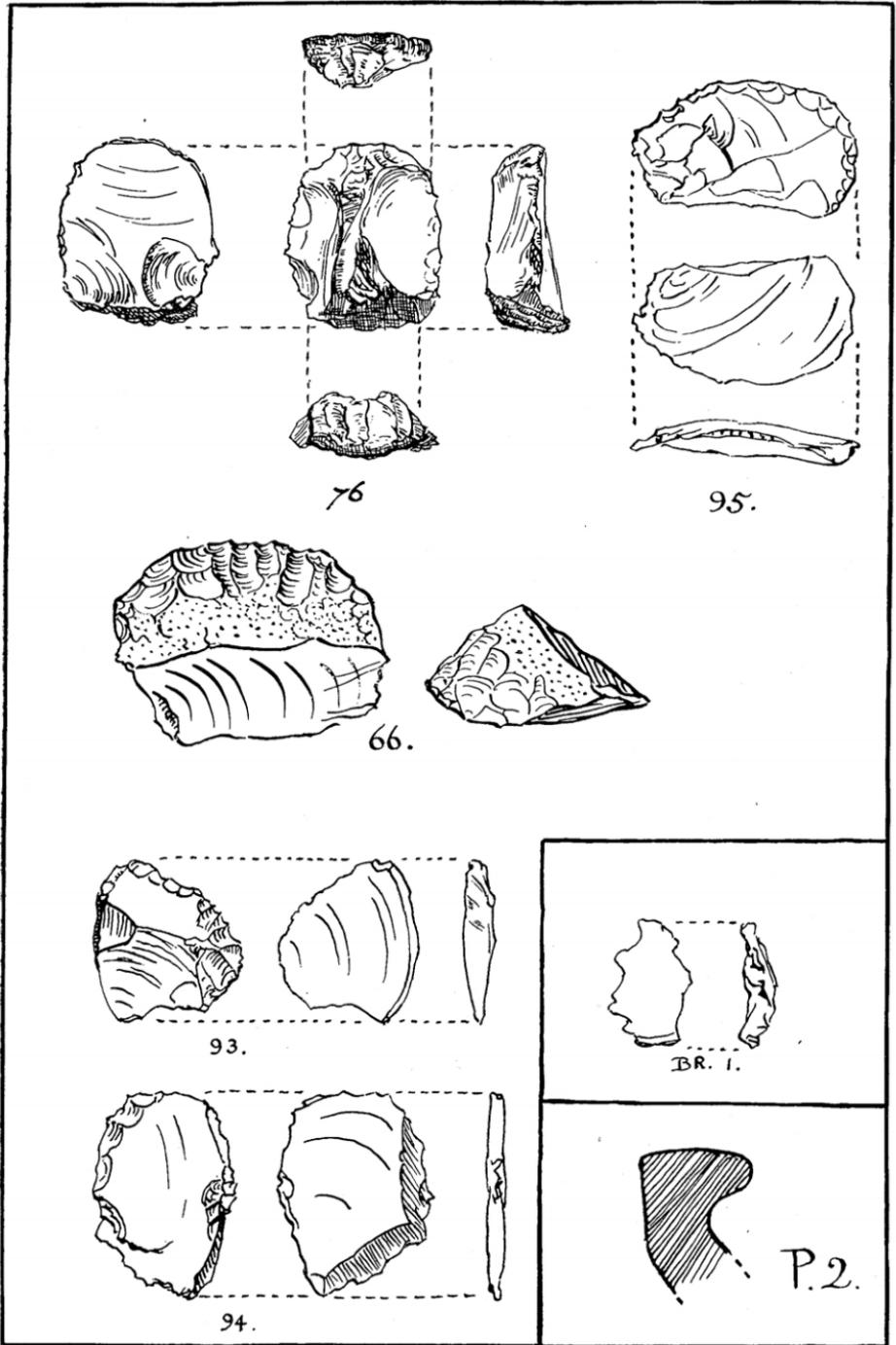
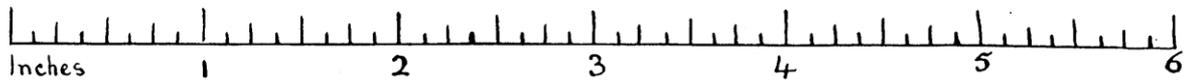
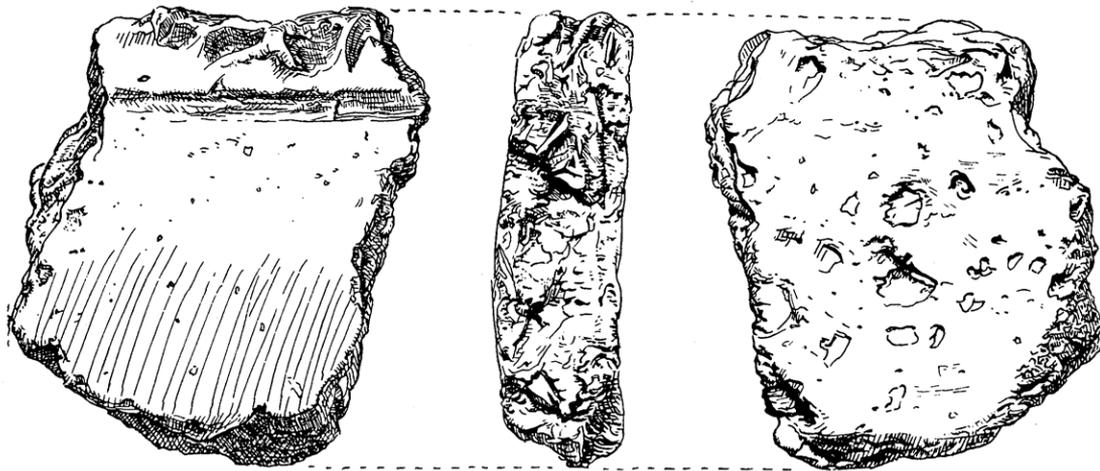


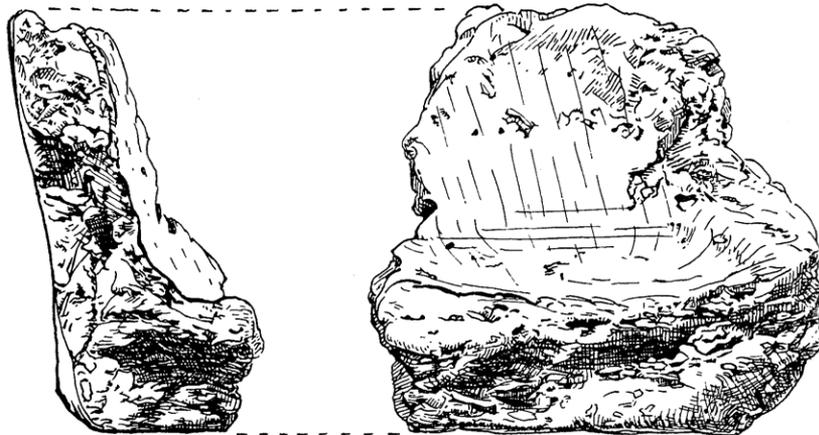
FIG. 12 †.



Outer surface.

Patterned fragment.

Inner surface.



Profile.

Inner face.

Fragment of Base and Wall.

FIG. 13.—No. 1 POT.

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