

ART. II.—*A preliminary report on a Microlithic site at Drigg, Cumberland.* By D. NICKSON, M.A., and J. H. MACDONALD.

*Read at Carlisle, September 13th, 1955.*

IN August 1954, after spending a pleasant afternoon at Wastwater, we decided to halt at Drigg for a few minutes before returning to Barrow; and when we were walking along the shore, at the foot of the cliffs, we found the first indication of the presence of a prehistoric site. At one point (marked A on the plan, fig. 1) a few fractured nodules and rough flakes of flint were seen in the material lying at the foot of the cliff; an attempt was made to trace the flint up the cliff-face, and eventually we were examining the ground inland. It was soon apparent that we had stumbled upon an extensive prehistoric site, for in the areas denuded of grass many flint cores, nodules and flakes lay scattered; and it was not long before the first microlith was found.

The National Grid reference for the site is 34/047987; it is situated between 50 and 100 yards north of the road from Drigg railway station to the shore. On the west it is bounded by the cliffs, and about 80 yards to the east by marshland; its height is roughly 30 feet above sea-level, with a shallow valley opening from it to the south. Further to the south, across the road, begin the extensive sand-dunes of the bird sanctuary.

The site is swampy, having several ponds on it, and is covered with marsh vegetation. The flint artefacts are found in those areas where there is no vegetation—in the main, sloping surfaces of clay traversed by narrow gullies, possibly caused by water draining from the higher ground to the east; during sunny weather, the ground presents

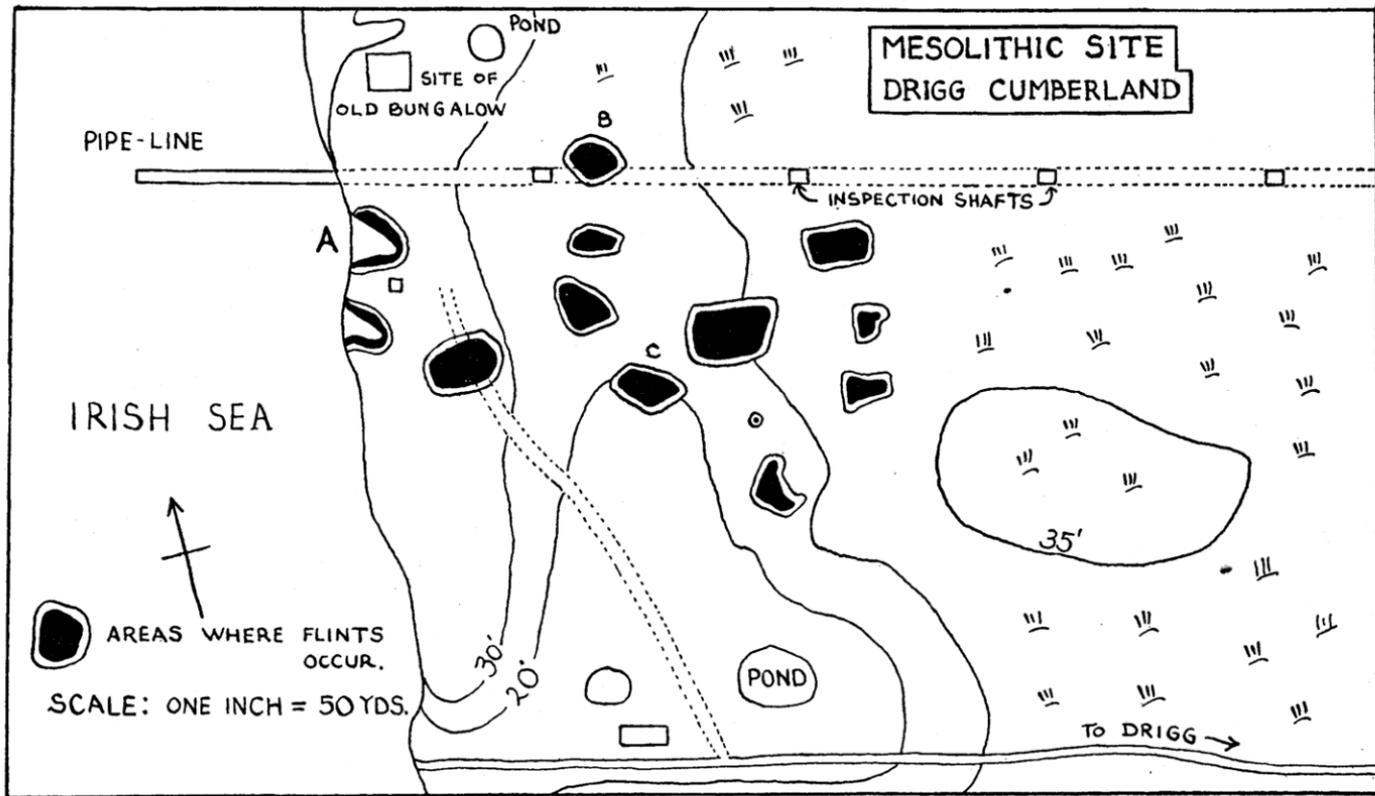


FIG. I.  
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the cracked and baked appearance of the bed of a dried-up pond. It is possible that flint artefacts may occur elsewhere on the site, in the parts of it still covered by grass and moss. A large number of flints, including cores and microliths, came from an area (marked C on the plan) among broken stones of the type associated with flint-knapping; this particular area appeared to have been completely undisturbed, the topsoil having been removed by weathering: the area slopes slightly towards the west, and the surrounding edges also appear to be breaking up through the same agency.

So much for the natural features of the site. It remains to mention one that is unnatural and problematical, an underground pipe-line that runs to the seashore from the Ministry of Supply buildings at Drigg; a line of iron-sheeted enclosures (possibly air-vents or inspection-shafts), at intervals of 80 yards, marks the course of this pipe-line: as the plan shows, it cuts across the northern part of the site. Presumably its construction entailed interference with the natural stratification of the ground thereabouts. Now flints, including microliths, have been picked up on the surface near it (area marked B on the plan); if they had been disturbed by its insertion, as seems possible, there may well be more material awaiting discovery below the surface here and elsewhere on the site. We think it unlikely that the construction of the pipe-line explains the surface flints found elsewhere on the site, as the majority of our finds came a considerable distance away from it.

Much flint was found, amounting in all to over ten pounds in weight, the greater part of it waste products; but many true artefacts were found, and the description of them is the main purpose of this paper. Preliminary sketches of the most characteristic specimens were sent to Professor Graham Clark, F.B.A., who kindly examined them, encouraged us to publish our discovery and gave us very useful information on the classification of the

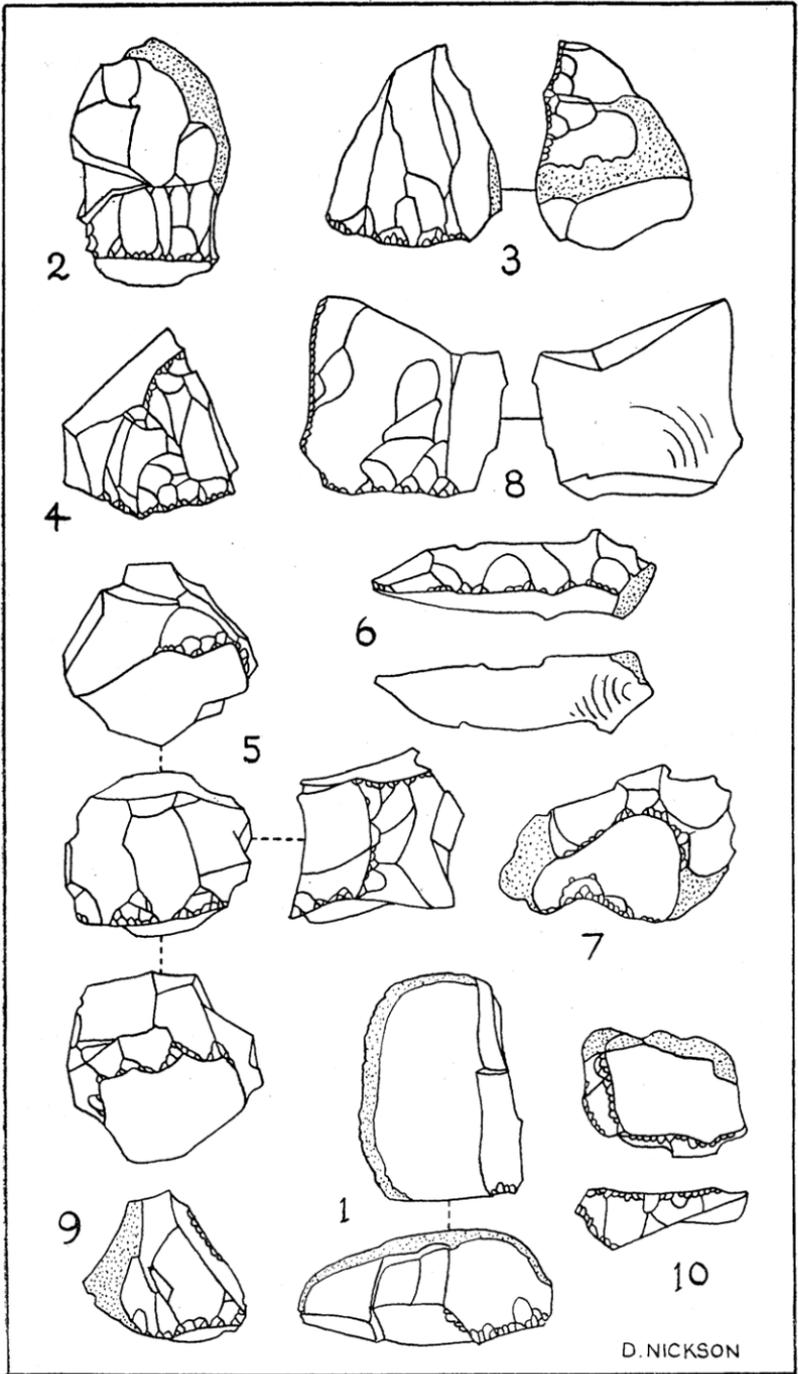


FIG. 2. (7).

material; he also referred us to his reports on the sites at Farnham<sup>1</sup> and Star Carr.<sup>2</sup> We must also express our thanks to Mr F. Barnes, and Mr J. L. Hobbs, who visited the site, confirmed our discovery and found several artefacts including microliths, which they kindly allowed us to examine and make use of in this paper. Furthermore, Mr Barnes has been most helpful in obtaining previous reports and literature relating to sites of similar culture.

### THE FINDS.

The *flint* is in various colours, honey and dark brown predominating, but there are pieces in dark grey, black and pale blue. Some pieces are heavily patinated and present a chalky appearance, especially those found at site C; this is regrettable, since it has made it difficult with some of the blades to discern the run of the flint by the concoidal rings. The dimensions of the material suggest that the flint originated as beach pebbles. In a few cases black chert has been utilised, instead of flint.

More than 100 *cores* have been found, most of them patinated to some degree, but ten or so (all of honey-coloured flint) are entirely free of patination. Most of the cores still have cortex attached; others have no cortex at all, particularly those with more than one striking-platform. They range in size from  $\frac{1}{2}$  in. to 2 in. in height. With the exception of half a dozen examples, the cores show secondary working, sometimes of a most delicate nature, suggesting that they were used as scrapers. All exhibit the narrow flake-scars typical of a Mesolithic industry. A characteristic feature of them is that the striking-platform itself is concave, a fact particularly obvious in the single-platformed cores; the secondary working round the circumference of the platform, meeting the concavity, produces a very effective scraping-edge. In two examples, where an extra large flake has been struck from the core, the secondary working appears on the platform itself, so that the flake-scar forms the base of a steep scraper (fig. 2, no. 1).

The *single-platform cores* have been sufficiently described, and a glance at the illustration (fig. 2, no. 2) will give a good idea of their characteristic shape. The *double-platformed cores* resolve themselves into three types. The majority have their striking-platforms set at an angle of 90 degrees to each other; in some

<sup>1</sup> *Proc. Prehist. Soc.* v, 1939, 61-118, especially the section on the flints, 70 f.).

<sup>2</sup> *Star Carr* (Cambridge, 1954), 98 ff.

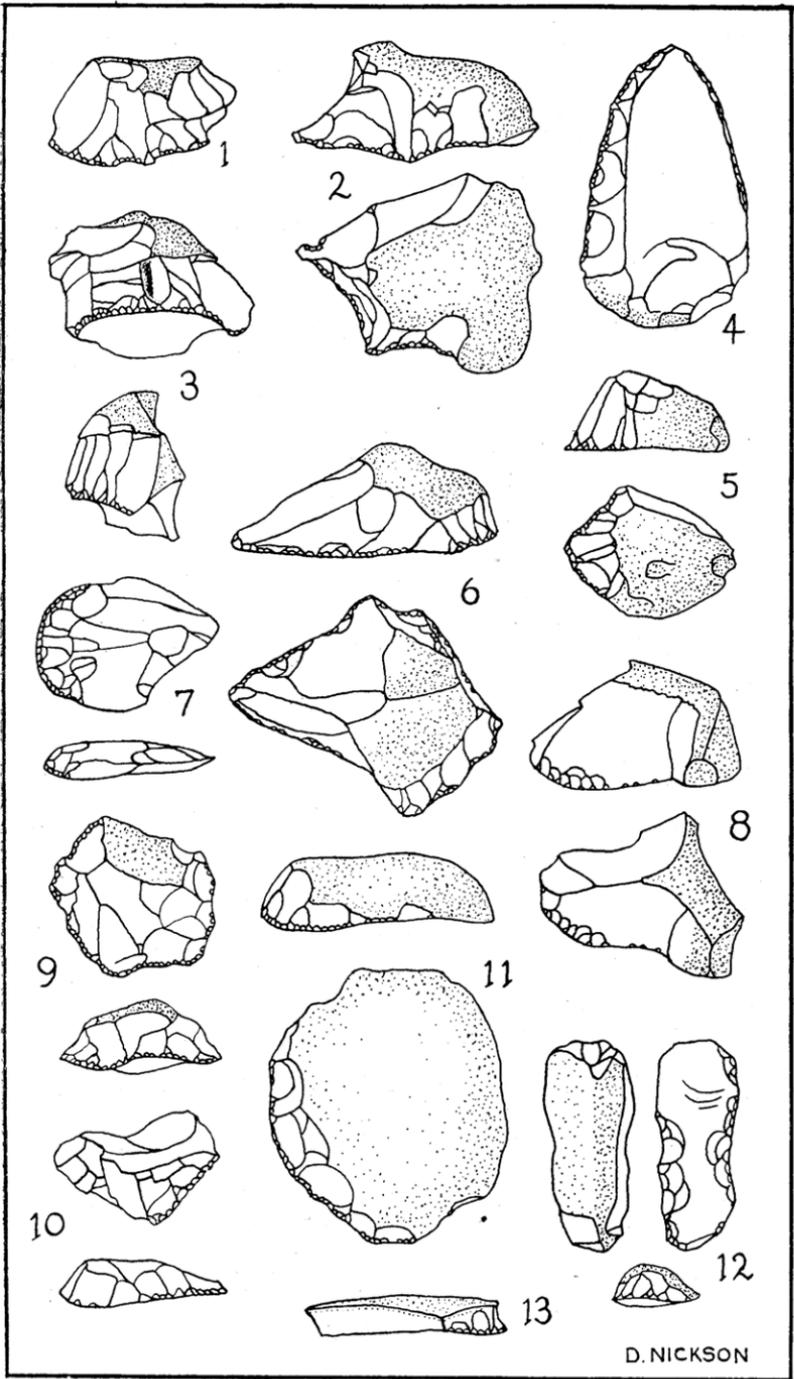


FIG. 3. (†).

cases it would appear that one platform has been the original striking-platform, and that the other has been formed by striking flakes from a large flake-scar running from the original platform (fig. 2, no. 3). The second type has its platforms inclined at an angle of 45 degrees to each other (fig. 2, no. 4). The third type is composed of cores with parallel platforms with flakes struck from both, so that they show flake-scars with concoidal rings running in opposite directions. The *three-platformed cores* have two platforms parallel and the third at right-angles to the other two (fig. 2, no. 5); as with the double-platformed cores, they seem to have been formed from original single-platformed flints.

When a scraper had become blunted through use, a technique was employed which removed a flake from the core, so that it could be resharpened with further secondary work. The flakes thus removed, termed *rejuvenation-flakes*, exhibit the secondary working to be found on the cores; they were struck off in a variety of ways and they are classified accordingly. Many of them have been further worked, after having been detached from the cores, to form a variety of implements.

Twelve examples have been found of rejuvenation-flakes struck off obliquely to the platform. From the position of the pronounced bulbs of percussion on the inverse sides of these flakes, it is clear that they were detached by a blow struck at the core in the same horizontal plane as the striking-platform, but a little above it (fig. 2, no. 6); several of these flakes have been subsequently worked into hollow scrapers: fig. 2, no. 7 is a good example of this, still bearing the worked edge of the original core, showing as a ridge or keel. Other flakes show this ridge almost in a straight line, and on some of the smaller examples this was so marked that they were at first sight mistaken for microliths. In some instances, the bulbs of percussion have actually been removed from these flakes, and we have considered the possibility that microliths might have been manufactured from them; but the true microliths do not appear to have been made in this fashion, as will be seen from our discussion on the microliths, below.

Rejuvenation-flakes struck at right-angles to the platform have been struck from the core by a blow delivered on the striking-platform in the same manner as with ordinary blades; the difference lies in the fact that the genuine rejuvenation-flakes of this type show, on the side opposite to the bulb of percussion, the secondary working that originally formed part of a core (fig. 2, no. 9). Many examples of this type of flake were found, some

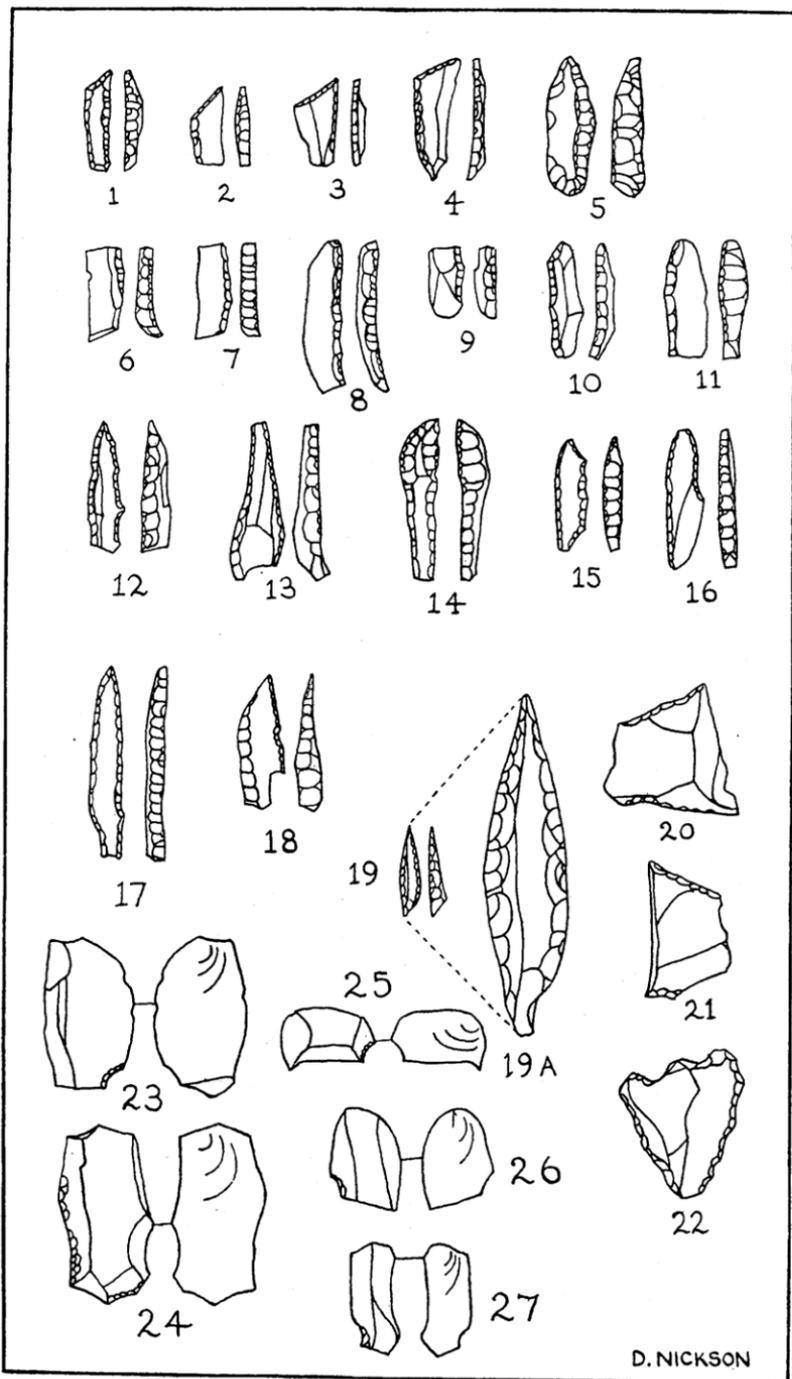
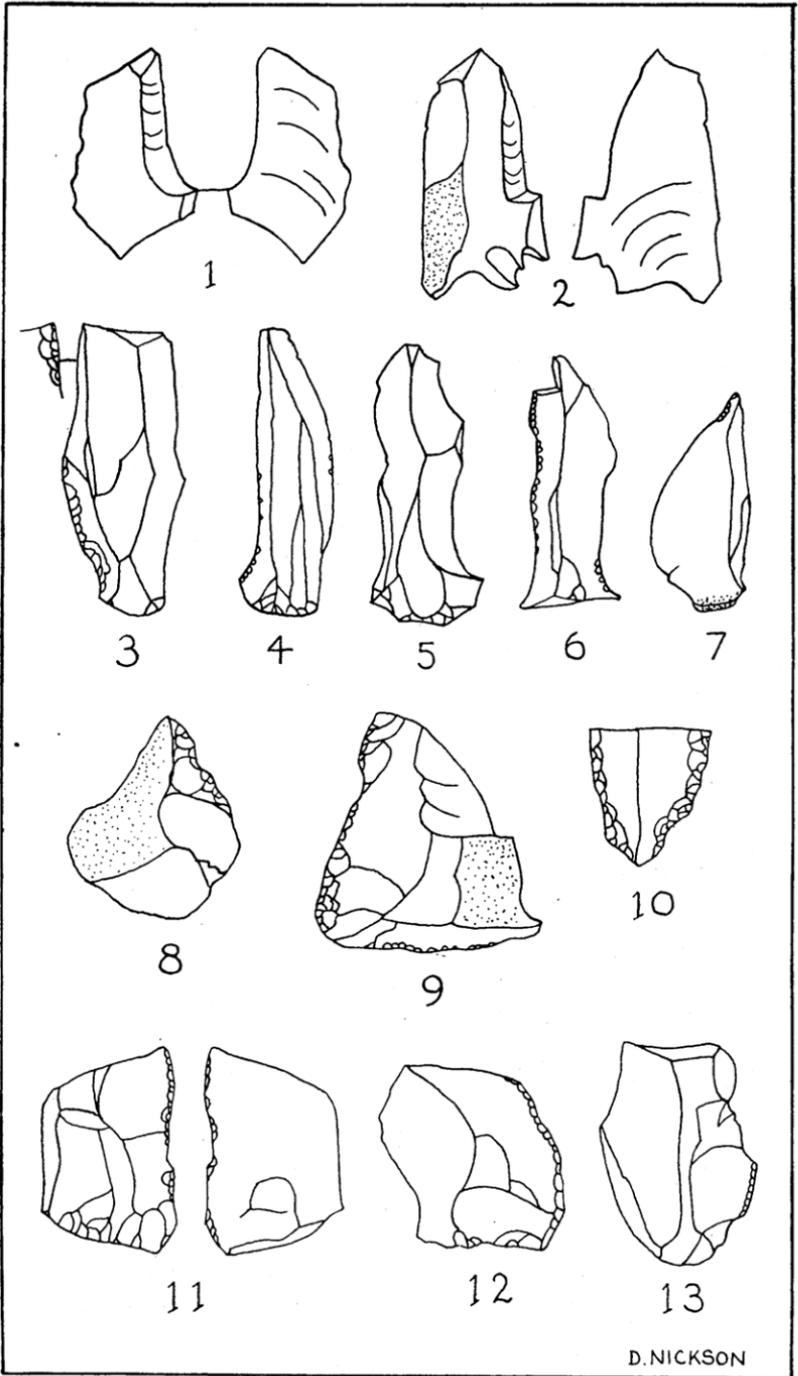


FIG. 4. (†).

of them bearing (along one or more edges) the beautiful microlithic blunting which must have been executed after the flake was detached (fig. 2, no. 8). Rejuvenation-flakes struck off parallel to the platform are similar in the manner of their detachment to those struck obliquely, but differ from them in that one of their surfaces consists of the complete original striking-platform of a core. They all show the secondary working that one associates with the core-scrapers; several of them have in fact been used as scrapers, the secondary work obviously having been added after the flake was detached (fig. 2, no. 10). Others of this type have been made into points and cutting-edges.

Apart from the core-scrapers (which require no further comment), over 40 *scrapers* of various types were found. They range in size from flakes of over 35 mm. in length, with steep working, to pieces less than 10 mm. long, with delicate secondary working. Some have been made from the tops of nodules that had been struck off as a preliminary to using the nodule as a core; on many of them the cortex remains on top of the scraper (as in fig. 3, no. 11). We have several examples of scrapers whose working edge resembles a bracket,  $\}$ ; the heaviest working appears on the point of this bracket: in other words, this type of scraper is a flake having two adjacent hollow scrapers on the same edge, separated by a point (fig. 3, no. 2). In other instances the scrapers often present a pointed appearance, as opposed to a curved edge (fig. 3, no. 5). Fig. 3, no. 6 is an unusual tool, the secondary work along all five edges being remarkably heavy, and the point particularly so; it would appear to be effective as a scraper and also as a boring-tool or awl: it is the amount of secondary working, exhibited on this flake, which tends to make it a problem-piece, at least as far as we are concerned. Fig. 3, no. 4 is a large thin flake, with beautiful microlithic working on both edges to the point, the base being left unworked; the working on the right-hand side is so steep as to be almost under-cut: it could be used equally well as a knife-blade or a side-scraper. Fig. 3, no. 12 is a rectangular flake showing a lot of cortex, which has been removed from both extremities and along the right-hand edge; this has produced a tool with two end-scrapers and a side-scraper, both edges showing inverse working. Many remaining scrapers are worked flakes of indeterminate shape.

Altogether 30 *microliths* have been found so far, but for the purposes of this paper we are restricting ourselves to those illustrated in fig. 4, since they are more obvious. All have their bulbs of percussion detached, and have been drawn with the concoidal rings open to the top of the page. The largest, no. 17, is 25 mm. in length and the smallest no. 19, 11 mm. To



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FIG. 5. (†).

date, no lunate forms have come to light. The type-forms of microlith found at Drigg so far are the *worked point* and the *microlith worked obliquely from the left*. Lunates, triangles and trapezes, shouldered and hollow-based points have not been found, with the exception of three trapezoidal flakes (fig. 4, nos. 20-22), which we are reluctant to claim as genuine trapezes. Great care has been taken in the search for the micro-burin, and singularly few good examples have been recovered. The remarkable number of blade fragments bearing the bulb of percussion, but no notch, suggests that the notch technique was not very highly developed; it would be natural, otherwise, to find more *micro-burins* (the waste product of the microlith) than microliths, which would probably have been used away from the site. This poses two questions: had the microliths actually been manufactured on the site, or were they manufactured elsewhere and brought in from the surrounding district? The evidence from the cores, and the extensive amount of waste, lead us to believe that they were made on the spot. On the other hand, a close examination of the microliths themselves leads one to believe that the notch technique was certainly used.

As far as possible, we have followed Dr Clark's classification of the microliths shown in fig. 4, showing all specimens with the rings open to the top of the page. In addition to being obliquely blunted, nos. 2 and 4 are blunted down the left-hand edge; no. 3 is blunted on the right-hand edge and no. 1 on both edges. Nos. 6 and 9 are blunted on the right-hand edge, nos. 10 and 11 on the left-hand edge only. Of the microliths blunted on two edges, nos. 12-15 and 17-19 are worked points; the concoidal rings indicate that the points are fashioned from that end of the blade which was nearest to the bulb of percussion; this is even true of no. 19, which has a needle-sharp point (to make it easier to appreciate the delicate nature of the working on this minute piece, it has been enlarged in the drawing no. 19A). An incipient form of shouldered point appears in nos. 17 and 19, but we do not consider either to be a genuine specimen; in any case, the microlith shown in no. 19 is far too minute.

The micro-burin is the lower portion of the microlithic blade, bearing the bulb of percussion, which is detached from the blade by a notch cut into the side of the latter slightly above the bulb of percussion, the bulb being then snapped off at the weakest point in the blade, through the notch. The resulting micro-burin generally bears traces of part of this notch, and an oblique scar where the blade has been snapped off. On the microlith itself, the notch is usually continued obliquely across its end, as can be seen in fig. 4, nos. 1-4; on other microliths the notch has been

continued higher up, in order to form a point, as can be particularly observed in fig. 4, nos. 12 and 19. Only seven such micro-burins have been counted. Many examples of bulbs of percussion, having the diagonal fracture but without the notch, have been found; altogether over 100 such pieces were picked up, which suggests that the notch technique was not invariably used, and that in many instances the bulb of percussion was struck from the blade with a single blow.

Several *angle-burins* have been found on the site, two of the best examples being illustrated in fig. 5, nos. 1 and 2; they consist of primary flakes showing a burin scar at right-angles to the primary flaking, the concoidal rings on the burin scar running in the opposite direction to those on the primary flake. The effect of this operation is that a pointed tool results, the point being broad and strong and suitable for work as a borer.

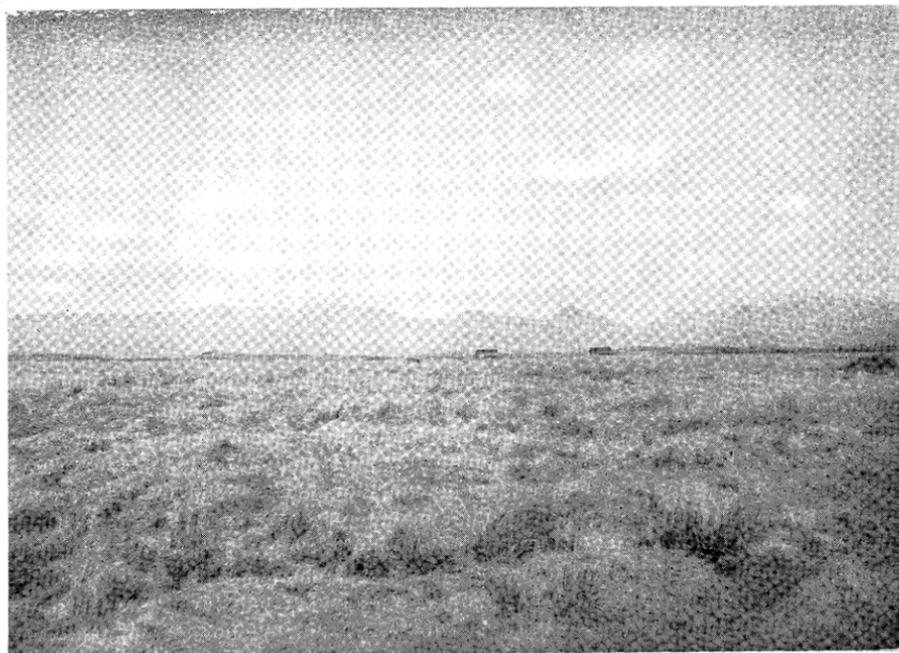
A great number of *blades* and *worked flakes* were found, far too many to be illustrated here. Many of them show, by working at one end, that they have been struck from cores as rejuvenation-flakes (fig. 5, no. 4). The largest blade so far found is 38 mm. in length; this particular blade has had the bulb of percussion detached, and may possibly be a microlith in the making. Some of these pieces are worked along the whole of one edge, in microlithic fashion (fig. 5, no. 12); others are worked into cutting-edges, but the majority are worked only partially, into points and hollow scrapers.

### CONCLUSIONS.

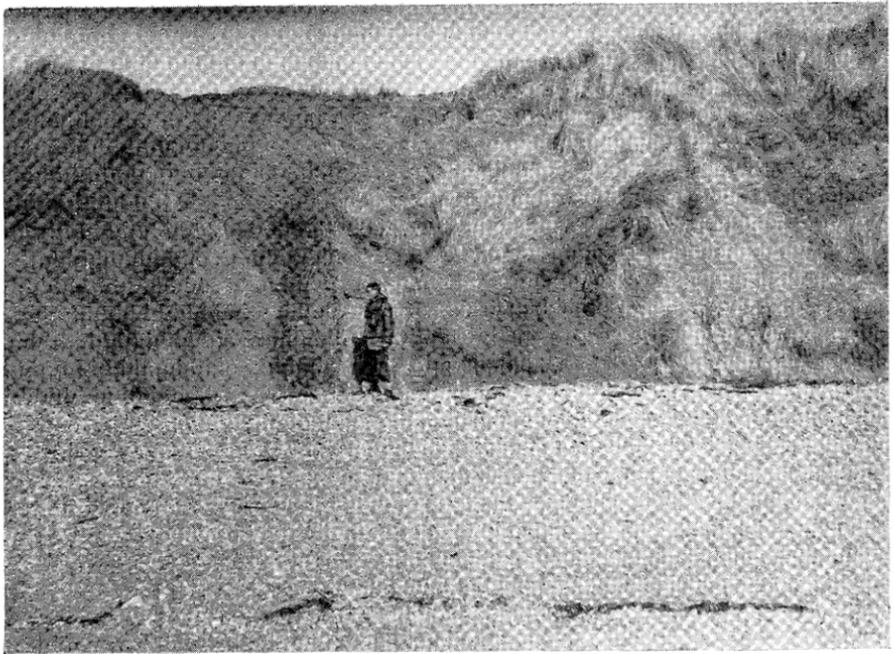
We trust that it will be appreciated that this report is only a preliminary to a more thorough survey of the site. No excavations have been attempted, and we would emphasize that all the finds have been made on the surface; any opinions we have formed have come from typology only. In other words we have compared the material from Drigg with that found elsewhere which shows similar characteristics of manufacture and technique, and has been reported upon by reliable authorities. Bearing these reservations in mind, the material found at Drigg points to a Mesolithic culture, the dating of which must await further development of the site; this, it is hoped, will include pollen-analysis, and a close study of the stratification.



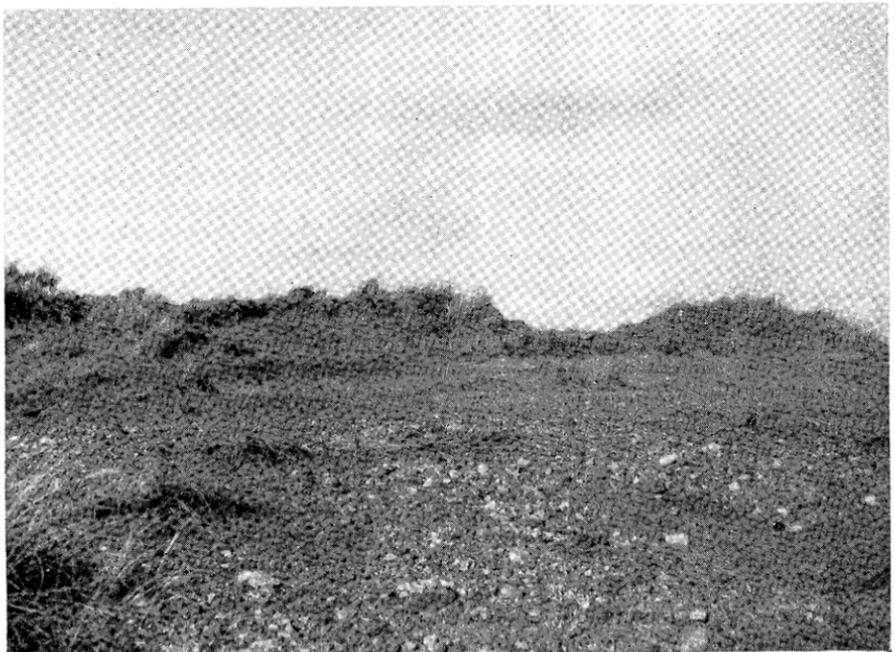
PL. I, 1.—Looking west—Barn Scar: Isle of Man on the horizon.



PL. I, 2.—Looking east—Great Gable in the background.



PL. II, 1.—The Cliff at A—where the first flints appeared.



PL. II, 2.—Area C—showing stones amongst which many artefacts were found.

A comparison with the reports on such sites as Farnham, Peacock Farm and others of accepted Mesolithic cultures, appears to confirm our opinions on that at Drigg, though the material found there, whilst showing many of the characteristics of manufacture and techniques, differs in size. All the flints, from cores to microliths, are noticeably smaller than those found elsewhere; this may, of course, be accounted for by the size of the raw material available which, as already mentioned, consists of beach pebbles of small size, found locally.

We have previously mentioned the lack of lunates, triangles and trapezes, hollow-based and shouldered points. It has been found elsewhere that such finds generally indicate an advanced Tardenoisian culture, and that the obliquely blunted edge (which seems to be a characteristic of the Drigg microliths) has previously been found in strata underneath those producing the more advanced forms. Now in dealing with the Drigg site, one has to remember that this has always been looked on as a backward region; if, therefore, the Drigg culture resembles a Mesolithic one, it may still be Neolithic in time—though we personally believe that, if this be the case, it must be at latest Early Neolithic. A further consideration is, that no heavy industry has yet been found at Drigg. We are aware, indeed, that an axe has been found in the neighbourhood, which was considered to be of Maglemose type;<sup>3</sup> but we have no reason to believe that it in any way relates to the finds here under review. No bone or antler remains have yet been found, but Professor Clark suggests that we should keep a sharp look-out for such material.

<sup>3</sup> W. B. Wright, *Tools and the Man* (London, 1939), 81.