

Percy Sladen Memorial Fund Excavations at Rowberrow Cavern, 1925.

BEING THE FIFTH REPORT ON THE CAVE.

BY HERBERT TAYLOR, M.B., M.R.C.S.

Thanks to the generosity of the trustees of the Percy Sladen Memorial Fund we have been able to employ labour for the excavation of Rowberrow Cavern, and satisfactory progress has been made. Practically all the remainder of the first two layers of the deposit has been removed; their combined thickness varied from $3\frac{1}{2}$ to 5 feet. The platform at the mouth of the cave has been cleared, in part, down to the same horizon, a depth of 9 feet. A trial pit 12 feet by 18 feet in diameter at the mouth has been begun, and has reached a depth of 10 feet over a small area. It is estimated that about 220 tons of material have been removed and sorted, of which 200 were derived from the first two layers.

The deposit in the inner or southern half of the cave appeared to be undisturbed, doubtless because too damp to attract burrowing animals; the deeper strata even in the entrance are rarely disturbed, owing to the floor of stalagmite above them. Consequently it is possible for the first time to deal with the finds in stratigraphical order. It is to be noted that some of the material mentioned awaits expert scrutiny.

A general view of the cave is given in Plate XIII A, and a longitudinal section of the excavations, Plate XIV, at the end of the article.

1. THE FIRST CLAY AND STONE LAYER.

In the southern half of the outer chamber the usual thickness of this layer was 4 feet. It was quite uniform in appearance, no hearths being recognisable; but three horizons can be distinguished by the contained artefacts: Modern, Mediæval, and Romano-British. The fauna appeared to be the same at all depths; to the lists given, two species have been added: Hare (*Lepus timidus*), and ? Wolf (*Canis lupus*), the latter from the fourth foot.

(a) MODERN DEPOSIT.

Thickness, 3 feet. Contents, some late pottery; bones chiefly of domestic fowl, sheep and goat.

(b) *MEDIÆVAL HORIZON.*

Average depth below surface, 3' to 3' 8". Contents, pottery and iron artefacts; fauna, all the species of the layer with the possible exception of wolf.

Parts of at least three large vessels were found. One (Fig. 1, No. 1) was about 10 $\frac{3}{4}$ inches in diameter at the rim, which was broad, flat, and everted; the vessel was hand-made, but finished on the wheel. The ware is thin and hard, dark brown in colour and sandy in texture. It may be as late as the XIIIth century, but in the present state of our knowledge of the pottery of the Dark Ages may equally well be much earlier. The base of this vessel may be reconstructed from a fragment of another, very similar in material and in size, but of a reddish colour externally (Fig. 1, No. 2). Sherds of an exceedingly

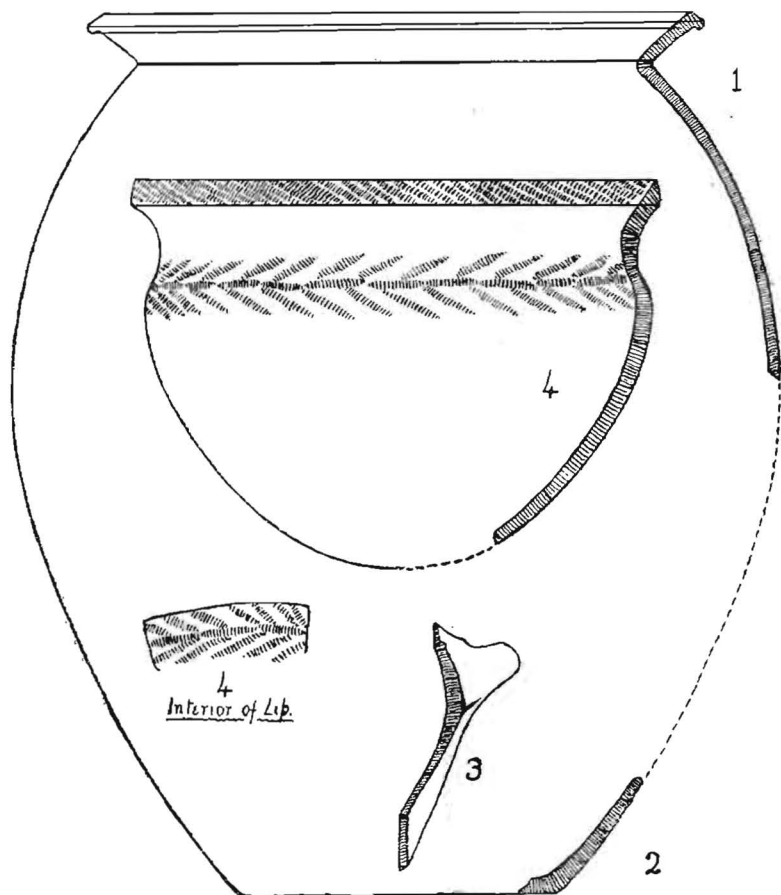


FIG. 1.

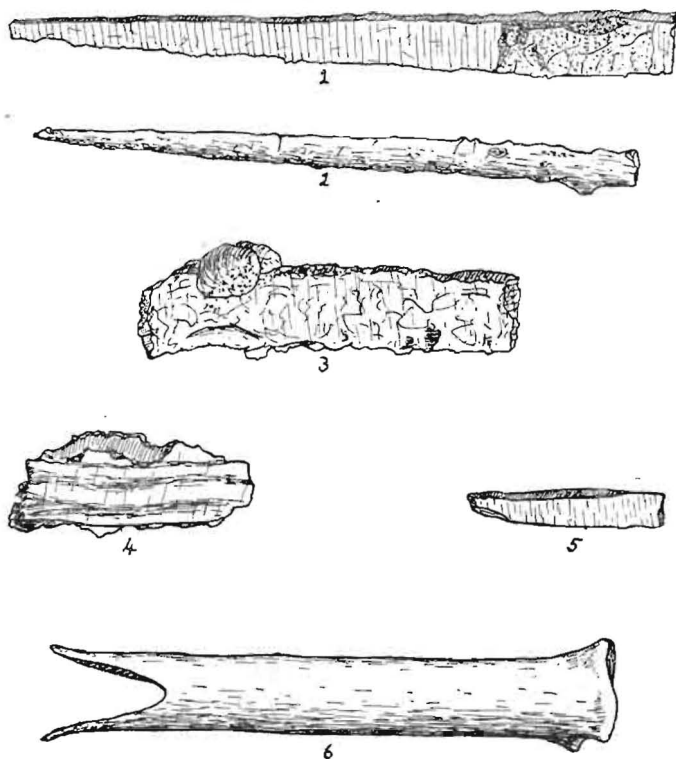
hard ware, varying in colour from light silvery-grey to black, and containing small white granules (? quartzite), are fairly numerous; one of the vessels was very large,—perhaps 20 inches in diameter,—and possessed lugs rising from a sharp angle (Fig. 1, No. 3). Some similar material is covered externally by a slip, light grey or buff in colour. The date is probably the XIIth or XIIIth century A.D.

An iron blade of triangular section (Fig. 2, No. 1) is definitely Mediæval, as was the lance-head figured previously²; a pointed rod of circular section cannot be dated, but was found at the same horizon in the deposit outside the cave (Fig. 2, No. 2).

A fragment of glass from the curved neck of a vessel completes the list of artefacts.

(c) ROMANO-BRITISH HORIZON.

Depth below present surface, 3' 6" to 4'



Nos. 1 to 5 two thirds natural size, No 6, one third.

FIG. 2.

This deposit, like the modern and probably the mediæval, would appear to cover a long period (I or II to early IV century A.D.), if we may accept the evidence of the pottery. A considerable number of sherds have been found, representing about twenty vessels, but none are sufficiently complete to permit of reconstruction. Description of the series is therefore postponed in the hope of further discoveries.

A bronze or copper coin, one half of another, and four smaller fragments have been found; though not identified, they are similar to the Tetricus group of earlier reports (A.D. 268 to 273, but current also in the early part of the IVth century). Three small bent fragments of copper or bronze, one almost a cylindrical bead in form, resemble those described before²; they are not distorted coins; their purpose is unknown. A bronze or copper point of square section (Fig. 2, No. 5), may belong to this horizon or to the Black Band. A fragment of lead in the form of a ridged strip, bent double longitudinally, is also puzzling; it was thought to be solder, but contains no tin (Fig. 2, No. 4).

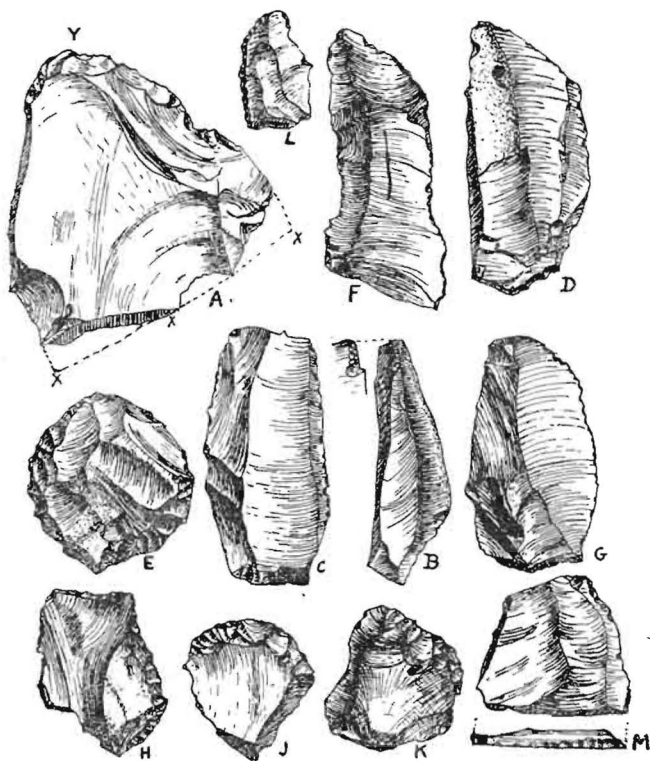
A considerable number of flint implements were found. This was unexpected. Armstrong³ has recorded the common occurrence of worked flints in an Early Iron Age site of Hallstatt culture at Grimes' Graves; those contemporary with the site were "steep chipped scrapers, recalling certain Aurignacian forms; round and square-ended scrapers, a prismatic tool, a chopper and two piercers"; they had a distinctive facies, "lacking the fine finish and secondary trimming of the older industries, and were, except where burnt or made from old Grimes' Graves flakes, quite black and unpatinated." This would almost describe the Rowberrow series, which, however, occur in the Romano-British, not in the Iron Age deposit. The fact that there are no local supplies of the raw material renders an extensive use of flint at so late a date yet more remarkable.

Individually, any specimen might be matched in a collection from local round barrows of the Bronze Age, or from the surface; collectively, the series is distinguished by:

1. A majority of chance forms. Every scrap of flint has been utilized, and almost every edge is worn.
 2. Utilization of older implements, often as such, but sometimes remodelled, sometimes simply as raw material.
 3. Ruder workmanship; much battering, no elaborate flaking.
 4. Prominence of the bulbs of percussion.
 5. Almost complete absence of patination.
- 1 and 2 perhaps signify only scarcity of flint.

Fig. 3, A, is an old implement slightly remodelled. It is a triangular plate of flint covered for the most part by a dense white patina; the rounded "point" has been retrimmed and a small fracture made in one of the edges at a much later date, for the surfaces so exposed are unaltered. Originally it may have been a tranche with an edge at XXX. The chipping at Y is obviously not intended to transform it into a scraper, neither could it be for use as a piercer.

C, D, F, G, M, are blades showing extensive wear. D bears a little secondary chipping; F has the point as well as the sides much damaged in use.



Two-thirds Actual Size.

FIG. 3.

K is a combined side- and steep end-scraper on a short flake; E is a thumb-scraper chipped almost vertically around three parts of the circumference, and J is a fragment of another. B is very interesting; it might be called a pseudo-burin. It is a keeled flake; at the narrower end one edge has been chipped in such a way as to give the appearance of a graver. Scratching or graving is about the

only use to which this implement could be put ; the sharp edge is quite unworn.

L is the end of a knife with chipped back ; this type persists from Pleistocene times, and parallels can be found from Aveline's Hole and from local round barrows.

Many of the implements found in the disturbed area of the cave must belong to this series, *e.g.* Nos. 17, 19, 20, 73 and 87, of those figured.²

A human radius and fibula, both incomplete, were found. They belong to an adult, possibly to the same individual as the cranial fragments and teeth already recorded. Scattered human bones are an unpleasant feature of many Romano-British cave deposits.

The absence of personal ornaments, and perhaps the utilization of flint, suggest an exceedingly poor community.

II. THE BLACK BAND.

This La Tène cultural deposit was found generally at a depth of about 4 feet, except where projecting bosses or shelves of the Cemented Floor caused it to lie nearer the surface. In thickness it was about 3" in the southern half of the Outer Chamber, but two feet or more in the Inner. Upon a relatively thin layer of the Black Band we found the spoil of the shallow pit dug apparently to serve as a furnace or ash-pit. The La Tène layer passed above and below the spoil heap, the contents of which will be described with the next layer, to which they belong for the most part.

Towards the inner (southern) end of the chamber the Black Band became somewhat peaty in character and contained bracken-fronds still readily recognisable. The fauna was the same as that of the preceeding layer, man, goat, roe-deer, polecat, cat, and bank-vole excepted ; bones of pig, sheep, horse, and badger were the most numerous. The sole portion of the hoof of a very small horse has been preserved, thanks to the peaty character of the deposit.

No flint artefacts were found.

Pottery was scarce in the area excavated ; the few sherds found were of La Tène type. A detailed account is postponed in the hope of further discoveries in the midden areas, but it may be mentioned that no decorated ware is present with the exception of a fragment showing a projecting rib with the finger-tip depressions characteristic of the Early Iron Age and end of the Bronze Age. There is no trace of the curvilinear technique such as we find in the Lake Villages of Somerset, at Wookey Hole, Read's Cavern, etc. This may indicate a cultural difference, *e.g.* an earlier period, or an affinity with the North

and East rather than the South ; but it may be due merely to the poverty of the occupants.

A curious implement, made from a large long bone (? horse), is illustrated in Fig. 2, No. 6. The prongs are quite slender and well formed of compact bone, therefore it is not one of the pseudo-implements gnawed by hyæna or dog.

A short length of an iron bar, not identifiable, but possibly part of a currency bar (Fig. 2, No. 3) ; some partly-reduced iron and waste ; a few lumps of hæmatite ; and a very large quantity of charcoal were found. A certain amount of work remains to be done on the slag ; all that analysed has been found to be iron, excepting a solitary fragment of lead-slag in the Romano-British level, clearly an accidental inclusion. The whole district is scarred by ancient lead-workings ; those of Charterhouse are known to have been worked under the Romans.

No trace of a built furnace, such as was probably used for the reduction of the ore, exists. Probably one or more were arranged in the banks of the shallow pit, already referred to, which was dug near the entrance ; its depth was rather less than two feet, its area about 6 feet by 8 feet, and it was floored incompletely by flat stones. It was filled with charcoal and ash, slag and fused stone, together with a few pot-sherds of the era—La Tène—a few bones of sheep and so forth, the majority of which were charred.

In the Inner Chamber the Black Band became much thicker, varying from two to three feet ; the increase in thickness being chiefly in an upward direction, it must have been, at least latterly, a refuse heap. It was composed of black slimy material, very odorous, and mainly organic in origin, as shown by combustion. More than half of its bulk consisted of the stalks and fronds of bracken, still well preserved ; it was even possible to show that some of the bracken had been cut. The deposit contained also many small twigs and fragments of several larger branches and stakes ; a nut ; and a number of plum-stones, ? a cultivated variety. Wing cases of beetles were exceedingly numerous. A fragment of pottery burnt very hard, a fragment of iron ore, some slag or partly-smelted iron, and a fragment of glass were found. The last is possibly of later date.

It would seem that the Inner Chamber first formed a stable or pen, that bracken was used as the bedding essential on a soft clay floor, and that the stakes were used for tethering animals. Portions of some stakes were still in a vertical position ; apparently they had been peeled or shaved, but no clear instance of a pointed end could be demonstrated. Pointing would be unnecessary, the

clay being soft. The foul condition of the deposit is perhaps in favour of the stable hypothesis, for bracken alone has quite a different odour when it rots. The upper foot or so cannot be anything but a midden, it approaches the roof so closely; probably the stable was abandoned on account of the accumulation of débris, and used as a refuse tip. The bracken may have been used as bedding for man as well as beast.

The scarcity of the usual kitchen rubbish is explicable, for bones have some value as fuel and doubtless were used to feed the fires; in fact they are relatively scanty everywhere in the Black Band. Bracken would be useless for such a purpose.

Some light is thrown upon the question, what species of animal was kept, by the height of the entrance of the Inner Chamber; the Keltic pony, though only 12 to 13 hands, the ox, etc., could not have entered. The hoof fragment of a very small horse probably belonged to a young individual, no evidence of a dwarf horse having been found amongst the bones. The stable may have been used for pigs, sheep, or goats; bones of the two former have been found both in the Inner Chamber and elsewhere in the Black Band, but as yet no typical horn-cores of the last.

A curious feature is the absence from the station of some common objects, *e.g.* spindle-whorls, loom weights, querns and quern-stones, "cheek pieces," and personal ornaments. This may possibly signify that it was not a dwelling-place, save temporarily for those employed in working the iron; they may have lived in the open in tents or huts, or come from some neighbouring station, such as Read's Cavern.

III. THE SECOND CLAY AND STONES LAYER.

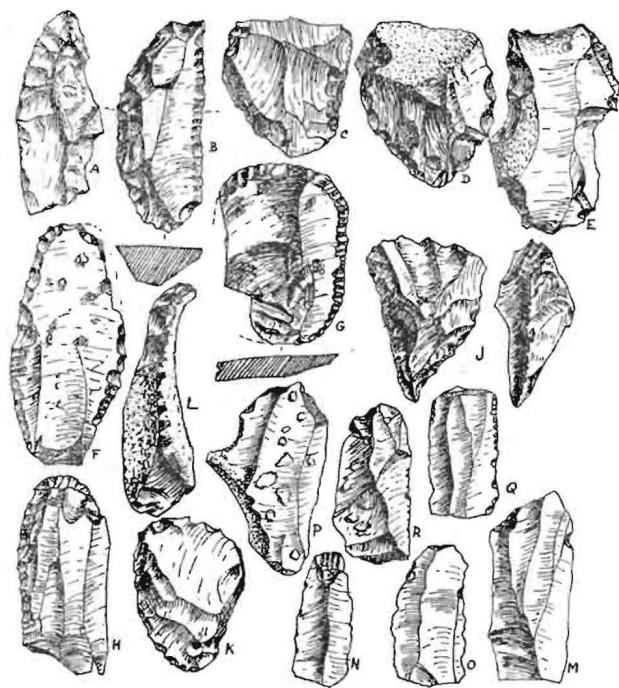
This layer has scarcely been touched in the southern half of the cave, where it seems to be of considerable thickness. No addition has been made to the faunal list.

FLINT ARTEFACTS.

Three more implements have been found in undisturbed material at the base of the layer: Fig. 4, H, J, L. The remainder of the first series described below are referred to the same horizon because:—

(a) They are of the same facies.

(b) Many are encrusted with stalagmite,—45 per cent. of all the flint artefacts from disturbed areas, which, corrected for the absence of lime-salt deposit over about a third of the floor, and for the fact that nearly a quarter of the implements found *in situ* upon stalagmite have escaped, indicates that about 80 per cent. belong to



Two-thirds Actual Size.

FIG. 4.

this horizon. The remaining 20 per cent. is doubtless the proportion of Romano-British implements, a figure which agrees with that obtained by counting the latter by absence of patination. No dateable object later than the Bronze Age bears stalagmite.

(c) The numerical test shows that about 82 per cent. of all the stalagmite-encrusted specimens were found upon or within a foot above the base of the Cemented Floor.

This last test deserves a little explanation, for it seems that sometimes the discovery that a deposit is disturbed has been allowed to throw unnecessary doubt upon its stratigraphical evidence. As a matter of fact, a little reflection will show that almost all cave deposits are disturbed; articles slip into cracks below their original level, especially by the cave-wall⁴; rodents have always been with us; apart from burials, any human occupation is likely to mix its traces with the subjacent layer. Until we come to Neolithic times the effects are likely to escape notice, the rate of change of culture having been slow; but afterwards it is very often evident, *e.g.* a Roman may

be separated by but a few inches from a Neolithic deposit, and therefore mixed to some extent therewith. If careful records are kept, it will often be possible to refer any group of half a dozen objects to its original position; for unless the material has been turned completely over a greater percentage will be found there than at other levels. This is not theory; it has proved reliable for everything found in Rowberrow Cavern,—slag, pottery, flint and metal.

Fig. 4, C is a flint knife made from a fragment of a polished implement, probably a celt; a segment of the edge of the original implement is visible, polished on one side, on the other re-sharpened by flaking. After being broken from the business edge of the celt the fragment was shaped into a knife by well-executed scale-flaking on both surfaces. The edges are much worn. The fragment has been regarded as the butt of a polished knife-dagger, chiefly owing to the character of the scaling; but the latter was done after the polishing.

Fig. 4, F*, G*, H*, R*, are knives which display fine surface-scaling not common amongst the surface implements of Mendip, in each case upon the upper surface only. (The asterisk indicates that a film of stalagmite is adherent). F was embedded in a superficial stratum of the cemented floor, in association with Bronze Age pottery resembling the local Food-Vessels in texture; the scaling was carried completely round the implement as was probably the case in G, which was oval before its breakage.

Fig. 4, B is a small stout crescent-shaped knife, exquisitely chipped; it is of the same flint as the above, as also is A*, a small pointed knife which has been badly fire-crackled and subsequently encrusted with stalagmite. D*, also fire-crackled, is of the same material and may be considered a modification of the horse-shoe scraper.

J*, again of the same flint, is a skilfully made point, almost certainly intended as a borer. Platforms have been left for thumb and forefinger; two ogival edges have been chipped, the pressure being directed mainly from the face not shown. Since either face is steeply ridged the section is quadrilateral.

L* is an accidental form, but the pointed end has seen much service; the back is chipped (*dos rabattu*). E, another fire-crackled specimen, is a hollow-ended scraper, and has also a concave scraping facet upon one side. K, again fire-crackled, is a small oval knife.

Fig. 4, Q is a short length of a narrow flake showing prepared striking platform and minimal bulb of percussion. The rather dense brownish patina differs from the preceding, and is scarcely matched

by anything from the cave excepting three implements previously figured,² No. 27 (a similar implement), Nos. 7 and 70, all of which are of types unusual in the district. It would be unsafe to draw conclusions from only two specimens, but Q and No. 27 recall the short lengths of narrow flakes with prepared striking-platforms and inconspicuous bulbs of percussion which have been recorded as occurring at a flaking site on Kelling Heath,⁵ and attributed to an early period in the Neolithic Age. I have seen one or two such specimens amongst local surface finds, none from barrows.

Fig. 4, M*, N, O, are flakes which suggest the Upper Palæolithic; they were discovered in the disturbed deposit in the 7th, 6th, and 4th foot respectively and doubtless belong to the surface of the gravel layer, but it will be more convenient to consider them here. They can be matched with flakes from Aveline's Hole, but with very few from local barrows. Their patination is heavier than that of anything else from the cave, and they are chalky in texture. M, with its oblique chipped extremity, is almost certainly Palæolithic.

The series A to L, P and R is of some interest. The patination is the same as that of the pygmy flints to be described, less heavy than that of the two Kelling Heath type flakes, and very much less heavy than that of the Upper Palæolithic. Compared with the local Middle Bronze Age period, as exemplified in the Tynning's Farm Barrow Group,—the periods of the overhanging rim and earlier finger-tip cinerary urns,—it suggests a rather earlier date, when scale-flaking was more usual and bruising less common. The fragment of polished celt, possibly a part of a knife-dagger, is perhaps the most dateable implement; it accords very well with the maggot-pottery, beaker and food-vessel fragments described below, and with the monolith which stood in former days about 200 yards North of the Warrener's Cottage on Rowberrow Warren. This stone is still marked on the six-inch Ordnance map, but is said to have been removed about 30 years ago for building purposes. Two insignificant fragments remain in the position given, in the sides of a small depression about 2 feet by 3 feet in diameter; one of the curious crosses (X, not +), which are believed to have been vermin traps, was built around it. It is just possible that the stone was merely part of the trap, but not one of the half-dozen others has a central stone or pit, or indeed any but accidentally included stone in its composition. There is one exception, which supports the idea that the stone was present before the cross was built; a half-cross (V), exists with its point at a wall which is obviously of earlier date.

THE PYGMY INDUSTRY.

Pygmy implements now number 15, of which 8 have been figured.² That they belong approximately to the same period as the last-mentioned series,—the extreme end of the Neolithic, or the earliest phase of the Bronze Age, is quite evident from their patination. The single example found in an undisturbed deposit (Fig. 5, E), was at this horizon; and the numerical test agrees:—

FOOT 1	FOOT 2	FOOT 3	FOOT 4	FOOT 5	FOOT 6
1	1	2	5	1	2

E is not included, for only specimens from areas which have been excavated to the full depth can be used; it lay at a depth of 4 to 4½ feet. The remaining two were found upon the spoil heap; these tiny implements covered with facets cling to the clay tenaciously. Allowing for the variations in depth of the Cemented Floor, more convincing figures are obtained, 8 of the 12 having been found in or upon that layer, *i.e.* within a foot above its lower surface.

The flaking is often exquisitely fine, and many of the facets are scarcely visible without a lens.

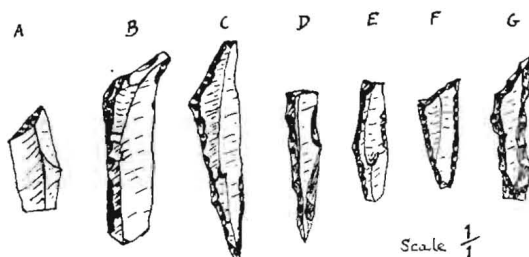


FIG. 5.

Fig. 5, B, C, D, E, belong to the elongated triangle type, having one knife edge; the two latter have been broken. G is of the same shape, but is chipped all round relatively coarsely. F is a shorter triangle, and A a pygmy flake with a perfectly-chipped oblique butt.

All the above would be considered perfect Tardenoisian geometrical pygmies; but their date cannot be earlier than the Late Neolithic, and is probably Early Bronze Age. Besides the evidence cited above, Beaker fragments were found apparently undisturbed at a depth of 5' 6" to 6' 6" in the same area in which pygmies occurred at a depth of 5' 0" to 6' 0"; these were the two from the sixth foot in the table of depths.

Precisely similar elongated triangles were common at Svaerdborg⁶, a station of the Maglemose culture; these were let into grooves,

one groove on either side of a long bone, and secured by mastic, thus forming a harpoon. No such bones have been found in Rowberrow Cavern. Many other uses have been suggested, such as : fish-hooks, teeth for saws and sickles, arrow tips, engraving tools, scrapers, awls, drills, tattooing needles, amulets, and exhibitions of skill in working flint. The two last suggestions arise from the fact that some are too fragile for any practical purpose ; the present series is more robust.

The age of such pygmy implements has long been a matter of dispute, some placing them at the close of the Palæolithic, and some, *e.g.*, Mr. J. Allen Brown, at the beginning of the Metal Age. That identical implements were in use at a very early date is quite certain ; they are found in association with the remains of reindeer in a Tardenoisian deposit at Remouchamp and Zonhoven in Belgium⁷; in Maglemose stations ; etc. Aurignacian and Magdalenian pygmy flints seem to be of a somewhat different facies. Messrs. Johnson and Wright⁸ conclude that in England such specimens as here illustrated " probably belong to the latest Neolithic period when bronze was used side by side with stone,"—*i.e.* to the Transitional Phase of the Bronze Age. They quote two specimens found by Bateman in Derbyshire round barrows ; the Pennine group found beneath about six feet of peat ; an example from a Neolithic tufaceous deposit near Corfe Castle, associated with the shells of limpets, oysters, and other molluscs ; the hundreds found in the Don Valley near Rotherham, and on adjacent high land above the 1,000 foot contour, associated with other flint implements of " Neolithic " type, but excluding the larger tools, *e.g.* celts. To this list of dateable discoveries we can now add :—

(1) Four typical pygmy flints of the elongated triangle type from the North Barrow, Tynning's Farm.⁹ These were in the primary part of the barrow. The primary deposit has not yet been found ; two cinerary urns of the extreme end of the Bronze Age accompanied secondary interments, but, contrary to the general rule, the primary barrow is obviously very much older, so much so that it was at first taken for a natural mound, in which shallow pits had been dug to receive the two (secondary) urns, and a foot or so of earth and stones added. The primary barrow is a simple bowl ; upon the basal turf level was a " hearth " containing charcoal, and one or two fragments of calcined bone, several flint implements, and coarse pottery, including part of an overhanging rim almost identical in design with that from the secondary interment in Barrow No. 1 Blackdown, in which the primary was accompanied by a beaker. Just above the basal turf were a considerable number of implements of " Neolithic " form,

and an early Bronze Age date seems certain. The pygmies resemble C, F, G, very closely.

(2) The Rowberrow finds, associated with "maggot" pottery, late beaker, and food-vessel (see below), and with scaled knives, and a fragment of polished celt; a number of small simple flake knives, possibly the counterpart of the special blades of the Azilio-Tardenoisian, are present, but the small oval scraper seems to have been replaced by rather larger implements.

The bulk of the earlier finds of pygmy tools seem to have been made along watercourses, or by the sea-shore, or upon high-lying moors, and these were unaccompanied by pottery; such tiny implements were known to occur in stations belonging to the close of the Palæolithic; these facts together with the absence of domestic animals, except possibly the dog, led to the assignment of that date to the type wherever found. It is still said that they have never been found with pottery¹⁰ in spite of Hastings and Sevenoaks.

There seems to be a distinct difference between a series from an Azilio-Tardenoisian station, so dated by other means, and one of the end of the Neolithic. Some types persist absolutely unchanged, *e.g.* the elongated triangles, as pointed out in comparing the Svaerdborg and Rowberrow examples; but the early series, at least in this country, and in Belgium, seem oftener to contain micro-burins, and either small oval scrapers and a characteristic blade (Azilian), or broader triangles and trapezoids (Tardenoisian), or both. Although trapezoids do occur in later series, it is in relatively small numbers. In the absence of the above criteria, it will be necessary to look for other evidence before assigning a Transitional date to a site containing pygmy implements, *e.g.*, dateable tools of flint, bone, or antler (Maglemose, and some French and Scottish station); survivals of Pleistocene fauna (Zonhoven); stratigraphical or geological evidence. In the absence of these the chances will be that the site is of the earliest Bronze period. Negative evidence, such as absence of pottery and domestic animals, can never be conclusive.

It has yet to be determined whether the microlithic industry persisted in Britain from the earlier date to the later, or whether it was reintroduced; it is said to have endured longer in Belgium than elsewhere on the continent, and may have been brought over by the Beaker-folk, or rather by followers who became attached to them en route. There seems to be no evidence of its existence in this country between the Transitional period and their arrival, unless it be the Second Pennine Group of Buckley,¹¹ but practically nothing is known of this possibly long interval.

Reviewing briefly some of the best-known sites of the pygmy industry, we can assign the Scunthorpe and the bulk of the Pennine finds to the later date with some probability. The much smaller "Second Pennine Group," as Buckley has pointed out, seems to be a development from the early Tardenois of Belgium, and includes micro-gravers, typical blades, oval scrapers, etc.; elongated triangles are uncommon, but cannot be differentiated from the Rowberrow specimens (to judge by the illustrations); *c.f.* the six "minute knives" found within a square foot on a "floor" on Warcock Hill—a harpoon? of which the shaft has decayed. Buckley regarded this group as contemporary with the other, but advanced no evidence. Its facies might be considered to suggest a Tardenoisian date, that of the main series certainly does not.

The Wilderness barrow at Sevenoaks was a round barrow of no very exceptional proportions, being 90' by 80' in diameter, and 5½' in height.¹² It contained apparently a mass cremation, if we may use the term. The pygmy flints found in the hearth layer, and in the white sand, and those of the neighbouring occupation site, are mainly elongated triangles of the usual pattern, or crescents (? a variant of the same). A number of other forms occurred, *e.g.*, borers and notched implements, possibly used in the manufacture of needles. Of the larger implements, a few certainly resemble common Upper Palæolithic types, but others are pretty definitely late Neolithic or early Bronze Age, *c.f.* Nos. 8 and 14, plate XI, in Mr. Lewis Abbott's article, (some error seems to have crept in in numbering the plates; I refer to the numbers engraved); the latter resembles closely Fig. 3, K, from Rowberrow. The presence of coarse pottery is recorded.

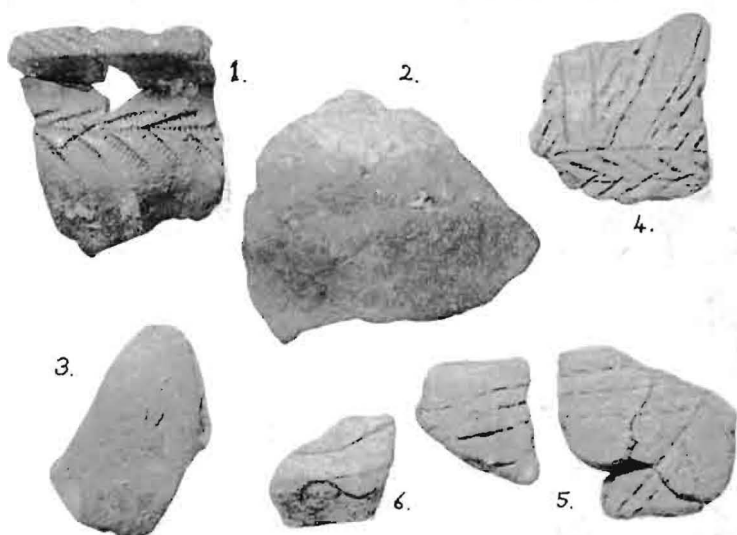
The barrow was constructed in layers, of material not all obtained from the immediate neighbourhood; beside the possibly natural layer of "carstone," (a very ferruginous sandstone), below the hearth, a similar layer sealed it down, and above this was sharp white sand, then local sand. With this the Mendip Hunt Barrow No. 1, described elsewhere in this number may be compared.

Similarly the Hastings kitchen-middens contained, besides large numbers of pygmy implements like the Rowberrow examples and a few other forms, some larger implements recalling the Upper Palæolithic, and others which must be regarded as Neolithic; *c.f.*, No. 15, Plate XIII and No. 19, Plate X,¹³ which are very like Fig. 4, B and No. 7 (previously figured), from Rowberrow, respectively. Some at least of the Palæolithic forms were merely old flakes re-utilised. The straight-line flaking characteristic of the small implements and found also on some of the larger, recalls that seen on some knife-daggers and arrow-heads of the Early Bronze Age.

ROWBERROW CAVERN.



A



B

PLATE XIII.

Coarse black hand-made pottery, well baked, in the form of flat-bottomed pots with large base, was common ; red ware too was found ; decorated fragments occurred. In the light of recent research more information ought to be obtainable from the collection.

The fauna was of quite modern aspect, only the mollusca seeming to differ.

It is fairly certain that both these stations belong to the close of the Neolithic or earliest Bronze Age, and this seems to have been the excavator's opinion. More recently, Mr. Lewis Abbott has published a discussion of the pygmy-flint problem, with a vivid reconstruction of the life of the times.¹⁴

POTTERY.

Neolithic and food-vessel ware was found in the disturbed deposit, but not in sufficient quantity to apply the test for original depth. The two larger Neolithic fragments and the first Food-Vessel fragment described below lay at a depth of 4 to 4½ feet in the spoil derived from the digging of the La Tène ash-pit or hearth ; the two beaker-sherds lay, possibly *in situ*, beneath the stone floor of the same pit at depths of 5' 6" to 6' 0" and 6' 0" to 6' 6" respectively. Part of the base of another food-vessel lay upon the Cemented Floor, at a depth of 3' 0" in that situation.

Plate XIII B, Nos. 1, 2, 3 are fragments of a Neolithic round-bottomed bowl, reconstructed in Fig. 1, No. 4. The height of the body is uncertain, probably rather over 3 inches ; the diameter at the rim 4½ inches. The vessel is hand made ; its walls are thin (one-sixth to one-fifth inches). The paste is dark brown, almost black, in colour, of fine texture, and surprisingly hard after drying. The incipient overhanging rim is noteworthy ; this is the prototype of some food-vessels and later of the Overhanging Rim type of cinerary urn. The decoration is the typical maggot pattern, and is placed around the junction of body and neck, and on the outer and inner surfaces of the lip. The tendency to an overhanging rim probably indicates a rather late date, which is what one would expect on account of the stratigraphy,—slightly later than a rather late beaker. It is quite usual, if not the invariable rule, to find such "Neolithic" pottery in association with beakers ; *c.f.* the West Kennet long barrow,¹⁵ in which (in a single associated group burial, according to Thurnam), fragments of about 50 vessels were found. The West Kennet beakers were early, to judge by the presence of plain zones and the fine quality of the ware in the Devizes Museum exhibit ; the Neolithic pottery associated therewith was thicker, coarser, more profusely and more roughly decorated than that from Rowberrow,

and fingertip impressions were a commoner motive than the maggot-pattern. With the late Rowberrow beaker is associated finer Neolithic ware, less ornate of decoration, and approaching the beaker ware itself in thinness and texture.

Plate XIII B, No. 4 is a fragment of typical beaker-ware; a smaller piece from the same vessel was found four feet away. The decoration and the quality of the paste indicate a rather late date; probably there were no plain zones, but the fragments are hardly large enough to decide. The design may be a bar chevron, or a bar-saltire in a panelled zone, the intermediate triangles being shaded; the barbed line decoration forming the boundary of the zone is reminiscent of the motive of the Neolithic bowl, but the technique differs in that the long axes of the individual impressions are longitudinal, not transverse to the lines of the pattern.

Plate XIII B, No. 5 is a fragment of food-vessel or possibly late beaker, showing a plain rounded rim. The ware is much thicker than either of the preceding, and contains a few very small white granules (? pounded flint). The motive and technique of the decoration is very similar to that of the beaker.

Plate XIII B, No. 6 is a fragment of the base of another food-vessel; the paste is identical with that of the last. Parallels for the curvilinear decoration seem to be rare in this country, but occur in the East Riding, and seem to be common in Ireland. Carbonised matter adheres to the interior of the pot, showing that the food-vessel was a domestic as well as a cinerary utensil.

One or two other fragments appear to belong to the Bronze Age, e.g. those embedded in the Cemented Floor (see below), and a sherd decorated with what appears to be an imitation of the cord pattern impressed by a small chisel-ended implement.

IV. THE CEMENTED FLOOR.

This layer is not an entity, being merely portions of the base of the last which have become impregnated with lime-salts, and thin layers of true stalagmite; rising in bosses two or three feet high at the sites of the more active drips, and altogether absent in other places; occasionally extending deep into the gravels. These deep extensions will be treated under the latter heading; most of the finds referable to cemented parts of the last layer have been mentioned above.

In an isolated plaque of breccia about two square yards in extent and eight inches thick, at a depth of rather more than four feet, two fragments of pottery were found, resembling the food-vessel in

texture, but hardly identifiable. They were imbedded beneath $4\frac{1}{2}$ inches of the breccia. Associated was a finely-scaled flint knife (Fig. 4, F), and a thin lamina of bone, like the rougher of the two spatulæ from Merlin's Cave (described elsewhere in this number), but even thinner. It was partly polished, partly rough owing to cancellous tissue; in spite of the greatest care it crumbled hopelessly in extraction. This plaque of breccia contained throughout its thickness much charcoal and splintered bone, including two portions of the ribs of sheep or deer. Charcoal was abundant in many other patches, but bone scanty. To the faunal list² the following have been added: sheep or deer; pig; large dog; and ? wolf. Batrachian bones formed almost solid masses here and there. Comminuted snail-shells were very numerous, whole specimens quite rare, suggesting the use of snails as food; but whether by bird or man it is hard to say.

The deposit evidently corresponds to a period of increased rainfall, such as is believed to have occurred in Neolithic times.

V. THE "GRAVELS."

The material so described appears to be derived from four sources:

- (a) A hill-wash. Fragments $\frac{1}{8}$ " to $1\frac{1}{2}$ " in diameter.
- (b) A talus due to weathering of the cliff in the face of which the cave opens.
- (c) Débris from the roof.
- (d) Clay and loam. Mostly filtered down from the clay layer, for beneath plaques of breccia the gravel is clean.

The relations of these deeper layers are best seen in the barrow-run (see Plate XIV). The summit of the pile of talus, etc., is $31\frac{1}{2}$ feet in front of the present mouth of the cave, and is formed by the Boulder-layer, the uppermost gravels having been carried further down the slope or denuded.

At the entrance the gravels are about 4 feet thick, lying at a depth of about 5 feet to 9 feet below the modern surface. No trace of the pebbly layer previously described exists in the area dug. Where the stones are clean a curious phenomenon is to be observed, which has not yet been explained; it occurs also in the boulder layer. Often every stone was covered by a uniform film of stalagmite one-sixteenth inch or more thick, yet was not cemented thereby to any of its neighbours. Possibly this is due to continual movement, a thing which would account for the scarcity of macroscopic bone and charcoal in the loose material (minute fragments do occur),

whereas such larger fragments are not infrequent in breccia of corresponding depth and age; but this explanation is not entirely satisfactory.

The following stratification applies to the mouth of the cave; towards the interior the depths are greater, the sixth-foot layer passing well below the material in which beaker fragments were found.

6th Foot. Collections of charcoal; a few rodent bones, including lemming; snail shells, mostly fragmentary; small bone fragments, some charred, a few of which may be identifiable; batrachian bones in great numbers in brecciated portions. The Pleistocene rodents mentioned in the last report probably belong here.

7th Foot. Practically barren.

8th Foot. Also practically barren, excepting a thin layer at a depth of 7' 9", which contained a mandible of lemming and several identifiable bones of larger animals.

9th Foot. At a depth of just over 8 feet, a hearth about an inch in thickness was found; together with the ossiferous deposit last mentioned this probably constitutes the "Second Bone Layer." The hearth lay in loose gravelly material directly beneath the above deposit; it was quite distinct in colour owing to the presence of fragments of charcoal and blackened bone. About two-thirds of the latter appeared to belong to some bird, but only a part of the keel was recognisable. A single flint implement lay in the hearth, a broken flake of dense greyish patina which may have been an end-scraper; unfortunately most of the end is missing. The remainder of the foot was absolutely barren.

VI. SANDY BRECCIA.

Between the relatively small fragments of the above deposits and the boulders was a layer of breccia with much sand and clay in its composition. It was fairly continuous in spite of several large gaps. Its thickness varied from 6" to 9", but masses of the next layer adherent to its under surface brought the total thickness of breccia up to 2½ feet or more in some places. It was quite barren.

VII. BOULDERS WITH GRAVEL.

The upper surface of this layer was encountered at a depth of 10 feet. Large blocks of conglomerate and of limestone, weighing several hundredweight, or even tons, are mingled with smaller stones weighing a few pounds, and interspersed are more or less well-defined strata of smaller material.

The deposit proved barren where examined,—11th foot in the mouth of the cave, and a large exposure in the sides of the barrow run.

SUMMARY.

In spite of the poverty of the cultural deposits, or rather the vast quantity of clay and gravel with which they are diluted, several points of interest have been demonstrated :—

1. An extensive use of flint implements by the peasantry in Roman times.

2. The existence of an Early Iron Age site of La Tène culture differing somewhat from that usual in the neighbourhood, at which the reduction of iron ore was carried out on a considerable scale ; and evidence that animals were kept in a portion of the living-site reserved for the purpose.

3. The presence of a Neolithic-Bronze Age transitional culture, possibly of the "Megalithic" period, characterised by finely-scaled knives ; Neolithic, beaker, and food-vessel ware ; and pygmy implements.

4. Some light has been thrown on the development and chronology of the Neolithic bowl.

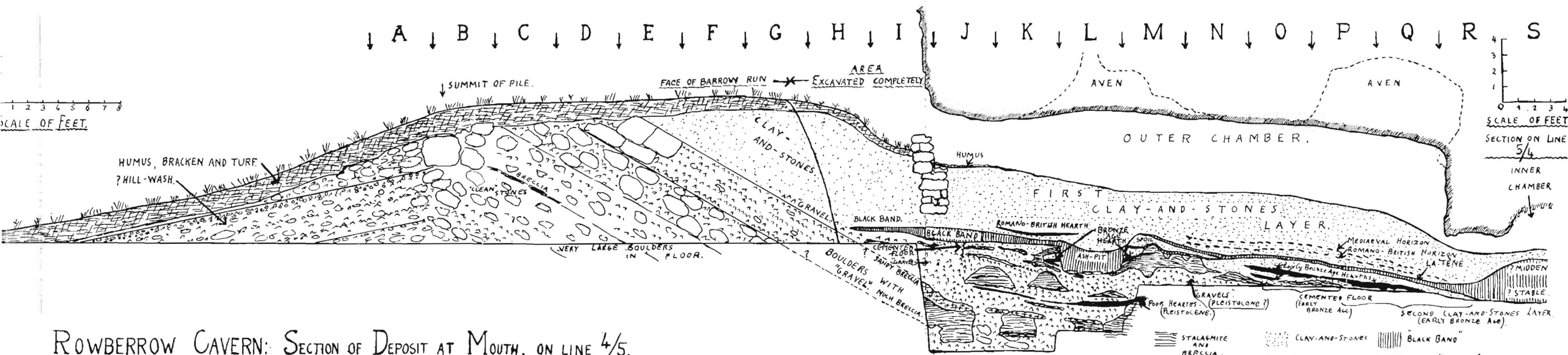
5. Conclusive evidence has been brought of the late date of the usual pygmy flint industry of this country.

I am especially indebted to Major E. R. Leacroft, lord of the manor, for permission to continue excavations on a larger scale, and to the Trustees of the Percy Sladen Memorial Fund for the grant which has made it possible to do so ; to Dr. Cyril Fox, F.S.A., who has kindly identified the pottery and iron artefacts ; to Mr. Martin A. C. Hinton, of the British Museum, for identification of a part of the fauna ; and to Mr. J. A. Davies, B.Sc., for his drawings of the flint artefacts, and for many valuable suggestions.

REFERENCES.

- 1 *Proceedings of the Spelæological Society*, Vol. I, No. 2 and Vol. II, No. 1.
- 2 The same, Vol. II, No. 1.
- 3 Armstrong, *Discovery of an Early Iron Age Site at Grimes' Graves. Proceedings of the Prehistoric Society of East Anglia*, Vol. IV, Part 2, pp. 16—17.
- 4 Cf. Paviland Cave ; see Prof. W. J. Sollas' monograph.
- 5 J. E. Sainty, *A flaking site on Kelling Heath, Norfolk. Proceedings of the Prehistoric Society of East Anglia*, Vol. IV, Part 2, p. 165.
- 6 M. C. Burkitt, M.A., *Notes on the Maglemose Culture, Proc. Spelæological Soc.*, Vol. II, No. 2.

- 7 Remouchamp: Baron de Loé et Rahir, *Note sur l'exploration des plateaux de l'Amblève, etc.* Soc. Anthropol. Bruxelles, 1903; Zonhoven: H. Nandris et Servais, *Contribution à l'étude du préhistorique dans la Carrapine bourgeoise*, Congrès de la Fédération Archéol. et Hist. Belg., Liège, 1909.
- 8 *Neolithic Man in North-East Surrey*, pp. 12—14.
- 9 Not yet published. For one secondary interment, see *Proc. Spelæological Soc.*, Vol. II, No. 2.
- ¹⁰ e.g. Osborne, *Men of the Old Stone Age* (1919), pp. 474 and 466.
- ¹¹ Buckley, *A Microlithic Industry of the Pennine Chain, related to the Tardenois of Belgium*.
- ¹² W. J. Lewis Abbott, F.G.S., *Journal of the Anthropological Institute*, Vol. XXV (1896), p. 130 *et seq.*
- ¹³ *Ibid.*, p. 122, *et seq.*
- ¹⁴ W. J. Lewis Abbott, F.G.S., "*Man*," 1909, No. 103.
- ¹⁵ Thurnam *Archæologia*, Vol. 38, p. 405, *et seq.*
-



ROWBERROW CAVERN: SECTION OF DEPOSIT AT MOUTH, ON LINE 4/5.

ROWBERROW CAVERN: LONGITUDINAL SECTION.

N.B. A later stage of the excavation is shown than that described in the text.