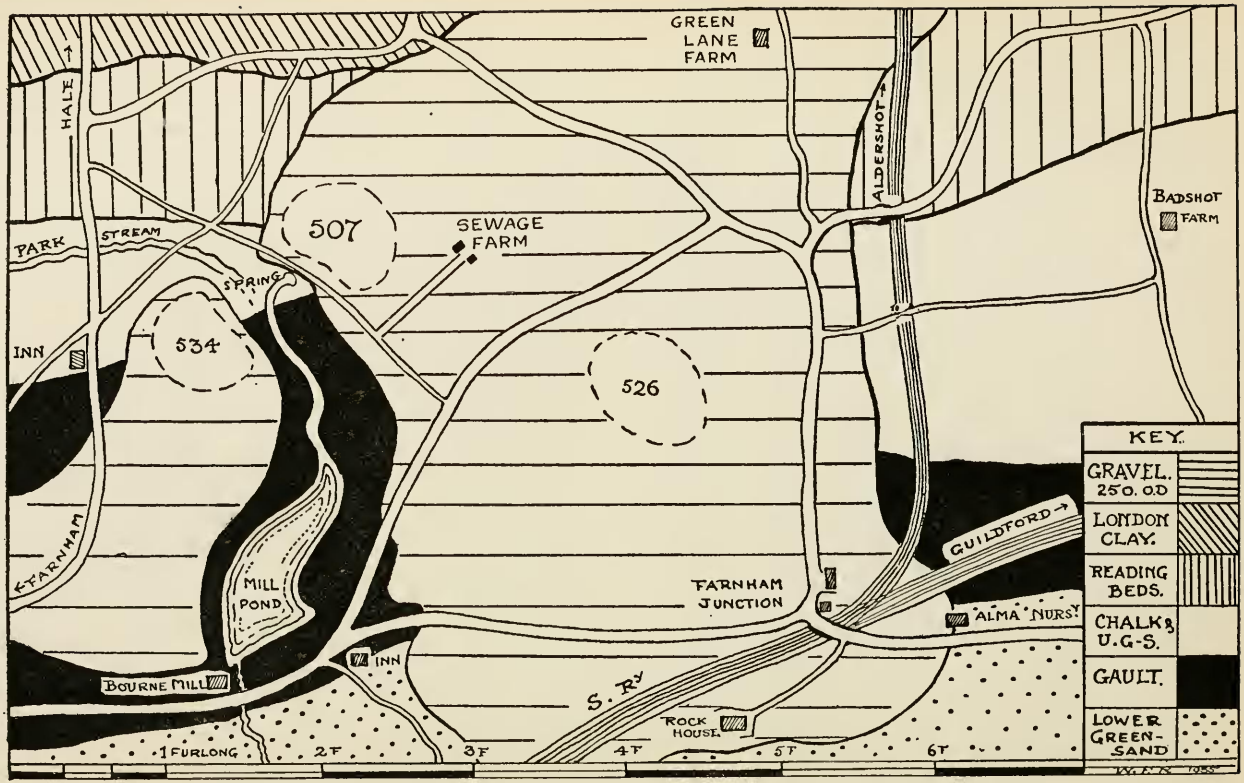

FIG. I.—SKETCH MAP SHOWING SITE WITH REFERENCE TO GEOLOGICAL OUTCROPS.

Based on the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office.

A MESOLITHIC SITE AT FARNHAM.

BY

W. F. RANKINE, F.S.A.Scot.

Section I.

Introduction.

NUMEROUS flint sites occur in the immediate neighbourhood of Farnham on both slopes of the Wey Valley and at varying heights above sea level. For many years past these sites have yielded to occasional surface collectors quantities of implements ranging in cultural association from gravers of late Palæolithic affinity to barbed and tanged arrowheads of Bronze Age type. But so far the only site [1] to yield microliths in appreciable numbers is the one lying one mile, north-north-east, from Farnham Castle. It is situated on land belonging to the Farnham Urban Council. More precisely the site lies in the angle formed by the junction of the Farnham–Aldershot and Farnham–Guildford roads. Its exact position on the 6-inch Ordnance map (Surrey—Sheet XXX, N.W) is 3 inches from the right-hand inner margin and $3\frac{3}{4}$ inches from the top inner margin.

In 1928 the writer commenced a survey of all arable land lying east of Farnham with the object of correlating the flint fields and in the spring of 1929 came upon this site which for all purposes of record is referred to as site 507 from its parcel reference number on the 25-inch Ordnance map—Surrey, Sheet XXX, 2. Similarly other neighbouring sites are known as 526 and 534. Site 507 is eminently the most extensive

[1] *S.A.C.*, Vol. XLI, "The Pigmy Flint Industries of Surrey," Wilfrid Hooper, LL.D., p. 77.

settlement site in the Farnham countryside or, for that matter, in West Surrey.

It extends over some ten acres of which more than half the area is thickly littered with occupational indices in the form of flint nodules, cores, flakes, some implements and calcined flint.

Geological Reference.

Unlike the majority of the Surrey Mesolithic sites 507 lies off the Lower Greensand. It is established upon the Old Blackwater gravels (O.D. 250), close to the scarp cut by the River Wey since that river captured the head-stream of the Old Blackwater.[1] These gravels are spread over outcrops of Lower Greensand, Gault, Upper Greensand and Chalk, and the southern edge of the Tertiaries of the London Basin. Fig. I shows site 507 with reference to the gravel spread and the outcrops. In this figure the Lower Greensand area is stippled; the Gault is printed full black; the Upper Greensand and Chalk belt is blank; the Reading clays are indicated by vertical lining and oblique shading determines the London Clay. The gravel sheet of the Old Blackwater is shaded horizontally.

A stream issuing from Farnham Park, shown as Park stream on Fig. I, tributary to the River Wey, has cut down through the gravel spread and exposed a spring from which a good supply of water continually flows. This spring is the focus of the site we are now recording and, incidentally, is now the source of the tributary stream owing to the capture of the Park stream by a system of swallow-holes in Farnham Park.[2]

The spring, usually referred to as the Bourne Mill Spring, may be located on the Geological Survey Map (Drift) 285 at a point 2·6 inches from the left inner margin and 3·6 inches from the bottom inner margin.

To the north of site 507 is land rising towards Hale where outcrop the Tertiary beds; to the south, towards Waverley, is a wide belt of alluvials forming the Wey flood plain and farther south stretches the heather-land of the Lower Green-

[1] *Memoirs of the Geological Survey*, Sheet 285, p. 127.
[2] G. W. Young, *Proc. Geol. Assoc.*, Vol. XXI, Pt. I, 1909, p. 32.

sand. Eastward lies the chalk outcrop which swells into the Hog's Back ridge from which some flint supplies were obtainable although possibly the material was of inferior quality.[1]

Thus it will be seen that although the site[2] is off the warm, dry surface of the Lower Greensand it had immediate access to a never-failing water supply at the spring, to well-watered pastures, somewhat rough perhaps, on the Wey flood plain, to supplies of flint in the chalk outcrop of West Surrey and, finally, the site was established on the comparatively pervious gravels.

However, with regard to the supply of flint, it should be noted that owing to heavy faulting, both dip and strike, in the local chalk much of the flint in the neighbouring beds is shattered and therefore impossible to use.

Another site, Fig. I, 534, lies to the west of 507 but, unfortunately, much of it has been removed or disturbed, in the course of gravel digging. Most probably it formed part, with 507, of a huge settlement around the spring. Sufficient evidence remains to indicate that it was a counterpart of 507. To the south-east of 507 lies another site, 526, which has been practically obliterated by gravel digging over a long period. Here again we have evidence of an important settlement and on each flanking site, 534 and 526, debris of a microlithic industry has been recorded.

Section II.

Investigation of the Pits.

Following the discovery of this prolific site in 1929 systematic surface collecting was commenced and quantities of cores and implements were accumulated. Fortunately ploughing was frequently done on the lands and so, after effective weathering of the surface, further finds were periodically secured. It became, in time, possible to map out roughly the scatters of the flints and fired stones which resolved themselves into groups. These groups coincided with definite,

[1] *Vide* Section IV.

[2] *The Mesolithic Settlement of Northern Europe.* J. G. D. Clark, M.A., Ph.D., F.S.A. Pp. 190, 251.

outstanding patches clearly observable as the furrows dried after ploughing. These patches always assumed a reddish-brown tint. Thus it became obvious that relic beds were being disturbed by the plough. However, subsequently, it was discovered that the deep tillage demanded by hop growing and ridging for irrigation purposes had done much to destroy these relic beds.

In the gullies connecting the lands it was observed that strong outwashes of water removed the lighter soil and worked down to a compact floor, leaving among the general debris many cores, flakes, a few implements and much calcined flint. Systematic searching around the spring showed that the bluff from which it now emerges had receded by erosion by some hundred feet since the time of its exposure and that the stream bed contained flint and fired stone. The fallen-in area around was littered with similar occupational indices.

In the spring of 1930 trial holes were opened near the spring and investigations revealed the existence of pits sunk into the gravel and that these pits contained a reddish brown earthy matrix in which hearths, flint cores and flakes were intermingled with pebbles, implements, flint nodules and much fired flint.

In the course of investigations up to June 1935 eighteen excavations were carried out representing sixteen pits because diggings 11 and 12, 15 and 16, merged. The examination of pits 1 and 2 established the facts stated in the foregoing paragraph. Pit 3 was opened in June 1931 and in July the first microliths were found—two obliquely blunted points and a point with hollow base (Fig. IV, No. 2). These were taken from the base of the pit. This particular pit had a clay-lined floor and heavy rains, accumulating in the excavations, prevented further search.

In connection with the discovery of microliths on this site it is noteworthy that prior to digging, although a very thorough surface exploration had been made, neither microlith nor micro-burin had been observed. And no microlithic form has been recorded from the surface since the discovery.

Summary of Investigations.

Pit.	Depth.	Diameter.	Matrix.	Notes.
4 .	3 ft.	4 ft.	Dark brown loam.	Chipping floor at 2 ft. No hearths. Abundance of fired flint. No microliths.
5 .	4 ft.	5 ft.	Compact red earth.	Good chipping floor. No microliths. Investigation interrupted.
6 .	2 ft.	3 ft.	Loamy sand.	Scanty chipping floor. Cores, microliths and microlithic primary flakes.
7 .	3 ft.	4 ft.	Dark brown loam.	Hearths and good chipping floor. Few microliths.
8 [1] .	5 ft.	6 ft.	Dark brown loam.	No hearths. Much fired flint. Dressed flakes. Two microliths at 3 ft. Ochreous nodules for the first time.
9 .	4 ft.	N.D. [2]	Loamy sand.	No hearths. Much fired flint. Cores and wastage. Few microliths. Leaf implement from upper level.
10 .	4 ft.	N.D.	Compact red earth.	Abundance of flint. No hearths. Microliths in groups. First record of micro-burin. Fig. IV, No. 22, from base. Also end scraper on blade in fresh black flint. Polisher, Fig. IX, from base.
11,[3] 12	2 ft.	N.D.	Compact red earth.	Subsequently proved to be one pit. No hearth. Chipping floor. Microliths.
13 .	4 ft.	N.D.	Compact red earth.	This proved to be the most instructive pit of the series and, consequently, is described in detail in a subsequent section. 105 microliths.
14 .	3 ft.	4 ft.	Brown loam.	Much fired flint. Some implements. No microliths.
15, 16	3 ft.	N.D.	Compact red earth.	Finally merged. Yielded 16 microliths and 11 micro-burins until inundation by seepage from a gully near by prevented further investigation for a time.
17 .	2 ft. 6 in.	5 ft.	Compact red earth.	A small pit with the usual fired stones and microliths.
18 .	2 ft. 6 in.	5 ft.	Compact red earth.	A small pit. 25 microliths. Fig. XI illustrates a selected series from this pit.

[1] This pit was connected with two others which could not be investigated.
[2] N.D. = not determined.
[3] The surface around this area had been lowered by two feet prior to excavating.

General Observations.

(1) The nature of the infilling matrix forming the pit floors varies considerably, *viz.* from (A) compact red earth through (B) dark brown loam to (C) loamy sand. (A in texture and general appearance resembles brickearth.)

(2) Microliths and hearths are always associated with A, are rarely found in B and occasionally in C.

(3) The loamy sand suggests that the pits were lined, from time to time, with sand of Lower Greensand origin. It could have been easily obtained from the river cliff half a mile to the south. (See Fig. I.)

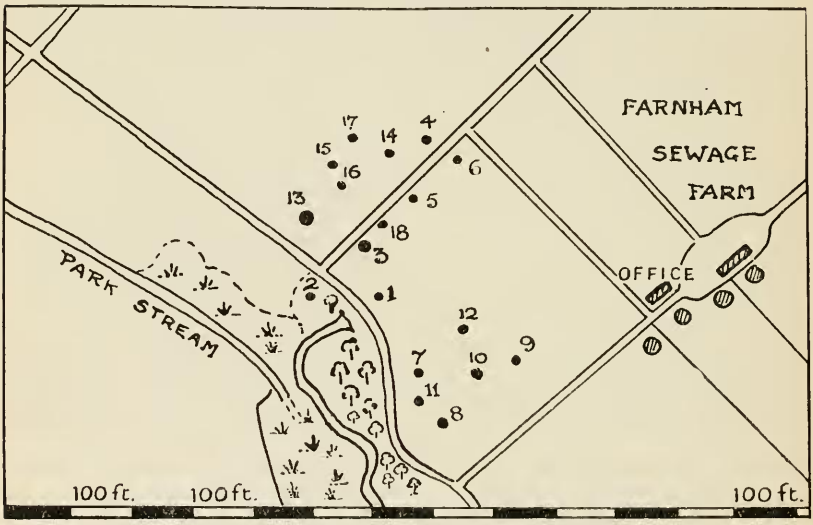

FIG. II.—MAP OF PITS EXCAVATED.

Based on the Ordnance Survey Map by permission.

Description of Pit 13.

This pit was located near to the spring (Figs. I and II), which is surrounded by oak trees visited, in season, by the nightingale. It was opened in December 1932 and closed in September of the following year. The experience gained during the examination of Pits 1 to 12 helped greatly in the interpretation of this pit. It yielded, in addition to an abundance of cores, dressed flake implements and dressed flake fragments, 105 microliths and 45 micro-burins.

A typical section of this pit shown in Fig. III is based

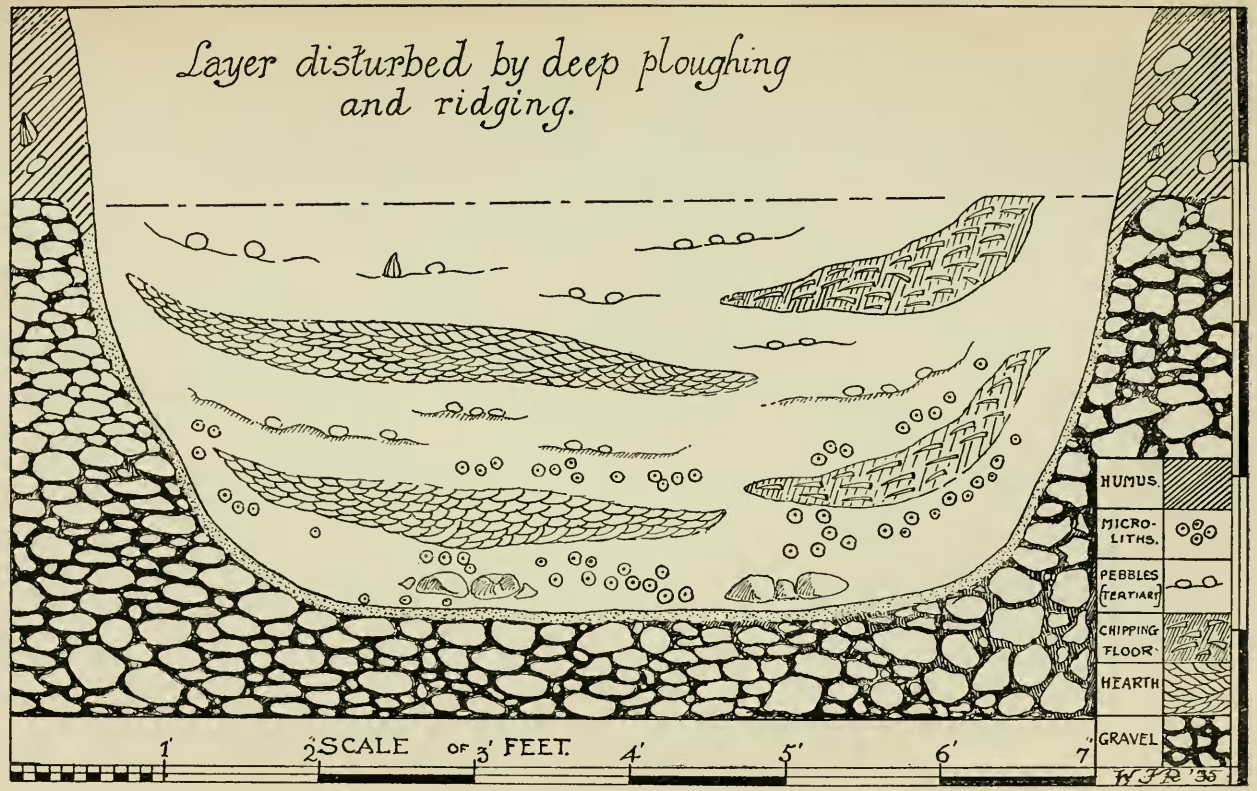

FIG. III.—SECTION OF PIT 13.

on measurements made in June 1933 along a cut parallel to the path westward of the site. The outstanding features are the two lenticular hearths of compact, calcined flint—6 inches in thickness—and the two corresponding chipping floors curving in conformity with the basin shape of the pit. The presence of two hearths is unique and whether they represent two successive cold season occupations by the same people or two widely separated occupations by different people we do not know.

The distribution of the microlith groups relative to the hearths is very significant. The lower hearth is definitely contemporary with a microlithic culture. Also, the first industry carried out in this pit, as in the others, was the production of microliths, and it is noteworthy that patinated microliths were found on the base line of this particular pit. A patinated core (Fig. VI, 5) was taken from the lower chipping floor.

The lower layers around the hearths and chipping floors were infilled with a very compact reddish matrix. This contained sporadic microliths, implements and wastage and quantities of Tertiary pebbles about 1 inch in length. These pebbles were incidental to all the pit floors. Frequently they exhibited a polished surface and many of the specimens were remarkable for their colour, chiefly red or yellow. Numbers of fractured pebbles were found. Such pebbles were easily obtainable from the Eocene outcrops to the north of the site in the direction of Hale. Their regular occurrence in such quantities indicates that they possessed some functional value.

On the pit base were groups of large gravel stones interspersed with large Tertiary pebbles. These clusters always contained infillings of grit and chips of flint and ochreous nodules.[1]

The area in which Pit 13 is situated had been previously subjected to deep ridging for irrigation purposes and thus, unfortunately, the upper level of the pit was greatly disturbed.

Section III.

Description of the Finds.

(A) MICROLITHS.

In all 203 microlithic forms were collected from the pit floors. Typed in accordance with Dr. Grahame Clark's classi-

[1] *Vide* Section III, f.

fication of the Horsham Tardenoisian,[1] the analysis is as follows :

Class A. = 64	Class D.1. = 16	Class F. = 2.
Class B. = 46	Class D. (2–8) = 48	Class G. = 2.
Class C. = 2	Class E. = 0.	

Unclassified = 23.

Total = 180 + 23 = 203.

Detail of analysis.

(A) 1, a (46), b (4), c (1), d (0) = 51.
2, a (13), b (0), c (0), d (0) = 13. *Total* = 64.

(B) 1, (25), 2 (1), 3 (1), 4 (19), = 46.

(C) 1, a (0), b (1), c (0), d (0) 1.
2, a (0), b (1), c (0), d (0) = 1. *Total* = 2

(D) 1, a, i (0), ii (0) ; b, i (4), ii (0), iii (0) iv (12) = 16.
2, a, i (1), ii (0) ; b, i (0), ii (2) = 3
3 (0) = 0
4 (0) = 0
5 (42) = 42
6, a (0), b (0) = 0
7, a (0), b (1), c (0) = 1
8, a (1), b (0), c (1), d (0) = 2
Total 48.

(E) = 0.

(F) 1, a, i (0) ii (0) ; b, i (0) ii (1) iii (0) = 1
2, a, i (0) ii (0) ; b, i (1) ii (0) = 1
Total = 2.

(G) 2, a (1), 2 c (1) = 2. *Total* = 2.

Percentage Analysis.

Class A = 36%	Class D1 = 9%	Class G = 1%
Class B = 26%	Class D (2–8) = 26%	
Class C = 1%	Class F = 1%	

Key to Classification.

Reference to Fig. IV will help to elucidate the above analysis, *viz.*

Class A. Points obliquely blunted along part of one edge as shown in Fig. IV, Nos. 21, 28, 29, 30, 31 and 32.

Class B. Points blunted right along one edge as shown in Fig. IV, Nos. 16, 17, 18, 19, 22 and 25.

Class C. Points blunted along one edge and across base as shown in Fig. IV, No. 26.

Class D. 1. Triangular forms as shown in Fig. IV, Nos. 8, 11, 12, 13, 14 and 20.

Class D. (2–8). Other geometric forms or sub-geometric forms as shown in Fig. IV, Nos. 6 (crescentic) 7, 9, 10 (sub-triangular forms), 27 (rhomboid).

Class E. Points with inverse retouch at base (not recorded on this site).

Class F. Points with hollow bases shown in Fig. IV, Nos. 1 and 2.

Class G. Shouldered or tanged points shown in Fig. IV, Nos. 3 and 4.

[1] *Archæological Journal*, Vol. XC, 1934.

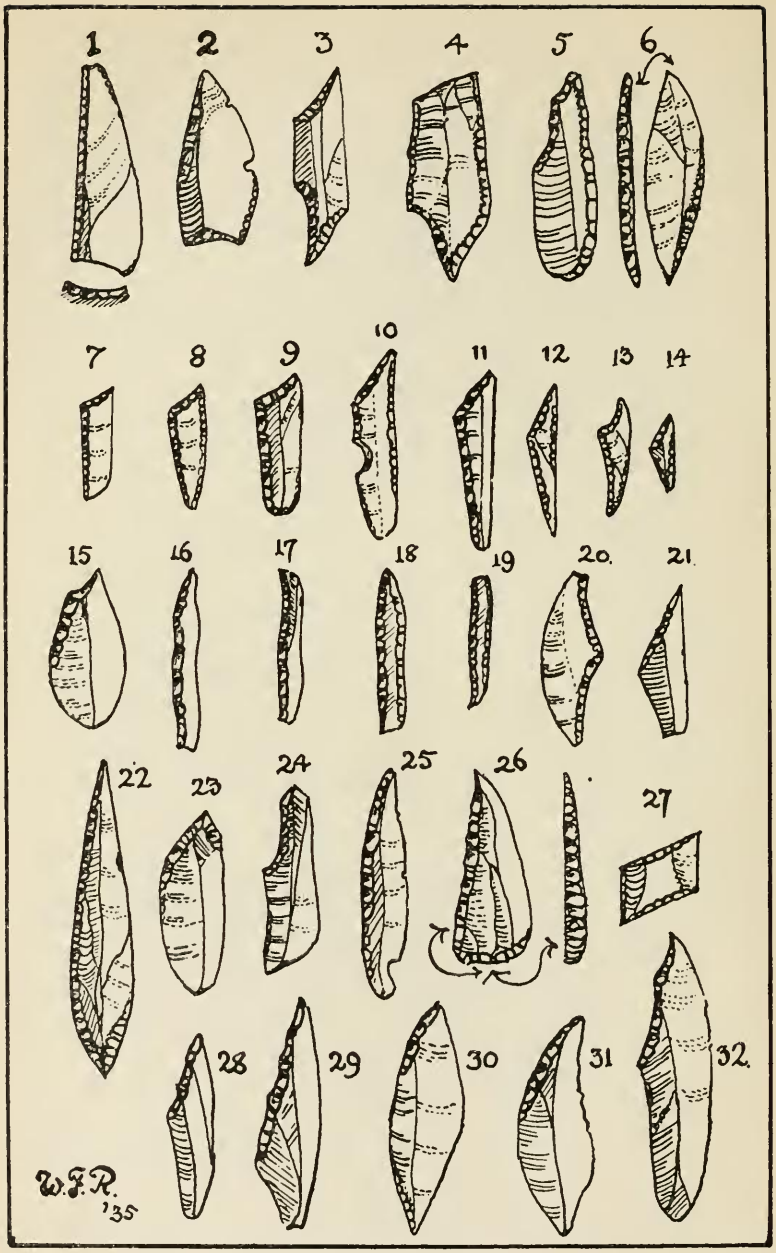

FIG. IV.—MICROLITHS.

(*Actual size.*)

Compared with the Horsham Tardenoisian as classified by Dr. Grahame Clark our industry differs from it greatly in three respects, *viz.* The Farnham industry has (1) a preponderance of points blunted right along one edge, (2) a preponderance of sub-triangular forms and (3) a deficiency of points with hollow bases. Also, in the Farnham range of microliths, points blunted along one edge and across the base (the penknife point), and tanged points are practically negligible. Again, the absence of the transversely sharpened core axe from the microlithic horizon in the Farnham site strengthens the conclusion that this industry is not identical with that of Horsham.

The sub-triangular geometric is very prominent here. Noteworthy, also, is the presence of the perfect scalene form with all sides blunted. Probably some of the sub-triangular forms are damaged scalenes. However, the presence of the triangular forms and the barely represented points with hollow bases would indicate that our industry is probably older than that of Horsham.

Notes on Fig. IV (Microliths).

Fig. IV, No. 22, portrays the most symmetrical and beautiful microlith of the 507 series; it is in mint condition, fashioned from perfect black flint. It was dug from the basal layer of Pit 10 (depth 4 feet) from a reddish earthy matrix. No. 27 shows a remarkably perfect rhomboid, in black flint, mint condition, blunted on two opposite sides and dressed on a third. It came from the upper level of Pit 15 (depth 1 foot 6 inches). The two points with hollow bases (Nos. 1 and 2) were collected from Pit 3, really a series of interconnected shallow depressions. No. 3 is an interesting form suggesting a combination of tanged point and rhomboid.

The majority of the microliths recorded on this site are in mint condition; a few exhibit advanced patina, *viz.* light blue to white. Patinated specimens were found side by side with unpatinated microliths in the basal layers of pits.

(B) MICRO-BURINS. (PYGMY GRAVERS.)

About sixty micro-burins were collected from the pit floors and the majority of these were taken from Pit 13. It must be admitted that this type-form had not been recognized prior to the opening of Pit 10.

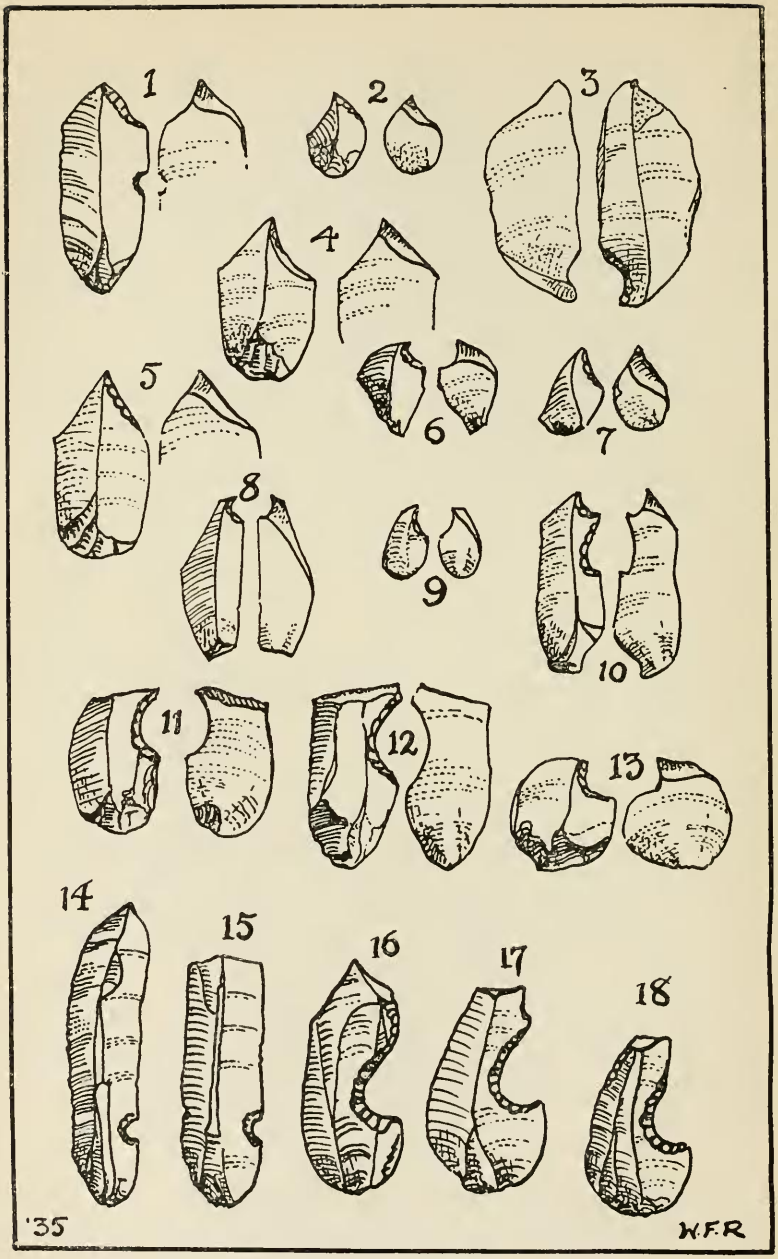

FIG. V.—MICRO-BURINS AND ALLIED FORMS.

(*Actual size.*)

Fig. V portrays a series of micro-burins and allied forms. Nos. 2, 6, 7 and 9 are remarkable for their smallness. Nos. 1, 5 and 8 are somewhat attenuated. No. 13 is a typical contour. In No. 1 an incipient notch is shown and in No. 10 a notch, apparently discarded, appears below the one from which the burin was struck. No. 3 is an instructive example of a burin fashioned from the tip of a blade. Nos. 11 and 12 show notch and indicate failure to carry out the burin-making coup. Nos. 14 and 15 again show the preliminary notch while Nos. 16, 17 and 18 appear to be intermediate forms. Nos. 16 and 18 are noteworthy—a micro-burin has been removed from the tip of each—one from the right (16) and the other from the left side of the flake. The negative facets are very clear in the actual specimens.

(c) CORES.

The core is the salient feature in the 507 context. Implements were comparatively uncommon in the pits but cores were abundant. Also on the surface they are abundant but typically different from the forms encountered in the microlith horizon which are associated with a narrow blade industry. From a large series collected during the excavation of Pits 1 to 18 some three hundred were selected for classification. From this examination three typical forms emerge.

(1) The well-known conical form which, incidentally, has been recorded from sites 534 and 526 as well as numerous sites peripheral to 507. Fig. VI, No. 1, portrays this type. This example is remarkably symmetrical, which probably is explained by the perfect texture of the black flint from which it is cut. Such cores yield a microlithic, primary blade from 1½ inches to 2 inches in length with a width varying from ¼ inch to ½ inch. Frequently when the core was approaching its flaking limit step-flaking intervened (Fig. VI, Nos. 1, 5 and 6). Some quaintly small cores were taken from the pits—one particular specimen, Fig. VI, No. 5, must represent the limit of flaking-down. A sub-conical form is fairly common as shown in Fig. VI, Nos. 5 and 6, and this is produced by removal of the core apex, probably with the object of securing a fresh striking platform. The subsequent basal dressing, shown in Fig. VI, No. 1, so often observable in this conical

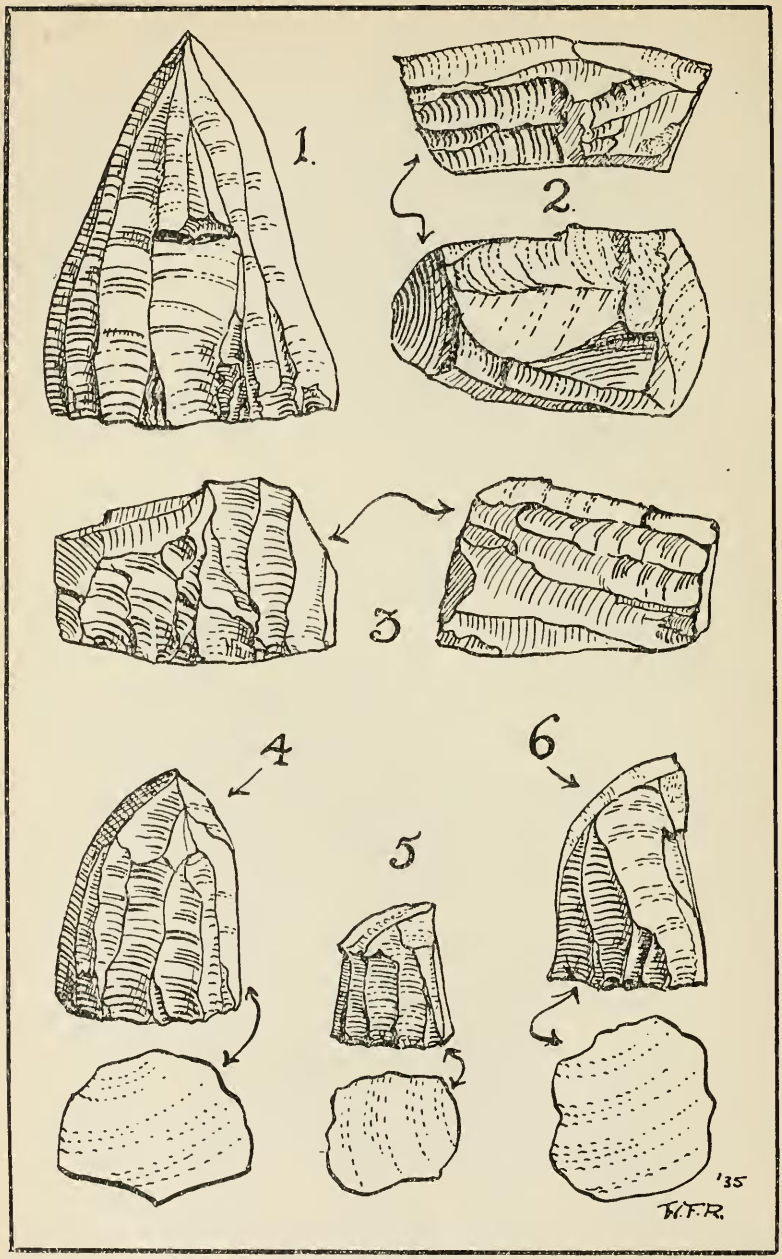

FIG. VI.—CORES.

(*Actual size.*)

form, indicates that it ultimately served some function as an implement, possibly a scraper. Finally, it is interesting to observe how inclusions, either organic or refractory flint, influenced the development of the conical core.

(**2**) A saddle-shaped core (Fig. VI, No. 2) with two opposite striking platforms provided straight microlithic primary blades of normal width but shorter than those flaked from the cone-cores. This type illustrates the facility with which fresh striking platforms were produced. Flaking was carried out alternately from the platforms which might conceivably produce a microlithic blade exhibiting opposite rippling on contiguous flake beds.

An interesting variant [1] of this core type is the form which has flakings on its upper and lower surfaces running transversely. This occurs on our site but is not common.

(**3**) Small cores with two striking platforms not on the same plane occurred only in the lower levels of the pits and in association with microliths. The platforms are so arranged that the flaking directions are more or less at right angles (Fig. VI, No. 3). Some specimens of this type are so small that it is difficult to assign a use to the tiny blades removed in the final flaking.

The majority of the cores recovered from the pits were fresh, sharp and unpatinated, but a few exhibit advanced patination although they were found in the usual loamy matrix. For instance, Fig. VI, No. 5 has dark blue patina ; it came from the base of Pit 13. Many core trimmings, removed in preparing fresh striking platforms, were collected. Some show signs of being adapted for implemental use. One transverse slice from a conical core has a burin facet.

(D) OBJECTS OF FLINT OTHER THAN MICROLITHS.

(**1**) Primary microlithic flakes. Numbers of these occurred in every pit yielding microliths. In length they vary from one inch to three inches. From such primary flakes microliths were made and some show the incipient notch characteristic of the micro-burin technique. See Fig. V, Nos. 14 and 15.

(**2**) Fragments of snapped blades—more usually the bulbar portion—were commonly met with.

[1] *Vide Stone Age Guide*, 1926, Fig. 73, p. 84.

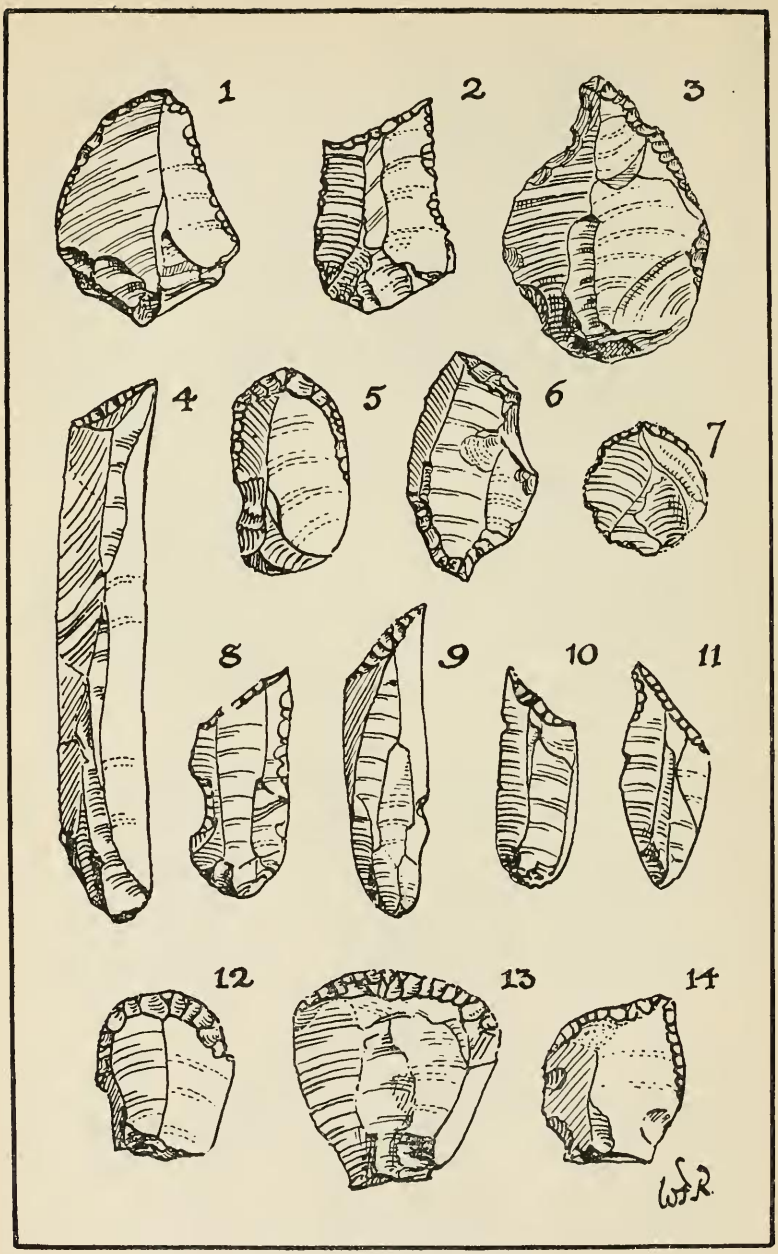

FIG. VII.—IMPLEMENTS ASSOCIATED WITH MICROLITHS.

(*Actual size.*)

(3) Truncated blades were common. See Fig. VII, Nos. 2, 8, 9 and 10 and Fig. XI, Nos. 4, 6, 7 and 8.

(4) Dressed flakes were frequent. Fig. VII, Nos. 1 and 3; Fig. XI, Nos. 2 and 3. Nosed and notched flakes (Fig. VII, No. 3) occurred frequently.

(5) Scrapers were not numerous. Fig. VII, Nos. 5, 7, 12, 13 and 14. The typical Tardenoisian form, Fig. VII, No. 12 was rarely met with. Hollow scrapers were common.

(6) Dressed flake fragments exhibiting microlithic technique were abundant. Fig. VII, No. 6. Among these fragments, often featureless, small notched forms are common.

(7) Serrated blades were fairly frequent.

(8) Knife-flakes were common (Fig. VIII).

(E) POLISHERS.

Four sandstone polishers were taken from the microlith horizon of the pit floors. One of soft sandstone[1] ($5\frac{3}{4}$ inches by $1\frac{3}{4}$ inches) is noteworthy. In addition to areas well worn by polishing it exhibits scratchings caused by some sharp object, presumably a flint flake. Prominent is a small area pecked out or perhaps worn as if the object had been used as an anvil say for the striking of micro-burins. (See Fig. IX.)

The sandstone material is of Tertiary age—Bracklesham or Barton—and is comparable with sandstone from Chobham and Knaphill districts. For this information I am indebted to the Geological Survey.

A similar object of similar material is in Haslemere museum; it was collected from Blackdown.

(F) OCHREOUS NODULES.

Nodules of an ochreous claylike substance were first noted during the examination of Pit 8, the deepest of the series. They produce a decided ochreous streak on paper and may be cut quite easily with a knife. In a hardened form these nodules occur freely among the grit and flint chippings enclosed in the clusters of large gravel stones in the pit bottoms (*vide* Fig. III, and description of Pit 13). In a softer form they occur intermixed with the matrix of the pit floors imparting a yellowish smudge to freshly cut faces in that substance.

[1] From base of Pit 10.

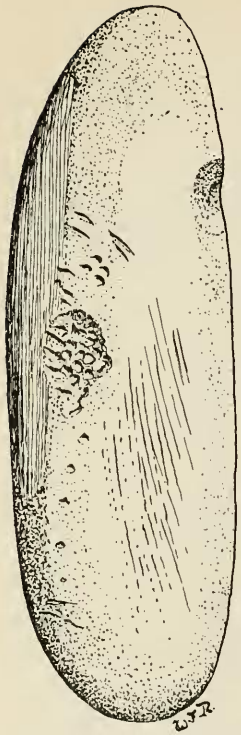

FIG. IX.—POLISHER.

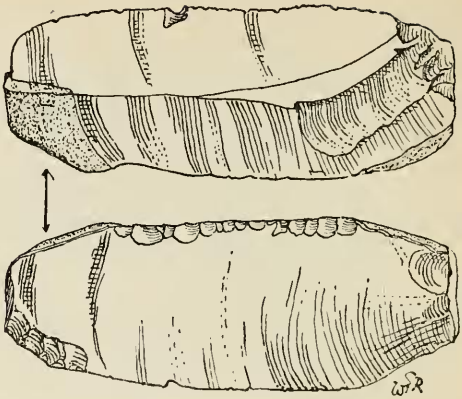

FIG. VIII.—KNIFE-FLAKE.

(⅔ *actual size.*)

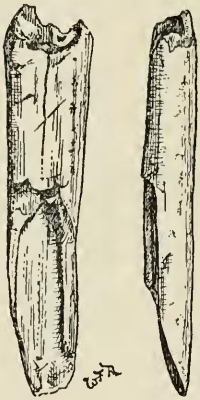

FIG. X.—BONE OBJECT.

Analysis of Ochreous Nodules.[1]

Siliceous matter	24·04
Moisture at 100° C.	4·10
Loss on ignition	11·42
Oxide of iron	47·75
Oxide of aluminium	12·40
Oxide of calcium	·40
Oxide of manganese	·25
Phosphoric acid	Trace
	100·36

[1] Dr. J. L. Dunlop.

I am indebted to the Geological Survey for the information that there is nothing in the analysis to disprove a natural origin for the material and that the composition is quite normal for ferruginous nodules in a variety of deposits such as the Reading Beds (30/1/1933). Bearing in mind that the Reading Beds outcrop in the immediate vicinity of this site and that clay, apparently derived from those beds, was found more than once in the pit bottoms, it may be that the ochreous nodules were introduced with the clay.

(G) BONE OBJECT (FIG. X).

The only object of bone encountered in the pits was found in Pit 13 below the lower hearth. It has been sharpened by cutting.

This bone has been identified as a part of a metacarpal bone of a very small domestic sheep. I am indebted to the British Museum of Natural History for this information.

(H) SELECTED SERIES OF FINDS FROM PIT 18.

Pit 18 was a small one with a matrix of compact red earth which usually yields microliths fairly generously.

Twenty-five microlithic forms were sifted from the floor of the basal layer and of these twenty-two are figured. Nos. 9, 10, 11, 12, 13, 14, 15, 16, 18 and 25 (Fig. XI) are of sub-triangular type. No. 19 is an obliquely blunted point. Nos. 20, 21, 22 and 23 are crescentic in form. No. 24, a point with both sides blunted, is remarkable for its slenderness. No. 29, a point with one side blunted, is suggestive of the small backed knife type. Nos. 27, 28, 30, 31 and 32 are mainly fragmentary.

Micro-burins were scarce in this pit; No. 17 is clearly an example of the preliminary notched blade. No. 26 (also figured in Fig. V, No. 10) is a micro-burin with a notch below the one used. Number 33 is a normal micro-burin.

Among the microlithic forms the domination of the sub-triangle is noteworthy.

Associated flint forms are represented by Nos. 1, 2 and 3, dressed flakes of slender cutting (note sections). These forms prevail in the upper levels of all pits and, also, may be met with in the surface scatter.

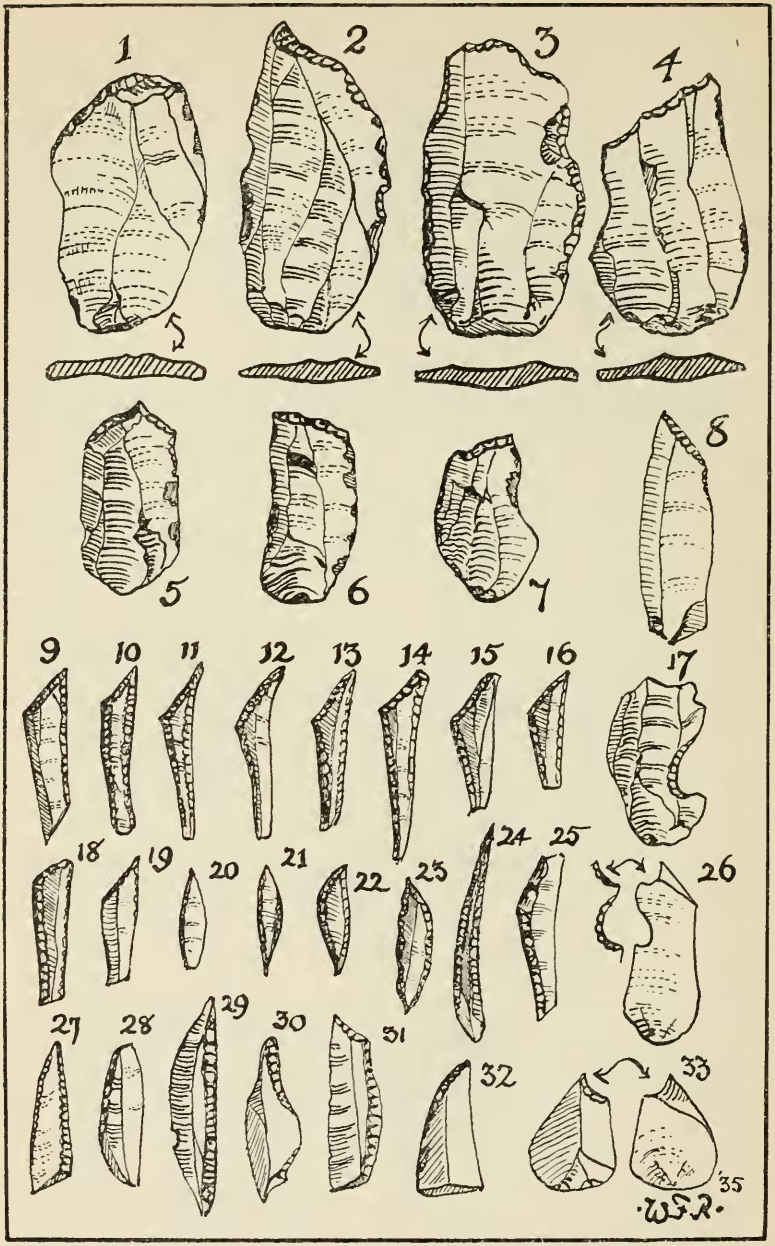

FIG. XI.—SELECTED SERIES FROM PIT 18.

(*Actual size.*)

Nos. 4, 5, 6, 7 and 8 are truncated blades. In addition a green sandstone polisher resembling, in form, the specimen illustrated in Fig. IX but without striation, was dug from the basal level. About twenty pounds of wastage was secured, and many typical cores.

Section IV.

Observations.

(*A*) *Notes on the Flint and Probable Sources of Supplies.*

Three definite types of flint were observed among the quantities of raw material and fresh cores collected from the pits, *viz.*

(**1**) Black flint, free from inclusions and therefore of a texture which permitted straight flaking and perfect fracture. Black flint, with brown cortex, evidently derived from surface nodules also occurs.

(**2**) Greyish blue, mottled flint is the commonest type of material. It has numerous whitish inclusions, either of organic or mineral origin, which in texture are coarser than the bluish grey matrix. In flaking this flint usually produces rather deep flake beds.

(**3**) Brownish grey flint, free from inclusions, and of good texture furnished a good flaking material. This often contains dark mineral colouring producing dendritic patterns and thin flakes are frequently translucent.

Owing to the fault-fractured state of the neighbouring cretaceous deposits it seems reasonable to assume that all this good material could not have been obtained from the immediate neighbourhood. Black flint, usually much shattered, is obtainable in quantities from neighbouring quarries, *i.e.* Badshot, Victory Pit, Seale Pit and Wanborough, but so far the mottled greyish blue material has not been traced to a local origin.

(*B*) *Notes on the Industry.*

This site is by no means exhausted; it offers an opportunity for further investigation which, if carried out on ambitious lines, would undoubtedly shed light on some problems still not solved. From the work already done we may broadly conclude that:

(1) A mesolithic industry is definitely associated with the lower level of the pit floors.

(2) This industry is not identical with the typical Tardenoisian of the Greensand sites although it belongs to the same culture.

(3) Apparently the implements of the upper level and, probably, those encountered on the surface scatters are of late Bronze Age context.

In connection with the obvious difference between the microlithic facies recorded from this site, and that of the Horsham industry as detailed in Section III A, some reference must be made to the tranchet, or transversely sharpened core axe. Numbers of these axes have been collected from this site [1] and its fringes, but throughout the investigation of the pits on 507 neither axe nor sharpening flake was ever found in association with microliths. Further, the majority of the axes found on and around this site are clearly evolved forms of the tranchet and are more symmetrical and usually longer than the type associated with microliths on the Greensand sites. Future investigation here on a scale larger than was possible with us may contribute some useful knowledge of the tranchet's true position, culturally, on site 507.

Finally, significant also, is the absence of the polished axe, of arrow-heads of any kind, and of pottery from the pit context.

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[1] 34 axes and 7 fragments of axes.