FIG. 1.—Palæolithic Implement from Farnham.
(Found in ballast, Worplesdon.)

face 25.

PALÆOLITHIC MAN IN WEST SURREY.

By FRANK LASHAM.

THE discovery of Palæolithic implements in Surrey is rare, except in that portion of the County which forms part of the valley of the Thames. Many deposits of river drift and brick earths exist, but so far but few discoveries of implements have been made which tend to locate the most primitive type of man's handiwork in the division of the County under notice. Dr. John Evans chronicles the finding of a small Palæolithic hâche, at the Peasmarsh, near Guildford, but is disposed to doubt its authenticity, although the gravels contained mammalian remains, and the deposit was one in which implements would be likely to occur.

The Rev. Charles Kerry, for some years curate of Puttenham, collected about fifteen years ago many examples of Neolithic implements from the district around Compton, Puttenham and other localities, his collection being now deposited at the Charterhouse Museum, Godalming; and amongst the implements there exhibited is one which has the appearance of a Palæolith, and as it was found in a spot (near Cut Mill) which is not far removed from the drift beds at Farnham, it may possibly have been derived from them.

About 1887, after a number of years' research and continued inquiry as to the deposits of gravel around Guildford, I was fortunate enough to meet with a workman who took an intelligent interest in "stoanes."

It was this man's keen eye that detected a fine implement (Fig. 1) which he had thrown out on to the road, at Worplesdon, near Guildford, from the "ballast," and had picked it up to be afterwards rewarded for his trouble.

This ballast was reported to have come from Farnham, Surrey, and some investigations soon showed that it was

possible that other implements might be forthcoming from the same beds of drift. This surmise proved correct, and after the expiration of something over a twelvemonth from the first visit to the pits, implements began to be found, and up to the present time over 300 have been obtained. In addition to the implement found at Worplesdon, it should be mentioned that a fine specimen, ochreous and abraded (Fig. 2), was discovered on the railway, between Farnham and Guildford, by a labourer, and taken to the Charterhouse Museum, Godalming, but the locality from which the gravel was taken being doubtful no clue could, by this find, be given with certainty as to its derivation; and although it may be cited as the first Palæolithic implement found in the locality, yet the implement found at Worplesdon is in reality the one which led to the discovery of others.

The valley of the Wey has often been mentioned by authorities as likely to be implementiferous, and there is no doubt but that a fair field is open for research from Farnham to Alton, and thence around Selborne, Ripley, etc., for evidences of Palæolithic man. Dr. John Evans, in his *Ancient Stone Implements*, p. 529, says: "In the Woodwardian Museum at Cambridge is an implement of Palæolithic type, and of the ovate form from higher up the valley of the Wey, near Alton, found on the surface, but not in the gravel."

At Farnham, the River Wey, at first running in an easterly direction, makes a curve, and tracking back into the valley at Elstead it winds round and passes through the Hog's Back at Guildford, eventually joining the Thames at Weybridge. It seems probable that the Hog's Back has played an important part in the late geological history of the district, and was a great factor in determining the direction in which the river drift of the ancient Thames and some of its tributaries took place.

At Farnham, above the railway station, drift beds are superimposed upon the Greensand, and occur along a ridge running by the margin of the Wey towards Alton; these beds, however, appear to thin out towards the south-west.

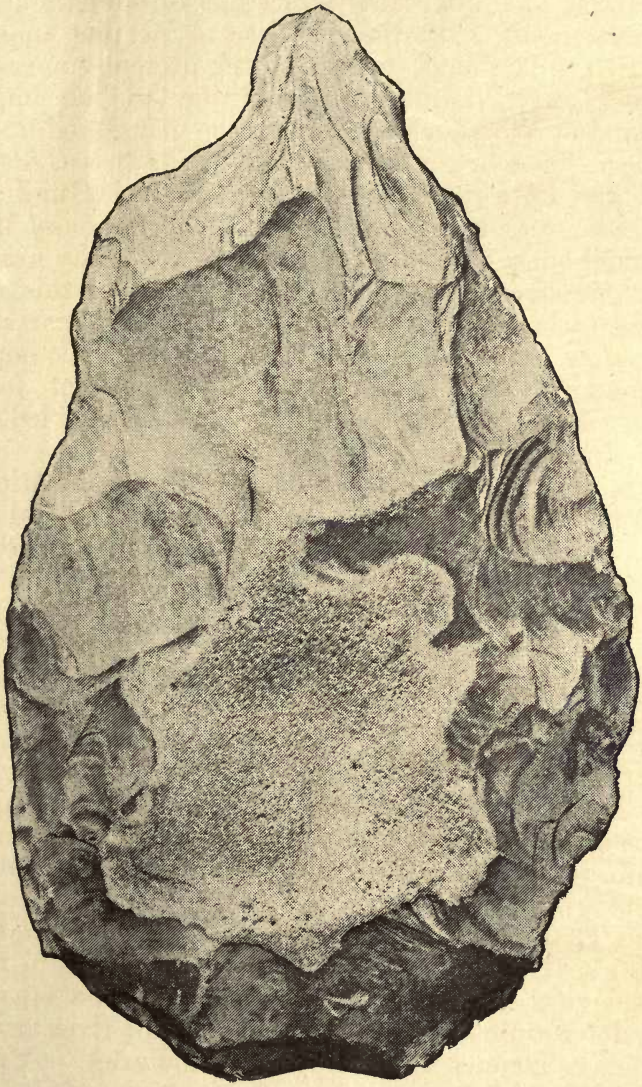

FIG. 2.—Palæolithic Implement, Farnham Drift.

(In Charterhouse Museum.)

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The gravels capping the ridge occur at 364 feet above mean sea level, or some 150 feet above the present bed of the river, and are spread over a fairly wide area; they trend down to the level of the railway.

When the river was flowing at 364 O.D. the contours in Surrey were entirely different, the present valleys did not then exist, and great changes in the face of the country must since have taken place.

The gravels are ochreous, and present the usual characteristic aspect of river drift; there appears to be but little evidence of ice action; although the stratification is varied, yet there is no indication of "trail," and from the great height of the beds one may conclude that these deposits are very ancient. The point yet to be investigated is, whether they were formed by the damming back of the present river by an ice-sheet or barrier, or other local obstruction, or merely the deposit of a stream of much larger volume than the present Wey. The beds are from ten to forty feet deep, and have been continuously worked for some years, "Farnham" gravel being well known in the district.

Mammalian remains are reported to have been found in these gravels. R. A. C. Godwin-Austen, in a paper published in *The Quarterly Journal of the Royal Geological Society*, on the "Gravel Beds of the Wey," says: "The gravel beds in the upper part of the valley of the Wey, at and above Farnham, have been found to contain abundantly the teeth and tusks of *Elephas primigenius;* the molars in particular are much water-worn." The writer has a portion of one of these teeth, and another fragment of bone, found at Farnham, but no fresh water shells have been met with. Lt.-Col. Godwin-Austen, F.R.S., in an elaborate paper (*Quarterly Journal of the Royal Geological Society*, August 1884) upon the "New Railway Cutting at Guildford," mentions the Pleistocene sands and drift gravels observed there, and records the finding of mammalian remains. These have been determined, and consist of numerous fragments of the tusks, molar teeth, ribs, leg-bones, and skull of *Elephas primigenius.* A bone of the horse (*Equus caballus*),

fragment of jaw of ox (*bos*), and some other bones. In addition to these, a fine tooth of *Elephas* was some years back found in excavating at Stoke-next-Guildford.

One remarkable feature in the deposits at Farnham, is the way in which the land falls away at the back of the ridge on which these deposits lie; the district around is known as the Bourne; and a small stream runs through this spot, but is hardly of importance enough to have ever been a factor in the deposits; but what seems probable is, that the Wey may have been in recent geological times connected with the Blackwater, and that by subsequent changes in the configuration of the land it altered its course, and allowed the ancient river to descend into the Elstead valley, leaving evidences of its former presence in the Bourne deposit.

With regard to the implements themselves, they present the usual characteristics of the drift types, but vary in their condition.

Some specimens, very much rolled and abraded, are of a dark brown colour, the facets being in some cases nearly gone (Fig. 3). This implement was found at 260 O.D., and some seven feet below the surface. As a rule, the abraded implements occur at the lower levels, and at the greatest depth on the higher levels; one fine specimen was found resting on the Greensand some twenty-four feet below the surface at the high level; it had dendritic markings.

FIG. 3.—Half-size.

In the collection of Farnham implements, made by Mr. H. A. Mangles, of Seale, are several remarkable specimens, many rough and abraded, whilst others are well worked and sharp. In many cases, if not all, the finer implements have been found at a high level, and appear to be local and not derived. Attention is called to Fig. 4; this hâche is of great interest, and appears to

have been formed and dropped on to the exposed Greensand (or what was then the land surface) at the time of its manufacture; it is bleached, and was probably never in contact with the drift at all. It was found in digging into a hedge-row which was growing in a bank of sand. So far flakes appear to be scarce. I have some six or eight in my collection, and it does not appear that a "floor" has been discovered, although one would imagine that there should be one not far off. The unrolled appearance of many of the implements is indicative of a working site not being far distant, and which may, as more gravel is removed from the ridge, present itself.

At Hale, on the opposite side of the hill, and on the other side of the Wey, at O.D. 340, occurs a deposit of gravel, marked of uncertain age in the Geological Survey; this drift, it may be assumed, is a very ancient one indeed, probably marine, but what connection it has with the Bourne deposit is at present a problem.

FIG. 4.—Half-size.

The whole of the district around Farnham presents many interesting points to geologists, and an examination of the Blackwater deposits might prove them to be of similar interest to those of the Wey. The figures, except No. 2, are from implements in my collection.

I have a fragment of an ovate Palæolithic implement, found on the surface of a field near Farley Heath, Albury; there is a drift deposit uncovered in one corner of the field, which may be lacustrine; this is so far an isolated specimen.