There is no doubt that the Red Crag was being cut into at the time of the formation of the Middle Gracial Gravel, as sometimes crag remains occur in it. Occasionally a typical sub-Crag flint is found which always shows the characteristic bold flaking and patina of that horizon, and is in every way different from the ordinary Middle Glacial stones. Also I sometimes find an edge-worked flint, which by its staining, mineral condition, and form, is precisely similar to the specimens found by Mr. Benjamin Harrison in the Plateau Drift of Kent, and I conclude that a deposit containing these very ancient flaked stones was being eroded during the deposition of the gravel in which they are now found. These sub-Crag and Harrisonian specimens, then, have come down true to their type through all the vicissitudes of their career, and we may, I think, ask how it is that these particular stones have had preferential treatment at the hands of Nature, when, as we are told, she has flaked others in the same gravel so freely.

In conclusion I would point out that those of us who assert that man has flaked these various stones can, by the ordinary methods of flint flaking, produce exactly similar forms. Those who assert Nature has produced them are quite unable by any unguided force of which we know to produce anything at all approaching them. Therefore, apart from any other consideration, we have the stronger case, and if our friends want their arguments to carry weight, they must be able to show a series of flint forms which they have produced by natural means, and which shall be indistinguishable from those which we find in the various deposits I have described. When they can do this I will at once admit they have a strong case, but until then I shall continue to look upon their views as being "A snare and a complete delusion."

A LATE PALÆOLITHIC SITE ON WRETHAM HEATH, NEAR THETFORD.

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The discovery of late Palæolithic relics in East Anglia has aroused the interest of students of prehistoric remains, and the paper by Dr. A. Sturge in Vol. I., Part II., of the Proceedings of the Prehistoric Society of East Anglia may be regarded as the starting-point from which much will be done in the near future.

I have for some time held on theoretical grounds that Late Palæolithic relics should occur in East Anglia, and collected specimens from Wretham Heath in support of that view: it was, therefore, with peculiar interest that I learned of Dr. Sturge's discoveries. I wish to thank Dr. Sturge and the Abbé Breuil for

their kindness in examining my specimens, and Mr. W. B. R. King, B.A., of Jesus College, Cambridge, for much help in collecting.

Wretham Heath lies four miles north-east of Thetford and one mile and a-half south-south-west of Wretham Station. The worked flints were picked from off what is now the surface, and they appear to be generally distributed over the low-lying grounds of the Heath. The Heath is largely covered by the characteristic vegetation of the East Anglian heathy tracts, a vegetation which, as I believe, contains plants marking a survival from steppe conditions. (See "Types of British Vegetation," edited by A. G. Tansley, M.A., Camb. Univ. Press, 1911, p. 97.) Where the vegetation has been removed the worked flints are found, and are often brought to the surface by rabbits. Such bare tracts occur on a small scale around Langmere, where many worked flints have been obtained, but the greatest number were found on a rather extensive bare tract about 100 yards east of the high road from Thetford to Wretham, and just north of a cross-road which runs nearly east and west, passing the south side of Langmere and crossing the Thetford and Swaffham Railway east-north-east of Roudham Junction.

There is no doubt that the tract was a station, and that the implements have not been transported. They are not water-worn, and the presence of cores, of numerous spalls of flint, and of pot-boilers shews that this was an actual site of occupation. The presence of the flints so near the surface indicates that little, if any, accumulation of material, other than occasional shifting of blown sand from place to place, has occurred since the site was occupied by the makers of the flints. In other words, steppe conditions have apparently been continuous for a long period of time. "It is doubtful if this area ever bore natural woodland" (Tansley, *loc. cit.*, p. 97.)

The dominant feature of the worked flints is the preponderance of long flakes. The patination of the flints is noteworthy, and resembles that of the flints of Magdalenian age described by Dr. Sturge in the paper in these Proceedings already cited. The flints vary in colour from deep mahogany-brown when unweathered, through café-au-lait colour to grey, blue-grey, and white.

The following instruments among those found on the sandy tract east of the high road between Thetford and Wretham are noteworthy:—

Three beautifully-worked end-scrapers, with the scraping end formed with fan-like secondary working, one of which is figured. (Pl. XCVI., Fig. 1, a b). The figured specimen is of grey flint, a second is mahogany-brown, and the third, white.

Several flints, chiefly grey, worked to a pointed end; they are not burins, for the end is nearly flat. (Fig. 2). It is doubtful whether any of the flakes which I have found here are true burins, though one or two approach the type.

A broken white flint, being part of a flake with battered back, worked like one figured by Sir John Evans ("Ancient Stone Implements of Great Britain," Fig. 198) from Australia. The curved end is similar to that of one figured by Dr. Sturge (Plate XCVI., Fig. 3). Another of similar type is perfect, being battered at the back and also at the blunt end (Plate XCVI., Figs. 5, 5a). The battering at the back is very regular, with a marked nervure down the middle. This implement is tiny, and strongly recalls flints of similar workmanship from Bruniquel; it is of grey flint.

A small mahogany-coloured denticulate flake (Plate XCVI., Fig. 4).

Associated with the above were two good cores of Magdalenian type. A large number of pot-boilers were also found. Stones other than flint were small and rare. I mention this, for although we can hardly expect to find mammalian bones in these loose sands, there is no reason why engraved stones similar to those which occur in the caves should not also be found upon the surface sites. They should be carefully sought.

From other parts of the Heath I have obtained, among other things, a flint which suggests the parrot-beak type of flake, though it is not well wrought; also a long chisel-ended mahogany-coloured flake.

A very small piece of pottery was found on the sandy tract east of the high road, and two larger pieces belonging to one vessel near some stunted shrubs between that tract and Langmere. The pottery is rough and hand-made, dark coloured, with many included quartz grains. I do not wish to assert that it is contemporaneous with the flints, but, as it may be so, I mention its occurrence.

There is no doubt as to the upper Palæolithic character of the worked flints, and they closely agree with those of the Magdalenian period.

I regard the discovery of these flints as the more interesting, inasmuch as no trace has occurred of any forms which are regarded as characteristic of Neolithic or later times. Arrow-heads, celts, short scrapers, and their usual accompaniments seem to be entirely absent, though they have been carefully sought. In any case they are obviously not likely to be found in abundance. This being so, Wretham Heath may prove to be a locality where one will be able to refer all the flint implements to one particular period. In the absence of stratigraphical evidence, advance in the future is likely to be made by studying the geographical distribution of types, and paying particular attention to tracts where types suggestive of one period only are found.

In conclusion, a few words may be added as to the physical conditions of Wretham Heath. I have referred to the Heath in a paper on "The Meres of Breckland" (Proc. Cambridge Phil. Soc., Vol. XVII., 1913, p. 58). It is typical breckland, and lies in a shallow east and west valley cut into a plateau. The plateau in

the immediate neighbourhood rises to a height of about forty feet above the valley bottom, the former being about 140 and the latter about 100 feet above sea level. In this valley are two dry channel courses, in the more northerly of which lies Langmere, and in the more southerly Ringmere. The bare sandy tract east of the high road on which most of the worked flints were found is just north of the southerly channel, and about ten feet above its floor. It is therefore clear that the general topography at the time when the men who worked the instruments inhabited the district was much as it now is, and they were probably attracted to the spot by the presence of the meres, for, though abundant near the meres, a prolonged search on the plateau has failed to yield any of the worked flints. Mr. W. G. Clarke (*Trans. Norfolk and Norwich Naturalists' Society*, Vol. VII., p. 499) records the discovery of a prehistoric flint from the floor of one of the meres. It is desirable that careful search for more should be made when the meres are dry.

The specimens collected by Mr. King and myself are preserved in the Sedgwick Museum, Cambridge.

Flakes from Wretham Heath.—1, End-Scraper; a, upper surface; b, side view; 2, Pointed flake; 3, Flake with beaten back, broken at left-hand end—notice curvature of beaten surface towards right-hand; 4, Denticulate flake; 5, Flake with beaten back and beaten end at right-hand side. The beaten back (at the top of the figure) does not shew well in the photograph; 5a, ditto, $\times 2$. All except 5a are natural size.