

Amber from the Palæolithic Deposits at Gough's Cave, Cheddar

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The winter months are the off season for the show caves at Cheddar. At Gough's Cave for a good many years this slack period has been used to carry out careful excavations of the deposits in the portion of the cave near the entrance. Reports on these excavations appeared in the *Proceedings of the Somerset Archaeological and Natural History Society* in 1928 and 1930.^{1, 2} Since that time much more work has been done and much material accumulated. The preliminary studies of this material indicate that the findings of the previous reports will be confirmed.

The excavating season 1950-1 yielded one very important find, a block of amber from the palæolithic levels. This amber (*Plate 26*), measures $6 \times 3 \times 2$ cm. It was found in layer 12, that is at a depth of 6 ft. from the original surface for the excavations are carried out in 6-in. layers. The site of the find was about 2 ft. from the opening of the side passage in which Cheddar man was found in 1903,^{3, 4} and about a foot out from the north wall of the main passage. The deposits here lie nearly horizontally across the cave and are much cemented together by stalagmite to form a breccia. The earlier accounts cited indicate some disturbance of the deposits in some areas down to a maximum depth of 4 ft. In the area in question there was very little if any disturbance of the deposits even in the uppermost levels. Flint implements of the Creswellian industry of the cave were found both above and below the amber and likewise bones of the late pleistocene fauna. These have already been described.^{1, 2} There is no doubt that the amber came from the palæolithic levels and that it was impossible for it to have come from a higher level into the position in which it was found either recently or from an occupation of the cave during post-palæolithic times.

The finder, Mr. Victor Painter, is chief guide to the cave and he has supervised the excavations for many years. He removed it himself from the sandy material which surrounded it inside a piece of breccia. When the amber was found the surface was smooth and glossy with evidence of flaking technique having been used upon it. The colour varies somewhat, but the main one is a dark reddish brown. The original nature of the surface can be seen over the whole of the butt end and at several other places indicated in the *Plate* by the smooth glossy areas. Since the amber

was freed from the deposit in which it had been lying there has been some deterioration of the surface giving the rough appearance seen in the plate. Similar deterioration, and often worse, is known to occur when amber is exposed to the air after a long period of burial.

The amber was sent to the British Museum and certain tests were carried out there. The report by Dr. H. J. Plenderleith states :—

“ General appearance [is] consistent with it being amber of Baltic origin, [this is] confirmed by hardness 2·3, specific gravity 1·10, burning test and ultraviolet fluorescence.”

But amber occurs naturally along the east coast of England and cannot be distinguished from Baltic amber as it has the same origin and is derived from the same geological horizon. So that the specimen could have been derived from the east side of England. In this Dr. Plenderleith fully concurs and wishes his report to be modified accordingly.*

In Magdalenian times up to very late in the period much of what is now the North Sea was dry land traversed by wide rivers. It is not known how far out into the North Sea bed, from what is now the east coast of England, late Magdalenian man would have had to go to find amber. It must have been a considerable distance and it would be a fair conclusion to derive the specimen from the Baltic zone including its westerly extension towards England. Other possible sources are very much further afield and therefore unlikely. It is unfortunate that the Gough's Cave specimen is too opaque to be examined for the very fine *Quercus* hairs typical of Baltic zone amber and no smaller fragments, which could be sacrificed for this examination, are available.

This is the first properly authenticated discovery of amber in England from a palæolithic horizon. A piece of amber is recorded as having been found at Creswell Crags Caves⁷ but the reference is not precise enough to enable the horizon from which it came to be determined and there must also be an element of doubt as to whether it really came from there at all.† Amber has been found at a mesolithic site at Star Carr, Seamer, in Yorkshire⁵ and sparingly at Maglemose sites in Denmark.⁶ In later periods it is well known as a raw material for ornaments of prehistoric man.

* Letter to the author.

† I am indebted to Dr. J. Wilfrid Jackson for this reference from Mr. Pennington's book: “ I have in my possession, from one of these caves, a neat pin or lance head, very much like some of those found in the Kesslerloch Cavern, in Switzerland, and a piece of amber. I do not know from which cave the latter came, but it is undoubtedly from Creswell, and its discoverer has endeavoured to find out what the material was by burning and cutting it. Its importance is the indication of trade it affords; and it assists us in the conclusion that these artist folk of Derbyshire were not after all so utterly savage.”

In France an amber bead⁸ and a horse's head⁹ in amber, shaped by a flaking technique, have been found in a lower Magdalenian level in the cavern of Isturitz (B.P.). St. Perier⁸ suggests that in these Pyrenean examples the amber may be of comparatively local origin as "it occurs naturally about sixty kilometres away." The Geological Department of the British Museum (Natural History) was consulted in this matter. Dr. Edwards* had no knowledge of such occurrence of amber in the Pyrenees and suggested that though "amber-bearing deposits are mentioned from half a dozen different localities . . . it is probably only a matter of a few fragments of some fossil resin." The specimens would not be large enough to produce such articles as those listed.

It thus seems probable that the finds from Isturitz came from the Baltic zone and likewise also the specimen referred to by St. Perier¹⁰ as having been found at Aurensan (H.P.), and being the first recorded identification of amber from palæolithic deposits. Skůtil¹¹ reports the discovery of amber on several occasions in palæolithic deposits in Moravia.

The piece of amber from Gough's Cave shows on its surface, where this is in its original state, unmistakable evidence of shaping by a flaking technique. This method of fashioning was used to produce the horse's head found at Isturitz. What the final shape of our object was going to be cannot be determined. The design is obviously incomplete.

It is not possible to state precisely how the amber was brought to the cave or why it was brought. Palæolithic people were hunters and food gatherers. It was a necessity of their mode of life that they moved over large tracts of country. It is known that the Gough's Cave people made frequent trips over the short distance of 20 to 30 miles to the nearest flint-bearing areas. Shells were brought from further afield.^{†1, 2} On hunting journeys, which may have been seasonal to follow the game, they may have met another group which had the amber and made an exchange, amicably or otherwise. Magdalenian-type harpoons have been found occasionally in English caves such as the three at Kent's Cavern¹² and the one at Aveline's Hole¹³ proving at least contact with contemporaries of the mainland of the continent and in particular with parts of France. These harpoons appear to have been traded articles since they are so seldom found in English cave deposits that local manufacture seems doubtful, especially as there is no developmental sequence as in the French series. The ones so far found all belong to the period of Magdalenian 6 of L'Abbé Breuil. Such an absence of earlier forms can only be explained on the basis of contacts

* Letter to the author.

† In addition to the species mentioned in the reports portions of a shell of *Buccinum undatum* and a shell of *Cardium norvigum* have been found in layer 13. They are on exhibition in the museum at the cave.

with other people with exchange of ideas or of the actual articles unless there is evidence, and there is not in the present case, of the arrival of newcomers.

If the suggestion is rejected of a local Pyrenean origin for the amber finds from Isturitz and Aurensan, and there are good geological grounds for such a rejection, then the amber pieces, both from the French sites and from Gough's Cave, must be regarded as having been brought to the area from far afield and almost certainly from the Baltic zone, not necessarily from the Baltic itself. The fact that articles have been shaped from the material indicates considerable familiarity with the material. This in turn suggests that the date for the commencement of the use of amber, and presumably of a degree of trade in the material, must be put back into lower Magdalenian times at least.

If the amber did not come to Mendip by means of trade then it must have been brought by the group who had acquired it in the course of their travels as they slowly migrated from one area to another, and the discovery indicates a migration route which crossed the Baltic zone on the way from the east to the west. It is probable that the real answer partakes of both suggestions as to how the amber was brought to the Mendips, and for that matter the Pyrenees.

It is more difficult still to state why the amber was brought. It may have had a magical significance as is suggested by the horse's head from Isturitz. It may simply have been regarded as a piece of attractive material from which to make an ornament, such as a bead. It may merely have been an object which took the fancy of the hunter. This last form of collecting is a well-known trait of man to the present day. Locally at both Gough's Cave,^{1, 2} and at Aveline's Hole,¹⁴ sea shells had been collected and brought to the cave for use as ornaments. At Aveline's Hole foreign fossils¹⁵ were also brought, and though one of them, *Pseudomelania Heddingtonensis*, may have had a phallic significance this can hardly be true of the ammonite body chambers, which were, presumably, intended to be used as ornaments.

In conclusion I would like to express my thanks to the Marquis of Bath for permission to publish the account of this discovery at his caves, to Mr. G. Robertson and Mr. V. Painter for their assistance on the details of the discovery of the amber, and to the authorities of the British Museum for their help.

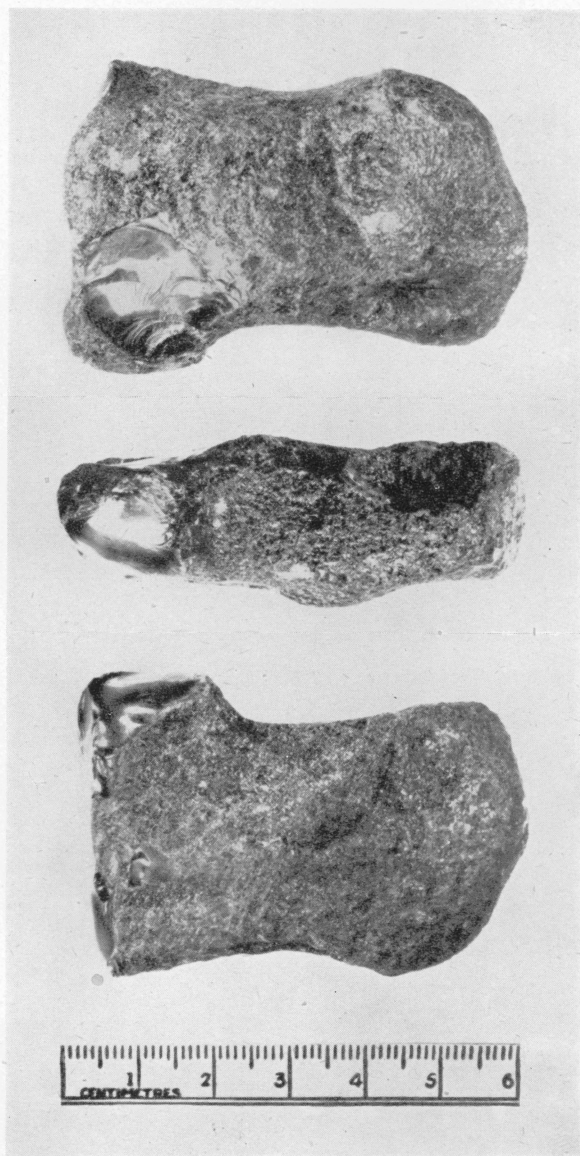
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- ¹¹ Skútil, J., "L'Ambre dans les stations palæolithiques de la Moraire," *Pamatky Arch.*, Vol. XXXIV, p. 437.
- ¹² British Association, *Reports of the Committee exploring Kent's Cavern, Devonshire*, 1867, pp. 29, 31; 1869, p. 191.
- ¹³ Davies, J. A., *U.B.S.S. Proc.*, 1920, Vol. I, No. 2, p. 69, and *Plate 1, Fig. 1*.
- ¹⁴ Davies, J. A., *Ibid.*, *Plate 1, Fig. 2*.
- ¹⁵ Davies, J. A., *Ibid.*, 1922, Vol. II, No. 1, p. 10, and *Plate 1, Fig. 2*.
- ¹⁶ Davies, J. A., *Ibid.*, 1924, Vol. II, No. 3, p. 108, and *Plate 8, Fig. 1*.

Abbreviations :—

- P.S.A.S.* : "Proceedings of the Somerset Archæological and Natural History Society".
U.B.S.S. Proc. : "Proceedings of the University of Bristol Spelæological Society".

PLATE 26



The amber from Gough's Cave, Cheddar. The nature of the surface when the specimen was first found is that shown by the glossy areas in the plate. The technique of shaping by flaking is obvious.