

## Further Report on the Human Material found in Aveline's Hole.

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Much more material has been found since the report in the first number of the proceedings, in fact bones representative of at least ten individuals have been identified, and curiously these remains, if the orthodox methods of sexing be applicable to pre-historic material, are either those of females who had reached adult life or of youths, whose age is uncertain, as the data are not sufficient to help in determination of the human remains. Three skulls were of sufficient completeness to make it possible to determine the breadth index; one was sufficiently complete to enable the cranial capacity to be estimated, and moreover sufficient of it was left to make reconstruction a comparatively easy matter. All the others were in such a fragmentary condition that reconstruction was impossible. In addition to skulls or fragments of skulls, numerous teeth were found, some of which were carious and subject to pyorrhœa. The teeth generally, however, were of good size and condition, and if worn, as many were, had compensatory growth of the dentine. In all cases the upper third molar was smaller than the other molars.

Of the limbs the chief finds were of the small bones, but a tibia of the right side shewed a platycnemic index of 60.5 and the outer facet on the head was markedly convex from before backwards in its hinder half. A fragment of the right femur bearing head, neck and trochanters with a little of the shaft below, shewed slight platymeria, and both of these bones were without doubt of the female sex. A few cervical vertebrae were found and some of these gave evidence of arthritic disease.

There were other bones whose mention specifically would serve no useful purpose; our attention may therefore be directed to the more complete skulls, and in order to distinguish them

sufficiently they may be alluded to as 1, 2 and 3, according to their breadth index which is sufficiently distinctive.

Skull No. 3 has a breadth index of 79.9. Skull No. 2 has a breadth index of 74 approximately, whilst skull No. 1 is the longest relatively, with a breadth index of 70.4.

Skulls Nos. 2 and 3 differ somewhat in character from skull No. 1, and No. 3 shews in *norma verticalis* a well marked pentagonal outline and much resembles the female Cro-magnon skull in that respect. Skull No. 1 is the most complete, and perhaps the most interesting. The greater part of the calvaria is present, with that part of the basal region bearing the two occipital condyles and sufficient of the basioccipital to enable us to determine the site of the basion. Then too the whole of the right zygomatic arch is present, as well as the right malar bone (Figs. 13—14.).

Two maxillae belonging to another skull were found, and the right one so nearly fitted the corresponding malar bone of skull No. 1, its medial border being in the middle line, that it seemed justifiable to make use of this material in making a reconstruction of this No. 1 skull. The reconstruction cannot be far amiss, and it brings out one or two very striking and important features (Fig. 15.).

The skull is disharmonic, the face being very broad in comparison with the length of the cranium—Length = 196 mm., bizygomatic width 138 mm. Still more striking perhaps is the great width of the skull between the outer margins of the glenoid cavities, viz., 134 mm.

The narrow (from above downwards) orbits, together with the downward and outward slope of their long axis is striking and reminds one forcibly of the condition in the female Cro-magnon skull (Damon's cast). The *apertura pyramidalis* is of the leptorhine type, and the total maxillary width opposite the first molar teeth is small, viz. 54 mm. In an Italian boy's skull at 16 years the maxillary width is 57 mm. This narrow maxillary width is no doubt due to skull No. 1 being female.

In No. 1 of the Proceedings attention was drawn to the varied festooning of the supratemporal crests opposite the Stephanion. The cranium was described as being slightly annulated

behind the bregma, but a remarkable feature presented by the occipital bone passed unnoticed ; it is this—that the margin of the foramen magnum behind the occipital condyle and the external occipital crest are *in the same plane*, a most unusual feature (Fig. 13).

A few detailed measurements may now be submitted.

Length. The greatest length was from the frontal eminence region to the occipital point—it amounted to 196 mm. The corresponding internal length after deducting for thickness was 185 mm.

Breadth, gross 138 mm. ; net 126 mm.

Height,—auriculo-bregmatic, gross 117 mm. ; net 106 ;

Height,—basi-bregmatic, gross 136 mm. ; net 128 ;

Breadth index = 70.4 ;

Height index—auriculo-bregmatic 59.6 ; basi-bregmatic 69.3 ;

Capacity a little over 1,200 cc. ;

Ophryal diameter 100 mm. ; net 90 ;

Orbital width 42 mm. ;

Orbital height 31.6 ;

Orbital index 75, *i.e.* microseme.

#### GENERAL CONCLUSION.

1. That the period to which the bone and associated flints belong is the Tardenoisian.

2. That from the form of the orbits and the outline of the skull in two specimens when seen from above, the race represented seems to be a direct continuation of the Cro-magnon, much modified in character.

3. All the skulls found and what limb-bones could be sexed appear to be female, some were young. I have no suggestion to make in explanation of the fact that the remains are female,—assuming always that present day methods of sexing are applicable to prehistoric material. It is of interest that most of the skulls found at Ofnet—*i.e.* presumably of about the same period—were females or young children. Further, in association with them were found a large number of perforated shells for a necklace. There was no sign of any ochre-colouring. Some of the fragments have the appearance of having been partially burned.

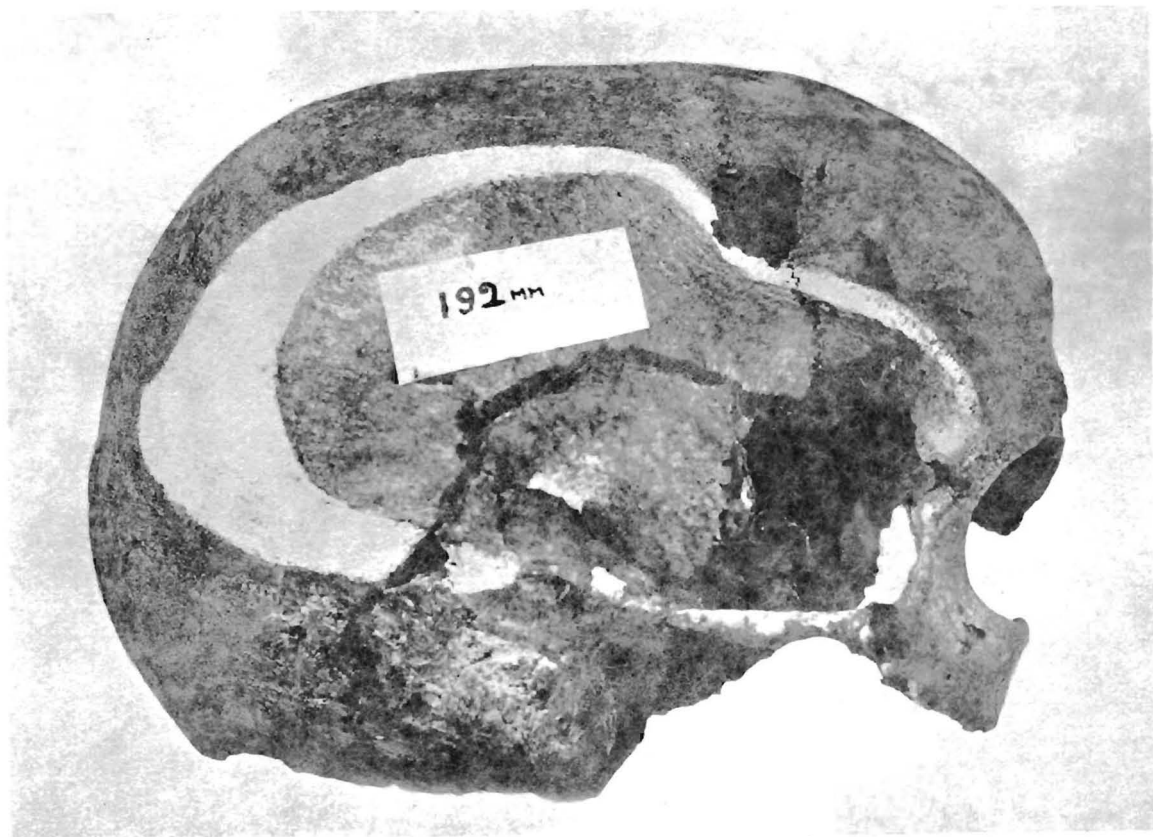
4. Although these skulls resemble those at Ofnet in that they are chiefly female and those of young persons, and in being either dolichocephalic or almost brachycephalic (breadth index of one 79.9), yet they differ in one important respect, they are disharmonic, *i.e.* they have long crania and wide faces. The skulls at Ofnet were harmonic in the sense that the crania were long and faces narrow. These skulls then at Aveline's Hole cannot be of the same race as those at Ofnet, and it is suggested, in contra-distinction to what was said in the first number of the Proceedings, that we have here a continuation, in modified form, of the Cro-magnon race, such as perhaps are the Dordogne people of to-day, those of Lannion in Brittany, where one-third of the people are said to be of Cro-magnon type, those of Oléron off the West Coast of France, and some few elsewhere (Osborne).

5. The presence of a Magdalenian (6 B. Breuil) harpoon, is to be accounted for by some by its having been brought here in prehistoric times from elsewhere.

6. As all the bones were found under the same stratum of stalagmite, and in association with the implements mentioned, it is fair to conclude that they were contemporary.

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SKULL No. 1.



The figure 192 mm. is the glabello-occipital length—not the greatest length.

FIG. 13.

**SKULL No. 1.**

View from above.



**FIG. 14.**



FIG. 15.