NOTES ON THE HABITS OF THE EXTINCT TASMANIAN RACE.

(1) THE USES AND MANUFACTURE OF BONE IMPLEMENTS.

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Plates XX. and XXI.

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INTRODUCTION.

For many years amongst those interested in the study of Tasmanian implements, existed the idea of certain bones having been used by the natives, probably as "scrapers."

Dr. F. Noetling (1) has examined certain specimens in the Tasmanian Museum, and in addition other bones excavated by himself at Rocky Cape. As a result, in the paper mentioned, he comes to the conclusion that those examples are simply portions of the fibulæ of *M. billardièri* fractured by falls of that animal in the course of its flight when pursued.

He reasons that all these specimens found in native feeding grounds are only traumatic fractures, and that therefore the use of bone implements was unknown to the native Tasmanian.

In much time spent in reading works that contain references to Tasmanian aborigines, I have found no instances of an observer seeing such implements in actual use.

Ling Roth (2) quotes La Billardière (3) as noting the natives prepare small spatulate pieces of wood, by which they separated limpets or sea ears from the rocks, on which to feast. These they smoothed with a piece of shell.

The bone implements 1, 2, 3, and 4, hereunder described in detail, would have been too light for such use, except in the case of small and not too adhesive shell fish. I cannot but feel, however, that they would have been of considerable use in extracting the contents of such edible types as *Turbo*, etc.

It seems reasonable to think, therefore, that such an instrument would be used, as a considerable proportion of the shells found on the mounds are unbroken, and those not intact do not seem to have been crushed between stones. Such implements may also have been of use in getting out the contents of oysters, mutton fish, and more particularly the small conical type of shells. It is to be remembered that although many settlers in Van Diemen's Land have seen the aborigines hunting and camping for a day or two on their migrations, very few indeed, except La Billardière, can have seen them in their natural state, collecting and eating their shell fish around their fires. The very presence of such observers would tend to cause all such feasting to cease.

DETAILED DESCRIPTION OF THE SPECIMENS.

The details of the specimens are as follows:—

No. 1.—Proximal Extremity of the *R. fibula* (*Macropus ruficollis*).

168 mm. in length, the epiphysis is wanting.

The specimen has been broken about the commencement of the middle third, where the shaft commences to flatten and comes into close relation to the Tibia. It presents a chisel-shaped edge. This edge, 5 mm. in length, has one serration, otherwise is smooth, and is not perfectly horizontal.

The mesial and lateral surfaces slope regularly to form this extremity.

The mesial surface, i.e., the relation to the Tibia, shows many fine longitudinal scratches, which may well have been incurred as a result of usage.

The lateral surface shows no marked features, except a few minute scratches, due perhaps, to friction.

With the exception of the hammer or pounding stones (4), it is established that the Tasmanians never ground their stone implements. Any shaping that may have been artificially induced in this bone specimen would probably have been by friction due to the use of its edge in extracting the bodies of the shell fish from the hard shell, prising open small bivalves and actions of such kind.

No. 2.—Proximal Extremity of *L. fibula* (*Macropus billardièri*).

165 mm. in length. Shows edge markedly oval in shape with an interesting flattening of the mesial surface, which has almost obliterated the irregularities of the origonal fracture. Very smooth to the touch. The longitudinal serrations noted in the previous specimen are not present.

The lateral surface shows a groove—probably artificial. Decidedly a lighter and more delicate instrument than Nos. 1 and 3.

No. 3.—Central portion of shaft of *L. fibula* (*Macrepus giganteus*).

152 mm. in length. This specimen seems to me even more than 1 and 2 to have been definitely shaped for use. Its extremity is beautifully oval in shape, and particularly on the mesial surface shows for 14 mm. undoubted smoothing by friction.

The lateral surface shows longitudinal friction markings at the point where the ridge becomes continuous with the flatter area. At the actual edge a chip has broken from the surface.

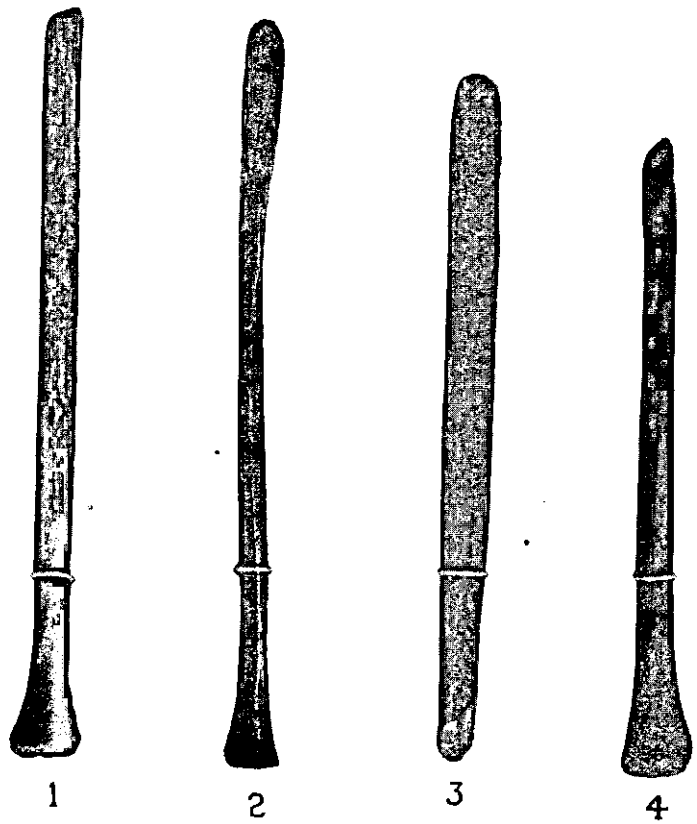
The other fractured extremity shows no smoothing of its fracture surface, which is still quite sharp, jagged, and well defined—in decided contrast to the well-marked flattening and smoothing of the distal extremity.

No. 4.—Proximal Extremity of *R. fibula* (*Macropus billardièri*).

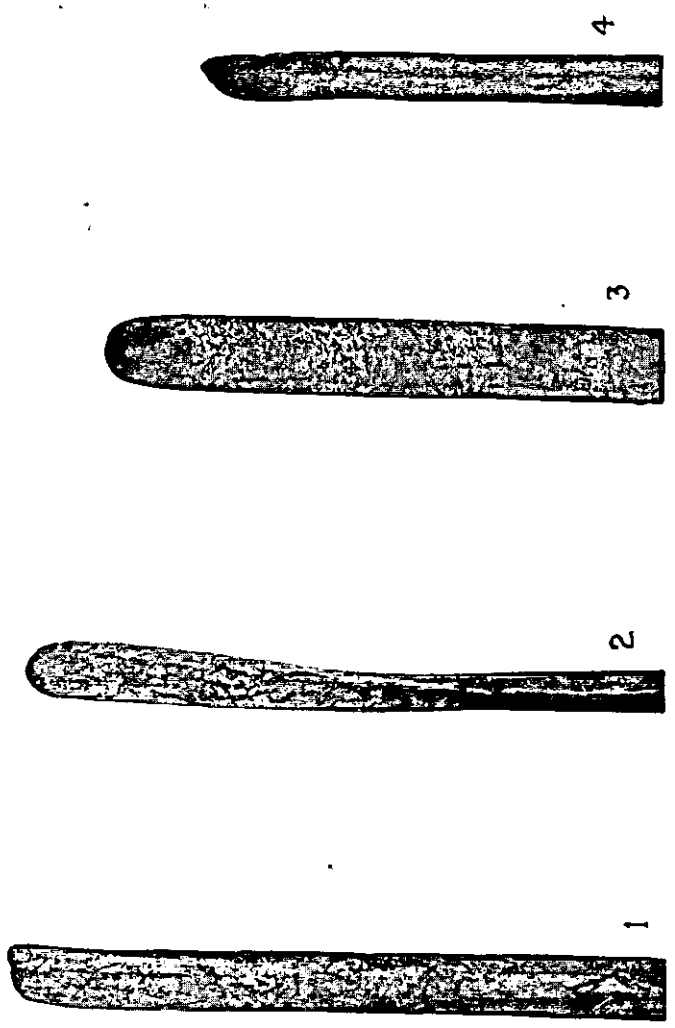
141 mm. I have included this specimen, as, although its edge approaches the wedge-shape, and shows rounding of the surface, it appears to me that such is very probably due to a limited amount of friction, either by man or the shifting of sand and shells in the Middens.

In any case, it approximates to the condition of the fractured ends of many bone fragments found among the remains of aboriginal shell mounds, and occupies a mid position between the well-smoothed edges of 1, 2, and 3, and the jagged fracture edge of No. 3.

The Tasmanian Museum has seven bone fragments labelled as implements.



Tasmanian Bone Implements.



Tasmanian Bone Implements.

One, A 2777, has a very well-rounded spatulate extremity, and resembles my specimen No. 2 very closely.

A 4305 may be classed as probably shaped by the aborigines. The others vary from splinters of long bones, to fibulæ such as I have described, except that their fracture edge shows no smoothing, and is such as would have been produced by ordinary traumatic fracture.

CONCLUSION.

To sum up, I feel that Dr. Noetling in the article described has dismissed in altogether too summarily a fashion the possibility of the use of these instruments. Just as a close study of the Tasmanian stone implements shows great variation in their workmanship with specialisation in the edges for different uses, so we may conclude that an individual who would go to such lengths in fashioning his stone work would experiment on and use such bone tools as Nos. 1, 2, and 3, and possibly 4.

I feel that ordinary fractures of these fibulæ would not give a surface such as I have described, and I conclude therefore that the four specimens described in detail have been deliberately shaped and used by the Tasmanians in connection with their routine feeding and daily life.

The actual discovery of such an implement in a small heap of shells and isolated from any other bony remains may possibly be made, and would be conclusive proof of their use as surmised.

REFERENCES.

(1) Pap. and Proc. Royal Society of Tas. 1911, p. 102.

(2) Ling Roth. "Aborigines of Tas.," 2nd Ed.

(3) La Billardière. "Voyage in search of La Pérouse."

(4) Dr. F. Noetling. "Tas. Naturalist," part 3.