



WILEY

35. On the Method Employed by the Natives of N.W. Australia in the Manufacture of Glass Spear-Heads.

Author(s): Henry Balfour

Source: *Man*, Vol. 3 (1903), p. 65

Published by: Royal Anthropological Institute of Great Britain and Ireland

Stable URL: <http://www.jstor.org/stable/2839799>

Accessed: 21-06-2016 10:46 UTC

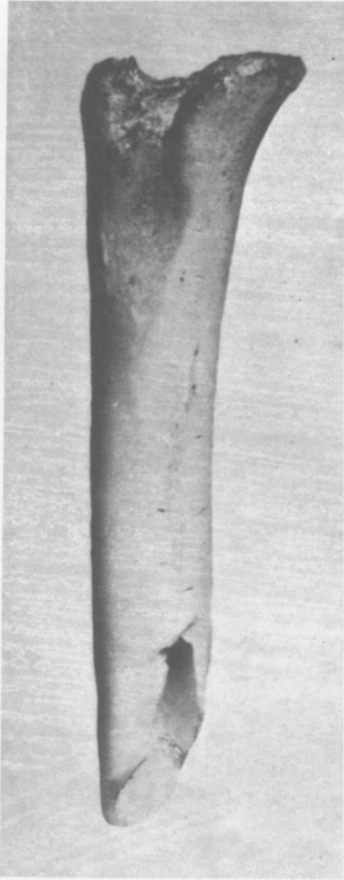
Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at

<http://about.jstor.org/terms>

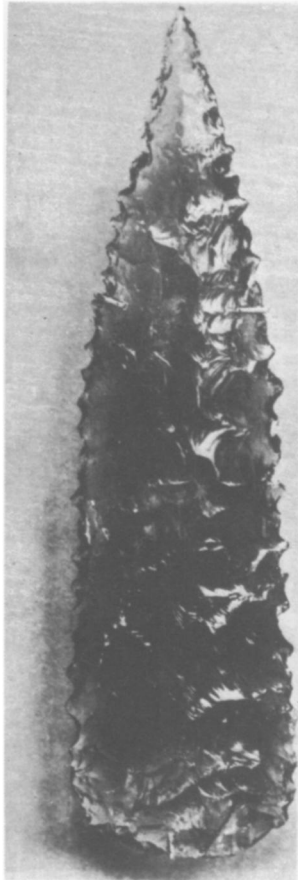
JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



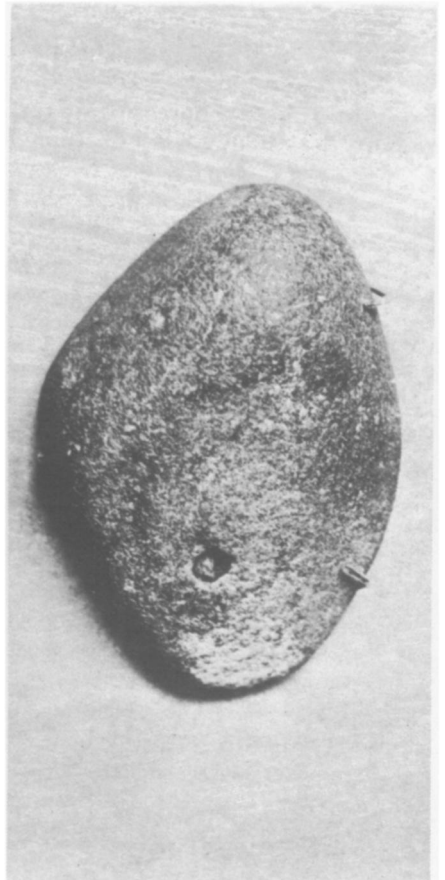
Royal Anthropological Institute of Great Britain and Ireland, Wiley are collaborating with JSTOR to digitize, preserve and extend access to *Man*



2.

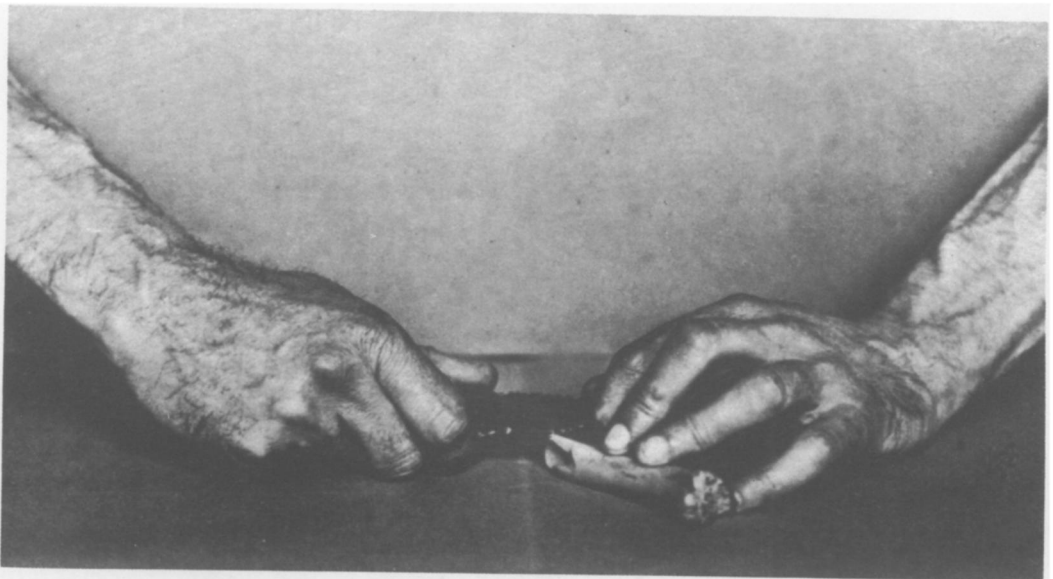


3.



1.

GLASS SPEAR-HEAD, AND TOOLS (PEBBLE AND BONE) WITH WHICH IT WAS MADE, N.W. AUSTRALIA.



4.

MANNER OF MANIPULATING THE GLASS AGAINST THE BONE, IN THE PROCESS OF PRESSING OFF FLAKES.

THE MANUFACTURE OF GLASS SPEAR-HEADS: N.W. AUSTRALIA.

ORIGINAL ARTICLES.

Australia.

With Plate E.

Balfour.

On the Method employed by the Natives of N.W. Australia in the Manufacture of Glass Spear-heads. *By Henry Balfour, M.A., F.Z.S., President of the Anthropological Institute.* **35**

The spear heads made with such skill by natives of N.W. Australia from broken glass bottles, telegraph insulators, and the like, have long been familiar objects in museums and private collections, and need no description here. As is well known, many of these spear-heads are really beautiful objects, and in delicacy of manufacture and symmetry of shape they compare very favourably with neolithic work of a high class. It becomes a matter of interest to know the methods by which the natives arrive at their excellent results, and it will probably be agreed that, in view of the extreme simplicity of the tools used in the operation of shaping pieces of broken glass bottles, &c. into spear-heads, the principal factors in the operation are extreme delicacy in manipulation, and perfect knowledge of the peculiar qualities of the material. Being very anxious myself to ascertain the methods employed, I asked Dr. E. Clement, who has travelled much in Western Australia and made extensive collections, to find out how the work is done, and also to bring me home the tools employed. Dr. Clement, to whom I am much indebted, readily responded, and secured for me the tools figured upon Plate E., Figs. 1 and 2, which had been procured from a native who was using them, together with a spear-head made with these very tools from a piece of a glass bottle (Fig. 3).

The contrast between the simplicity of the tools and the effectiveness of the results is very striking.

The implements consist of (a) a water-worn pebble (Fig. 1) of some hard, close-grained rock, of irregular shape, rounded on one face, flattened on the other; the upper end is rounded and fits the hollow of the hand comfortably, the lower end is blunt edged. The shape is purely natural. The weight of the pebble is $3\frac{1}{2}$ ozs. (b) A piece about 4 inches long, of the leg-bone of a sheep, which has been roughly broken across (Fig. 2).

The stone is abraded at the lower end, the abrasions extending some way up the convex face of the pebble. It was used for striking off and pressing off flakes from the glass, presumably during the earlier stages in the fashioning of the spear-head. Such abraded stones frequently occur amongst neolithic finds. The bone was used in the final shaping of the spear-head, and to some extent at least in the manner which is represented in the photograph (Fig. 4). This was not taken on the spot, but was arranged in accordance with a sketch which Dr. Clement gave to me. The developing spear-head was held in both hands in the position shown in the photograph, and the edges pressed with a slightly rotary movement against the edges of the broken end of the bone, which was held down with the fingers of the left hand. In this manner flakes were detached with considerable accuracy, and the serrated edges of the blade were formed by flaking deeper at regular intervals. The edges of the bone have been partially smoothed by rubbing, presumably to improve their shape for the process of flaking the glass.

HENRY BALFOUR.

India.

Measurements of the Indian Coronation Contingent. *By J. Gray, B.Sc.* **36**

On the occasion of the coronation of His Majesty King Edward VII. there were brought to London a considerable number of troops, among which many of the non-European races of the British Empire were represented. It occurred to me that this would be a good opportunity of getting measurements which might be of some value