

THE WINDANG, OR EDGE-GROUND UNIFACE PEBBLE AXE IN EASTERN AUSTRALIA.

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(Plate xvi, figures 1-6.)

The Australian Museum possesses a series of one-hundred and eight axes of a type that may be considered transitional between the trimmed uniface pebble implements and edge-ground axes. The characteristics of the type are simple: it is made from a pebble, half of a split-pebble, or a slice from a pebble, trimmed partly or wholly on one surface only, with a blade ground on one or both facets.

Attention has been drawn to occasional specimens but the series has not been described, nor has attention been drawn to its affinities. In the following analytical description, the series is divided into two groups, coroid and split-pebble.

Coroid.

The varieties in this group are the same as the trimmed uniface pebble implements, and they have been classified according to the trimming to draw attention to the relationship. The ground-edge blade is always at one end.

(A). *Trimmed at one end* (Plate xvi, fig. 1).—The chipping is limited to one facet only. The butt end is lacking on two, and one has a trimmed concave edge adjoining the butt. The eighteen specimens range from 9 to 18 cm. long, 6 to 11 cm. wide, 2 to 5 cm. thick, and from 8 oz. to 3 lb. in weight. They range from round to elongate-oval in shape, and one from Prairie, Queensland, is pear-shaped.

Localities.—*North Coast*: Clarence River, Bulga (Hunter River Valley). *South Coast*: Quibray, Shellharbour (2), Bellambi. *Inland*: Gunnedah, Oberon (2), Bathurst (2), Nattai River, Waste Point (Snowy River) (3). *Queensland*: Prairie. *Victoria*: Cape Liptrap, Tarwin.

(B). *Trimmed on one lateral margin.*—There are few examples in the collection, and the trimming on them appears to have been done for shaping and not for use. The trimmed uniface pebble implements with lateral working edge are the most unsuitable type in the group for addition of the ground blade. There is, however, one example, E.49513 (Plate xvi, fig. 2), and it is a most unusual axe, from the Macquarie River, between Dubbo and Narromine. The trimmed lateral margin is steep-faced and step-chipped. The blade is ground on both surfaces at one end, but it has two facets separated by a ridge on the trimmed surface, and one on the crust surface. These three facets form a two-edged gouge-like blade. It is $14 \times 7 \times 4$ cm., and 1 lb. 2 oz. in weight. It is made of a fine-grained indurated shale, and is elongate-oval in shape.

(C). *Trimmed on one or both lateral margins and end* (Plate xvi, fig. 3).—The trimming is limited to one margin and end on two specimens only, and is present on both margins and end on eighteen. On the latter series a tongue of crust extends from the butt along the surface between the trimmed margins. Two exceptions have the ground blade on the untrimmed end. They are all oval in shape, and range from 9 to 21 cm. long, 6.5 to 11 cm. wide, 2 to 6 cm. thick, and from 8 oz. to 3 lb. 8 oz. in weight.

Localities.—*North Coast*: Bulga (Hunter River Valley). *South Coast*: Quibray (2), Bellambi, Lake Illawarra (4), Shellharbour (4), Murrumurang. *Inland*: Lower Macquarie River (Geurie parish), Glen Allan, Ginkin, Duckmaloi River (2), Bungonia. *Victoria*: Cape Otway.

(D). *Trimmed all over one surface* (Plate xvi, fig. 4).—Some are thick at the butt end and taper to the blade, others have a rounded crown in the middle of the flaked surface. The majority are oval in shape, but four are made from straight-sided pebbles, and two are pear-shaped. One from Cape Otway is elongate, straight-sided, and shoe-