

THE CONCAVE STONE IMPLEMENTS OF THE
TASMANIAN ABORIGINES.

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Plates XXVI-XXVIII.

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The following paper seeks to deal with these implements as they are found in Tasmania, and to institute a comparison with those found in S.E. Victoria.

This is the last part of Australia to be united to Tasmania, and here, if anywhere, resemblances should be found.

When we take into consideration the daily life of the aboriginal, a considerable part must have been spent in the making, smoothing, sharpening, and maintaining of his wooden weapons.

These were two in number—the spear and the throwing stick. All the secondary or finishing work on them was done with the concave stone implements.

DIFFERENT GROOVES FOR DIFFERENT PURPOSES.

Two sorts of grooves would, of course, be necessary, and two sorts are found for preparing these two weapons. There is the short semi-circular groove (Fig. 1a.), usually small in diameter. This was evidently for the smaller circumference of the spear or for the sharpening of points of either implement. Then there was the long hyperbolic curve (Fig. 2b.), which is, as a rule, larger and stouter. It appears to have been used in the earlier work on implements. (In my collection, this variety is the commoner form of the two in Tasmania.)

VARIETIES OF GROOVES.

1. *The Worked Groove* (Fig. 2a.).—The chipped markings along the edge show plainly that the groove has been worked; and this is the commonest form of Tasmanian concave implements.

In S.E. Victoria one finds the working developed further into crenulations. These must have acted like so many teeth, and would have been most effective in the first cutting action when getting the wooden implements into shape. I have not seen this form amongst Tasmanian specimens.

2. *The Smooth Groove* (Fig. 3).—This is relatively rare

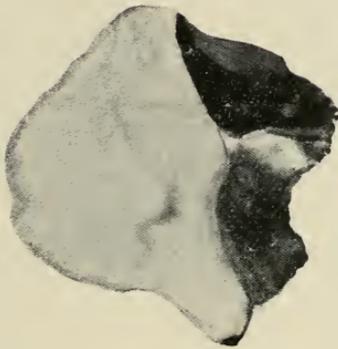


Fig. 1A.

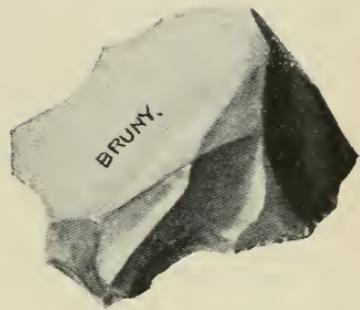


Fig. 1B.



Fig. 2A.



Fig. 4.



Fig. 2B.



Fig. 5A.



Fig. 3.



Fig. 5B.

in Tasmania, but is very common in S.E. Victoria. It is made by the pressure of a rounded wooden weapon on the thin edge of the stone.

This concave implement is often also concave in transverse section, and is like the covers of a closed book which stand out beyond the leaves. Gradually friction reduces these sharp edges (which are quite thin, and in this also resemble the covers of a book). Generally, however, a shadow can be seen running longitudinally along the face of the groove, which shows that at first there is a part untouched by friction.

The absence of any chipping or irregularity would impart smoothness to the weapon being worked. The sharp, thin outside edges are the best possible thing for scraping action.

3. *The Channel Groove* (Fig. 4) is the third variety, and consists of a concave gutter sometimes 24 mm. long (13 mm. is the longest noted amongst Tasmanians). This gutter frequently dips down at its outside edge, *i.e.*, it is bevelled at the gutter's end. This bevelling would be made by rubbing the implement on the spear with long sweeps, when its edge would turn over to a slight extent.

A variant of the channel groove is found in the *underneath groove* (Fig. 5). In this the groove, instead of being made on the narrow surface of the stone, is upon its under surface.

The Tasmanian concaves differ from the Victorian chiefly in the coarseness, strength, and power of the former and the delicacy and fineness common in the latter.

The Victorian as a rule (though not always) made his concave scraper out of a flake that was chipped first, and had, therefore, always a suitable edge for making this groove upon.

METHODS OF USE.

Amongst the Australians a common method is the (1) *two-handed* or spokeshave method as in the illustration of the Aluritja man (Fig. 8).

For this photograph I have to thank Dr. Basedow, from his *Australian Tribes*. This method was sometimes used by the Tasmanians as is seen in Fig. 2b., which shows two thumb-marks for gripping the spokeshave. The Victorian often made a long flake first, and chipped marks on it subsequently for steadying fingers or thumbs. They would then break in the concave grooves which completed the spokeshave.

Sometimes the position of the groove tells that it was for (2) *one-handed* use. The concave is in this case at the end of a stone which may be quite long, or it may be near the end at one side, or it is on such a round thick stone as appears improbable for a spokeshave.

The channel grooves appear to have been used by the (3) *overhand* grip, as in the illustration of the Wonkanguru man (Fig. 9), for which I have to thank Mr. Aiston. The man is here using a flat smoother on a boomerang, but the method of employment is the same.

OTHER IMPLEMENTS USED.

The Tasmanians frequently made, upon a straight edge, a curved excrescence or a sharp point. The protuberance was chipped all round, or, if a point, on both sides. With its use this article does not deal. The angle, where this curve or point joined the straight edge, was often used to form a concave scraper.

If both sides of the curve or point were so used, a (1) "*duck-bill*" (Ling Roth) was made (Fig. 6).

The illustration shows a chalcedony specimen from Lisdillon, near Little Swanport, where one angle of the chipped curve has been so employed.

Just as other implements were often used as concave scrapers in Australia, the Tasmanian would also pick up the first stone to hand if he sought to plane down his throwing stick, or to put a point on his spear. For him the (2) *scraper* with its thinner edge and especially with its chipped margin would be particularly suitable; therefore, it is this implement that was most frequently used.

The comparatively (3) *thin knives* of the Tasmanians are made quite readily into concave scrapers, and, although this is not seen as often as it is North of Bass Straits, yet relatively they are quite as frequent. The Victorians frequently used the little "chipped-back knives" (Etheridge) as sharpening implements, and even the minute, round, chipped scrapers (6 mm. in diameter) are sometimes grooved for that purpose.

The *disc-shaped scraper* (4), which has one flat side (Fig. 1a and b), and the other side either flattened or in a ridge, or conical, is in 16 per cent. of my cases made into a concave scraper. Mr. Clive Lord draws my attention to the fact that dents in its edge are frequently worked in concave implements. It is singular that a similar employment by the Victorians is not noted. Out of 60 (not selected) specimens, not one had been so employed.

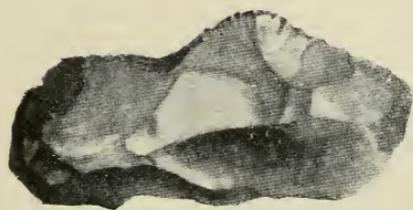


Fig. 6.



Fig. 7.

Fig. 6. Chalcedony specimen from Lisdillon.

Fig. 7. Specimen from Melton Mowbray.

PART OF THE STONE USED.

The chipped stones that are used as implements have, more or less, a definite shape. They have the one side more or less flat, and the other side raised, tending to form a pent house, ridge, keel, or cone. Mr. Scott, whose brother lived long amongst Tasmanian aborigines, was the first (P. & P. R.S. Tas., 1873) to point out that the flat side was always used with the thumb upon it. The keeled or conical side supported the fingers. On the edge of this finger side was the chipping. The concave groove, especially when it was worked, was never straight across the stone. It was always on the same side as the chipping and sloped up from the margin on to this finger-side. This holds good for the first groove that was made in an implement, but frequently two grooves were made. This was, generally, in stones that were more or less flat on both sides. Here both sides were treated as if they could be thumb-sides, and the second groove was therefore cut on the opposite side of the stone to the first groove.

It has been asserted (Noetling, P. & P. R.S. Tas., 1909) that this was an accident, and arose from a mistake on the part of the native. However, my investigations over a small group of concave scrapers show that in 84 per cent. of cases (not including duck-bills) the grooves are on opposite sides of the stone, and only in 16 per cent. upon the same side. In cases where they are chipped, the chipping is on the opposite side, but in the concave and also on the stone around. Apparently the groove which was first made was placed opposite that side which was most plainly the thumb-side.

It is impossible to say why this particular device to work on opposite sides of the stone existed in the Tasmanian. A somewhat similar habit exists in Australians, not indeed in concave scrapers, but in those irregular chunks of stone used as scrapers.

The concave scrapers of S.E. Victoria, in picking up at random 100 double-grooved stones, I find to be in 26 per cent. on opposite sides, whilst 74 per cent. are on the same side. Why this should be it is difficult to say. One might hazard a guess that the Australian frequently used his concave scraper with two hands, that is, as a spokeshave, and he therefore from the start made a tool that would work in that way.

NUMBER OF GROOVES.

The number of grooves that may be made in any stone of course varies; but, as one might guess from the casual

habits of the native, one groove was made, it was used, and the stone then dropped. The following table was made from a random 100 concave scrapers:—

Concave scrapers with 1 groove . . .	44	per cent.
2 grooves . .	20	„ „
3 or more grooves . .	36	„ „

As many as six grooves I have found on one stone, but such a large number is uncommon.

Amongst the Victorians large numbers of the smooth grooves are the rule, whereas almost invariably single concaves are found where a pebble is used, and worked grooves are either single or not numerous.

MATERIAL.

Any material, just as any implement, may serve the Tasmanian in making a concave scraper; but by far the commonest in use is the blue-black metamorphic mudstone, called hornstone by some writers.

This stone has the peculiarity that its surface, in certain conditions, alters. It changes with decomposition to a light buff colour, but it still remains hard and its outlines are still sharp. It is not a real patina, but a decomposition of the rock. Some implements, that I have, are heavily thus patinated, but have other concave grooves worked in them that are blue-black and sharp (Fig. 7).

The difference between the age of the grooves covered with patina and those grooves with no patina would be interesting.

Unfortunately, the patina is acquired in varying times according to the moisture, etc.

All one can say is that some considerable time has elapsed since the first chips were made. How long we can guess at, but a guess it must remain.

EXPLANATION OF PLATES.

PLATE XXVI.

Fig. 1A.	Fig. 2B.	Fig. 2A.	Fig. 2B.
Fig. 3.	Fig. 4.	Fig. 5A.	Fig. 5B.

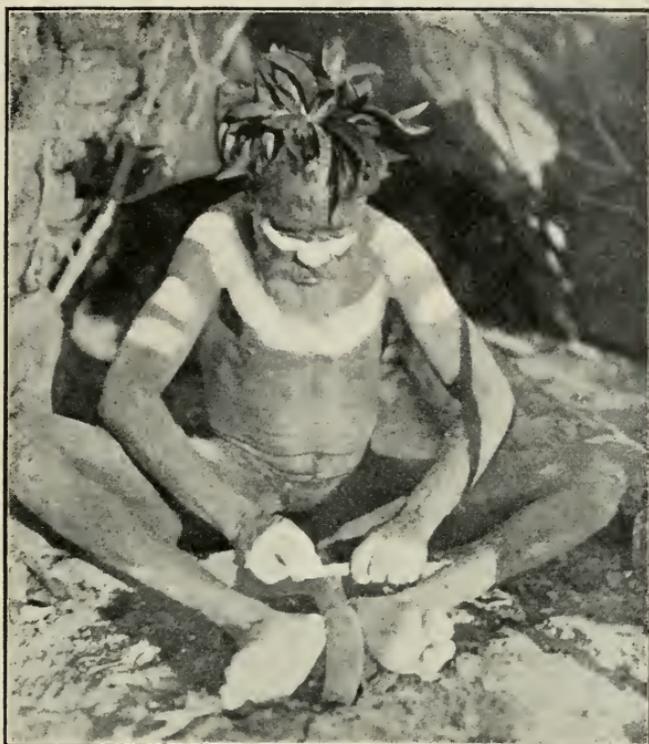


Fig. 8 Aluritja man using two-handed spokeshave. (Illustration from Dr. Basedow's *Australian Tribes*.)

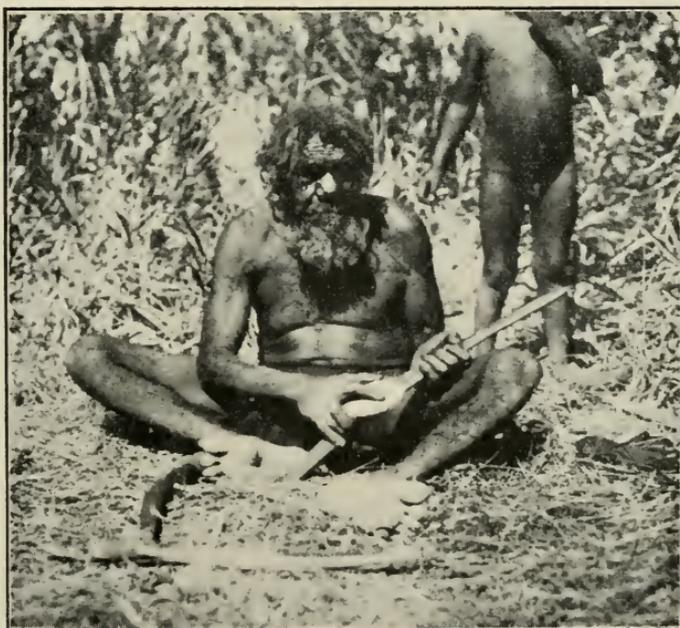


Fig. 9 Wonkanguru man using flat smoother. (From photograph by Mr. Aiston.)

PLATE XXVII.

Fig. 6. Fig. 7

Fig. 6.

Chalcedony specimen from Lisdillon, East Coast.

Fig. 7.

Specimen from Melton Mowbray.

PLATE XXVIII.

Fig. 8.

Aluritja man using two-handed spokeshave. (Illustration
from Dr. Basedow's *Australian Tribes*.)

Fig. 9.

Wonkanguru man using flat smoother. (From photograph
by Mr. Aiston.)