

MEM. NAT. MUS. VICT., XI, 1939.

SOME PREHISTORIC ARTEFACTS FROM THE  
TERRITORY OF NEW GUINEA.*By D. A. Casey,  
Hon. Ethnologist.*

## PLATE VI.

The National Museum has recently received the five artefacts described below. The three obsidian implements are from the Rev. Father Neuhans, M.S.C., and the stone figure of a bird and the carved stone axe were brought to the Museum for examination by E. W. P. Chinnery, formerly Director of District Services, Territory of New Guinea.

## CARVED STONE BIRD

From the Wahgi Valley, about 40 miles W. of Chimbu Station, Fig. 1 and Plate VI.

The figure measures  $4\frac{3}{4}$  inches wide,  $3\frac{3}{4}$  inches high, and  $3\frac{3}{4}$  inches long. It is made of moderately coarse-grained volcanic rock of andesitic type. The surface is considerably patinated. The wings are extended sideways and downwards. The legs, which are widely spaced, are rather stout and of circular section. They appear to have been broken off short, as their under surfaces are not flat. The face and beak have been broken off. The bird is finely made, and is gracefully

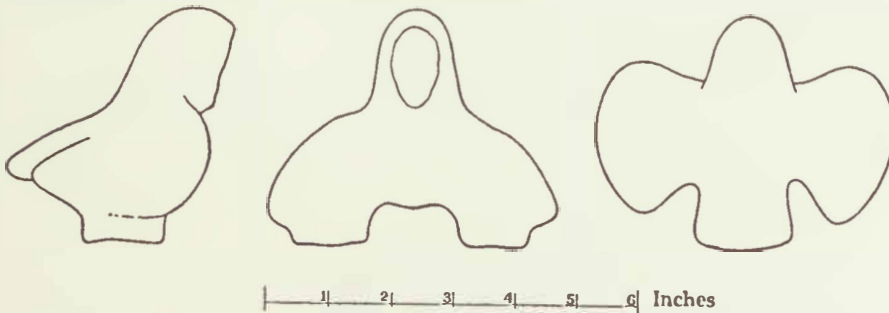


FIG. 1. STONE BIRD, WAHGI VALLEY.

shaped and proportioned in smooth flowing lines. It was found by natives while digging garden land. Like all other prehistoric artefacts from New Guinea, the present natives have no knowledge of its origin or significance. Now in the possession of E. W. P. Chinnery.

Among the prehistoric carved stonework from New Guinea (1) and the adjacent islands, several other bird figures are known.

(a) From Aikora River Goldfield, Papua (2). An elongated figure of a bird which forms the handle of a pestle; the extended wings, stretched outwards and downwards, are similar to those of the Wahgi Valley bird, and the long curved neck and long single leg are circular in section. Found under 10 feet of alluvial sand and clay. British Museum.

(b) From New Ireland (3). A rather massive conventionalized figure of a bird, with folded wings, standing on a single central leg of circular section. It is said to have been used during sacred ceremonies of the Ingiyet Society. National Museum, Melbourne.

(c) From the Waitut River, Territory of New Guinea (4, 5). A crude head and neck only. Australian Museum, Sydney.

(d) From Papua, locality unknown, Fig. 2. A head with elongated neck, broken off at its lowest end. Made from volcanic rock, heavily patinated. The eyes are formed by raised bosses similar in shape to the eyes on the axe from Bougainville described hereunder. Australian Institute of Anatomy, Canberra.

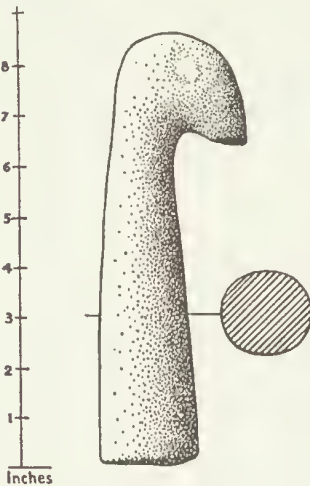


FIG. 2. STONE BIRD'S HEAD, PAPUA.

(e) From the Wahgi Valley (5). A mortar with four lateral projections, one of which is in the form of a bird's head. Australian Museum, Sydney.

(f) From the Wahgi Valley (5). A bowl, the outer surface carved in relief with bird-like figures. Australian Museum, Sydney.

(g) From Bougainville Island. The carved birds' heads on the axe described hereunder.

#### CARVED STONE AXE

From Toiminapo Plantation, S.E. coast of Bougainville Island. Fig. 3 and Plate VI.

On both top and bottom of the body of the axe there is a projection in the shape of the head and neck of a bird. Across each side of the axe is a line of six raised bosses, the end ones forming the bird's eyes. The bosses which form the eyes are sub-cylindrical in form, and appear to have been shaped by grinding with a hollow cylindrical drill. An

enlargement on the butt end is serrated by a number of grooves and notches. Just forward of the bird's head projec-

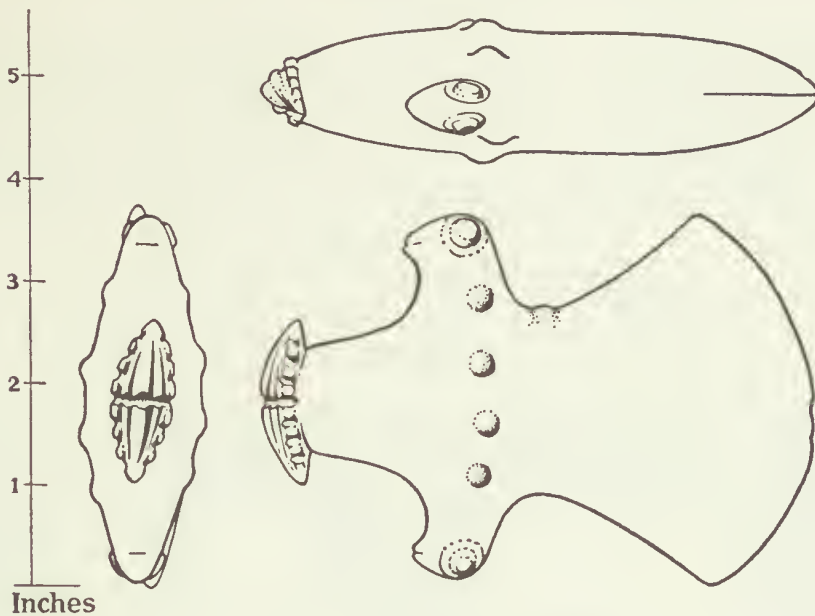


FIG. 3. STONE AXE, BOUGAINVILLE ISLAND.

tions, the body of the axe shows faint grooving, which seems to have been worn by a binding. Rabaul Museum, T.N.G.

The axe is unique, and its use is unknown. Except for the grooving, there is no indication as to how it could have been hafted.

The axe is made of a similar type of stone to that used for the stone bird described above. The surface is considerably patinated.

The bird motif and the decorative raised bosses indicate that it is related to the prehistoric stone mortar culture of New Guinea, as both these features are found on the stone mortars and pestles.

#### OBSIDIAN FISH HOOK

From Lihir Island, off the east coast of New Ireland. National Museum, Melbourne. Reg. No. 43303. Fig. 4.

The implement was found at Kiata, near the south point of the island, at a spot about 200 yards from the shore where the ground over a subterranean watercourse had sunk, exposing the hook, which was nearly a foot below the surface. It was brought to Father Neuhaus by the native who discovered it.

Although Lihir is a volcanic Island, obsidian is not found there.

The implement, which measures  $7\frac{3}{8}$  by  $5\frac{5}{8}$  inches, is made from a large flake. The secondary chipping has been done from both front and back, so that the edge is in the medial plane. The bulb of percussion has been removed, but was approximately at the point A in Fig. 4. The side B-C has been formed by a single fracture which is not an accidental break, since it would be impossible to break the flake here

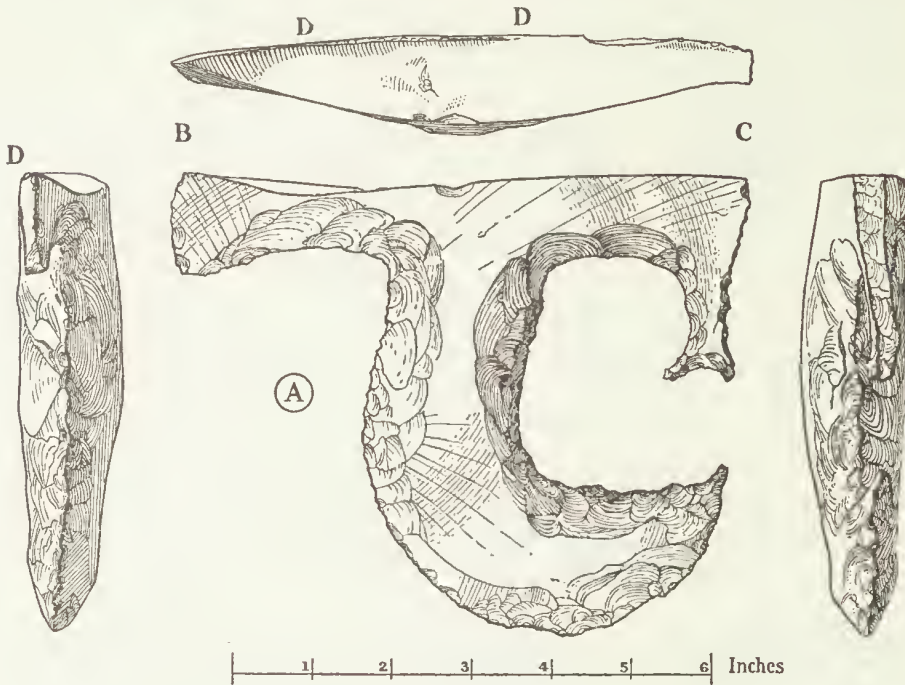


FIG. 4. OBSIDIAN FISH-HOOK, LIHIR ISLAND.

after the hook had been shaped. The sharp upturned edge of the fracture has been slightly trimmed down at D-D.

That this remarkable artifact is indeed a fish-hook, is clearly shown by its similarity in form to certain fish-hooks from the Carolines. Fig. 5 shows three types of hook used at Nukuor, a small island south of the Mortlock group. Nos. 1 (6) and 2 (7) are of pearl shell and are of a type peculiar to this island. Nos. 3 (7) and 4 (8) are of turtle shell, and are types which were used also in other parts of the Carolines. Although it is much larger, the Lihir hook is strikingly similar in form to Nos. 1 and 2. These latter, however, lack the projection opposite the point, but such a projection (the lug to which the line is attached) is present in the other two types. In



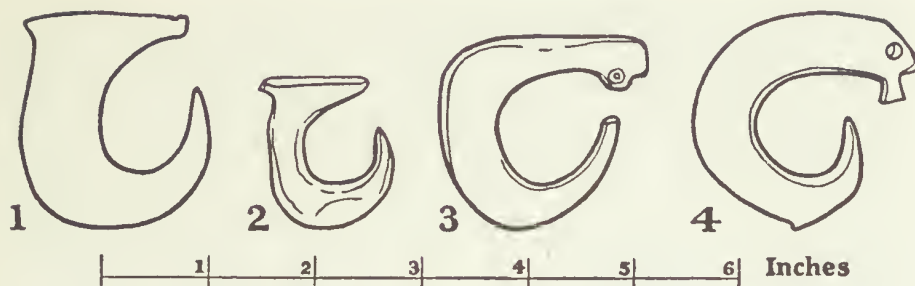


FIG. 5. TYPES OF HOOKS USED AT NUKUOR, CAROLINE ISLANDS.  
(After Finsch, Eilers, and Beasley.)

each case the line runs to the right of the hook, as drawn. In Nos. 1 and 2 it is attached by binding it along the flat side of the hook.

Only one other obsidian fish-hook (Fig. 6) is known (9). It was found in the interior of the island of Manus, on ground that had been cleared of timber. It is of large size (9 x 7½ inches) and is similar in form to the simple one-piece hooks

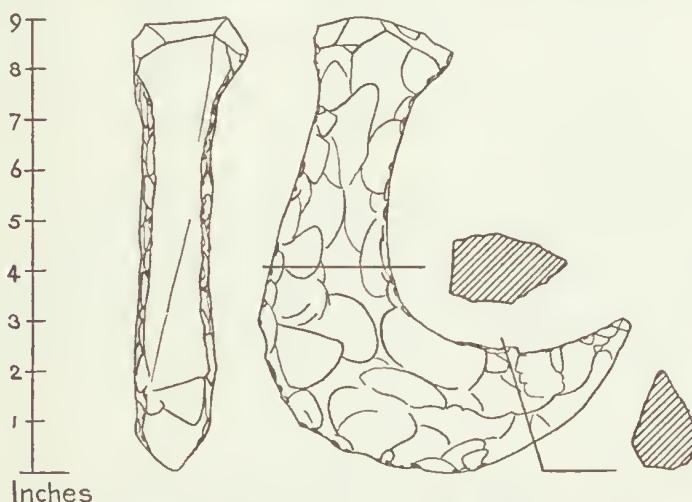


FIG. 6. OBSIDIAN FISH-HOOK, ADMIRALTY ISLANDS.

From photographs supplied by Dr. Alfred Bühler, Museum für Volgerkunde, Basel.

widely distributed in the Pacific. It has been shaped by secondary chipping from both front and back. The back of the hook has been formed by a single fracture.

The only other places in the Pacific where stone fish hooks are found are Easter Island and New Zealand. The Easter Island hooks were made of a close-grained hard stone, shaped by drilling and grinding. Some of them at least, from their apparently impracticable form, seem to have been made for

ceremonial purposes only. In New Zealand, a highly conventionalized greenstone hook (*hei matau*) was used in rites to ensure success in important fishing expeditions, and also as a personal ornament. The *hei matau* can probably be identified as the hook of Maui, who in Polynesian legend pulled the land up out of the ocean with a hook. This legend, or variants of it, is found throughout Polynesia. As well as these stone hooks, ceremonial hooks of other materials (wood, bone and shell) are found at several places in the Pacific.

As the Lihir and Manus hooks are made from such comparatively brittle material, it is probable that they were used only for ceremonial or ritual purposes. In their form, however, there is nothing to suggest that they are types which have lost their utility and become conventionalized. In this regard it should be remembered that many primitive hooks were not intended to be penetrative, like the modern hook, but were merely bait-holders. Those shown in Fig. 5 are in this class.

#### OBSIDIAN BLADE IMPLEMENT

From the District of Talasea, New Britain. National Museum, Melbourne. Reg. No. 43304. Fig. 7a.

The circumstances of the finding of this implement are not known, but it was collected in the District of Talasea by Father Schumm.

It has been made from a long parallel-sided flake, of remarkable symmetry, struck from a prepared core. The flake has been fractured at one end and, as in the case of the Lihir hook, the sharp upturned edge of the fracture has been slightly trimmed down. The "handle" end has been shaped by secondary chipping from both front and back. The function or use of the implement is not known.

Chipping from both front and back, so that the edge is in the medial plane, is a specialized technique requiring considerable skill. Apart from the three implements described, only one other example of this technique is known from the Western Pacific; a large obsidian axe from the Yodda Valley, Papua (10). The rarity of such artefacts clearly shows them to be ancient, and their technique indicates that they all probably belong to the same culture.

Seligman (11) has called attention to the similarity in form and material between the Yodda Valley axe and the obsidian spearheads of Easter Island, and has suggested that they may possibly be related. Metraux (12), however, has pointed out that the great distance separating the two localities and the

fact that no obsidian occurs between them make relationship extremely improbable. The Easter Island spearheads are certainly chipped from both front and back, but they are of crude workmanship and extremely simple form. A tang is formed on a flake by the simple method of making two

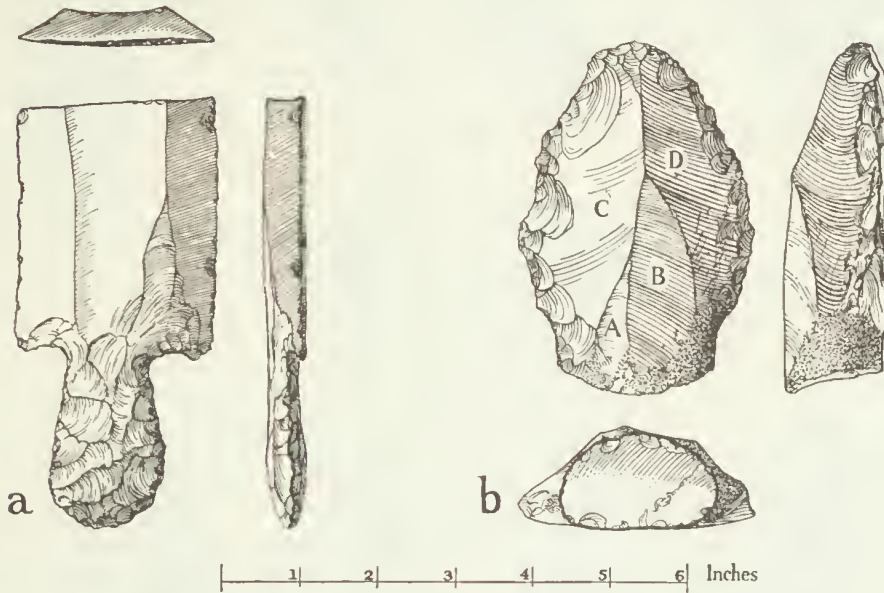


FIG. 7. (a) OBSIDIAN IMPLEMENT, TALASEA, NEW BRITAIN.  
(b) OBSIDIAN POINT, LIHIR ISLAND.

notches on its side. Although it is fundamentally the same, the technique employed cannot be compared with the skilled workmanship of the Yodda Valley axe and the other examples described herein.

#### OBSIDIAN POINT

From Lihir Island. National Museum, Melbourne. Reg. No. 43305. Fig. 7b.

When the obsidian hook described above was found, Father Neuhaus asked the natives to look out for any similar artifacts. Shortly afterwards a native brought to him an obsidian point which had been found in a river not very far (about half an hour's walk) from the place where the hook was discovered.

The implement is made from a flake. The base end has been shaped to a roughly oval section by hammer dressing. The base has been fractured, probably after manufacture, as the hammer dressing goes right up to the edge of the fracture.

Superficially the implement resembles the obsidian flake spearheads from the island of Manus. It has, however, been made in quite a different way. In the Manus spearheads the primary flakes are all struck from the same direction (i.e., from the base, towards the point). In this case, the flake from which the implement is made has been struck from the direction of the base, as have also flakes A and B, in Fig. 7b, but flakes C and D have been struck from the opposite direction.

This implement is the only known example of hammer-dressed obsidian.

#### BIBLIOGRAPHY

1. Chinnery, E. W. P., *Stonework and Goldfields in British New Guinea*, J. Roy. Anthropological Inst., XLIX, 1919, p. 271: Sherwin, V. H., and Haddon, A. C., *Man*, 1933, No. 166.
2. Barton, Capt. F. R., *Man*, 1908, No. 1.
3. Edge-Partington, J. *Pacific Islands Album*, III, 1898, p. 38.
4. Sherwin, V. H., *Man*, 1938, No. 69: Haddon, A. C., *Man*, 1938, No. 70.
5. Bramell, Elsie, *Aust. Mus. Magazine*, VII, No. 2, 1939, p. 40.
6. Finsch, O. *Ethnologische Erfahrungen und Belegstücke aus der Südsee*, Taf. III (20) and p. 333. Wien, 1893.
7. Eilers, Anneliese. *Inseln um Ponape: Ergebnisse der Südsee—Expedition*, IIB, Band 8, p. 238. Hamburg, 1934.
8. Beasley, H. G. *Pacific Island Records: Fish Hooks*, pl. CLI and p. 99. London, 1928.
9. Bühler, A., *Versuch einer Bevölkerungs und Kulturanalyse auf dem Admiraltatsinseln*, *Zeitschrift für Ethnologie*, 1935, p. 21, fig. 3.
10. Monckton, C. A. W., *British New Guinea Annual Report, 1903-4*, Appendix D., p. 31: Seligman, C. G., and Joyce, T. A. *Anthropological Essays presented to E. B. Tylor*, 1907, p. 327: Casey, D. A., *Mem. Nat. Mus.*, No. 8, 1934, p. 98 and Pl. IX.
11. Seligman, C. G., *Notes on an Obsidian Axe or Adze from Papua*, *Man*, 1915. No. 91.
12. Metraux, Alfred, *Easter Island and Melanesia*, *Mankind*, Sydney, Vol. 2, 1938, p. 98.

#### DESCRIPTION OF PLATE VI

1. Stone Bird, Wahgi Valley, Territory of New Guinea.
2. Stone Axe, Bougainville Island.





1. Stone Bird, Wahgi Valley.



2. Stone Axe, Bougainville Island.  
Prehistoric Artefacts, Territory of New Guinea.