## SOME NEW AND UNUSUAL STONE IMPLEMENTS FROM AUSTRALIA AND NEW GUINEA.

## By FREDERICK D. MCCARTHY.

Curator of Anthropology, Australian Museum.

## (Figures 1–21.)

## ABRADING STONES.

Morella-type. During 1949 Mr. Duncan Mackay of Hereward Station, Morella, central Queensland, presented to the Museum a series of twelve complete and several imperfect specimens of a type of abrading stone not previously recorded in Australia. They were found in widely scattered places in the district, which is part of the Darling Downs, mostly near creeks and on claypans, but some were collected on hills some miles away from permanent water. One of the claypans yielded almost a dozen specimens. There is no evidence to suggest that they were produced by natural agencies, in fact, the polishing on them is obviously artificial.

They are all flat-sided pieces of silicified wood, mostly rectangular in transverse section, but some are plano-convex, oval, lozenge and triangular in section. Silicified wood is abundant in the district.

E.53229.1 (Figure 1) bears the greatest amount of use on its numerous polished surfaces, which are separated by sharp ridges. It is  $10.2 \times 2 \times 1.8$  cm., almost square in section, and the lower surface is flat with a deep groove in the middle; the opposite surface is flat at one end on which there is a very shallow groove, there is a deep groove in the middle, and the other end is ridged. One lateral margin or side is flat at one end which bears a very shallow groove, there is a second shallow groove in the middle, then a hump, and a third shallow groove at the other end adjoining a narrow grooved facet on its margin; the opposite side has a bevelled surface along each margin, between which is a flat face at each end, and a sharp ridge (between the grooves) in the middle. All of these surfaces are highly polished, and they bear in all eight grooves from some just begun to two almost 4 mm. deep. The grooves are from 1.6 to 2 cm. wide, and the deepest two are situated approximately in the middle of the lower and upper surfaces but not directly opposite one another.

E.53229.2-4 (Figures 2-3, 6) are three other well-used specimens of a similar type,  $9 \times 2.5 \times 2$ ,  $9.3 \times 3.5 \times 1.5$ , and  $11.5 \times 3.4 \times 1.8$  cm. The largest one has broad upper and lower surfaces on each of which is a deep groove; these grooves are opposite one another, are closer to one end than the other, and are from 2 to 3 cm. wide. The grooves on both surfaces are formed by a narrow bevelled groove at each end and then a wider groove extending to the middle, there being two opposite narrow pairs and two opposite wide pairs of facets forming an encircling groove. The narrow pairs are separated by a narrow flat strip of unused cortex on each lateral margin. The surface is rough and ridged and the polishing extends from the groove at one end and halfway to the other end on one surface, and partly along the ridges on the other surface. One lateral margin is lightly polished from end to end, with the beginnings of a groove on each end, and the opposite side has the beginnings of a groove at one end. The second specimen has six grooves, among which two depressions form the groove on one broad flat surface, and the beginnings of the groove on the opposite surface; one lateral margin has two narrow bevelled grooves 2.5 and 4 cm. long, separated by a median ridge, and the opposite side has narrow grooves also. The third specimen has five grooves, four of which form an encircling groove closer to one end than the other. On one broad flat surface the groove is 3 cm. wide and 4 mm. deep, but the opposite groove is not so deep, and adjoins an