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STONE HAMMERS OR PESTLES OF THE NORTH- WEST COAST OF AMERICA

BY HARLAN I. SMITH

The stone hammers or pestles of the northwest coast of America represent a variety of types of peculiar distribution. An examination of the specimens in the American Museum of Natural History, New York, reveals the following facts:

The different types of these hammers have many features in common. Their use for driving wedges causes many of them to have concave bases, while those used for rubbing have become but slightly convex on this surface. They usually have a well-defined head, which in general is cylindrical, and extends some

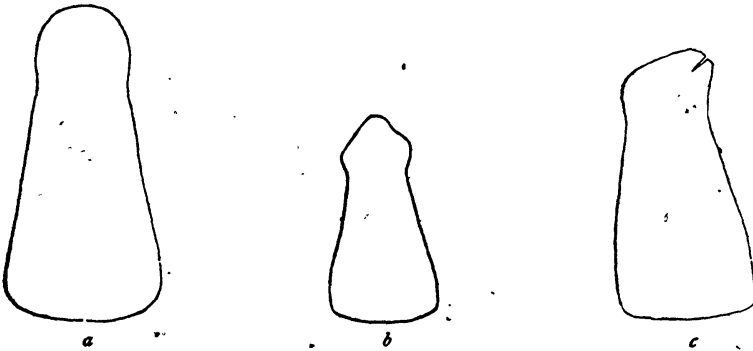


FIG. 9.—Forms of hammers or pestles from Thompson river valley, British Columbia. a, No. 16-2426, Kamloops; b, No. 16-2537, Kamloops; c, No. 16-2870, Spence's Bridge. (One-fourth nat.)

distance up from the base (figure 10). Rarely the body meets the base without such a head, except in those cases where the body is bulging (figure 9), instead of flaring toward the base (figure 12).

Each variety, so far as we know, may be assigned to a particular region. In the specimens from the valleys of Thompson river

and the upper Columbia (near Spokane) the body is conoid in shape, as shown in figure 9, *a*. The top is sometimes made in the form of a face or animal head (figure 9, *c*); frequently it is of hat-shape, as shown in figure 9, *b*.

In the valley of Fraser river, near Lytton, British Columbia, there is a type with a well-defined cylindrical head, larger than

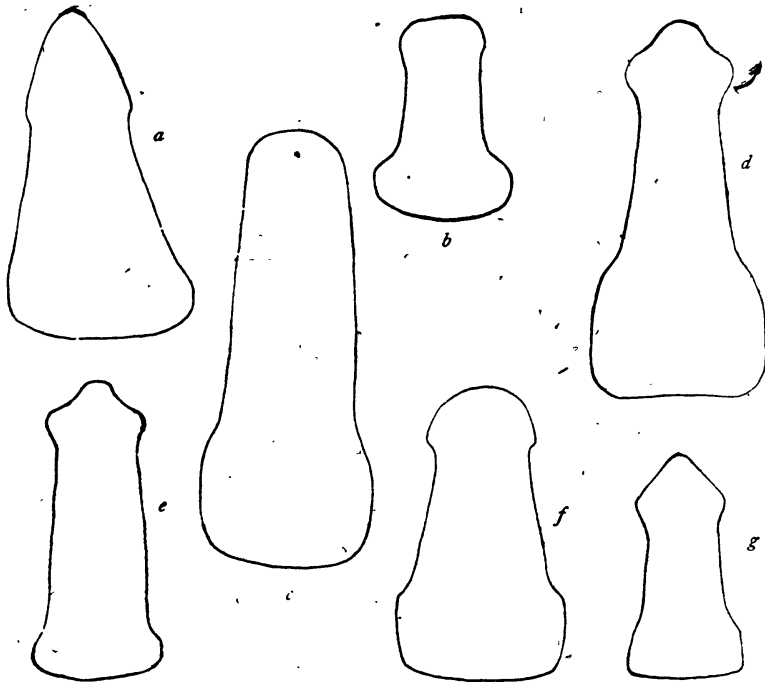


FIG. 10.—Forms of hammers or pestles from Lytton, B. C. *a*, No. 16-2908; *b*, No. 16-3221; *c*, No. 16-3222; *d*, No. 16-2904; *e*, No. 16-2958; *f*, No. 16-2907; *g*, No. 16-2906. (One-fourth nat.)

the tapering body, the sides of which meet the base at nearly right angles, as in figure 10, *d-g*. The prevailing form of knob at the top of the handle of this type resembles that of the Thompson valley type (figure 9, *b*), and it occurs also in Alaska. At Lytton is also found a conoid knob at the top of the handle (figure 10, *a*). Another hammer of this form (figure 11, *a*) has been found in the delta of Fraser river. In that region, however, many

types are in evidence, as one might expect, if it were visited by many tribes in the past, as it is at present.

On the western and northern parts of Vancouver island, the typical form of hammer is provided with a head at each end, the faces of which are nearly parallel, and the upper and lower ends somewhat alike, except that the latter is larger (figure 11, *b*, *c*).

In Alaska there are two types, one resembling the form found at Lytton, save that it is much more slender and tapering (figure 12), and the other having a handle like a flatiron, saw, or paddle

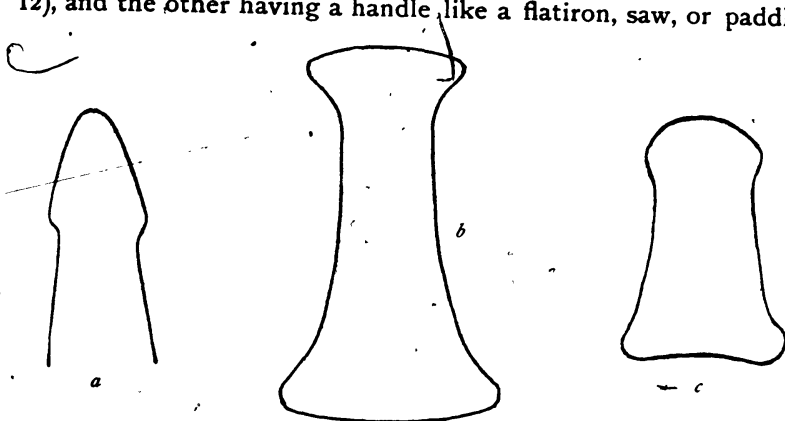


FIG. 11.—Forms of hammers or pestles from British Columbia. *a*, Fragment from Eburne, Fraser river delta, No. 16-5208; *b*, from Clayoquath, Vancouver island, No. 16-2124; *c*, from Fort Rupert, Vancouver island, No. 16-2226. (One-fourth nat.)

(figure 13). This type has a very short body, which resembles the head of the other types, and which might well be called a head, were we able to consider the body suppressed. The practically cylindrical body, which does not appreciably taper or flare, meets the slightly convex or concave base at nearly right angles, and never with a sharp, acute angle. Except in one case (figure 13, *c*) I have not seen a marked line between the body and the handle, the ends of which, in some cases, are ornamented with notches or human faces in relief. These hammers seem to have been used for rubbing as well as for pounding.

Specimens of the types found in the valley of Thompson river, at Lytton, and in lower Fraser valley, have been found in graves

not associated with evidences of contact with civilization, and accompanied with chipped stone arrowpoints and other things which indicate that they were made prior to such contact. Sev-

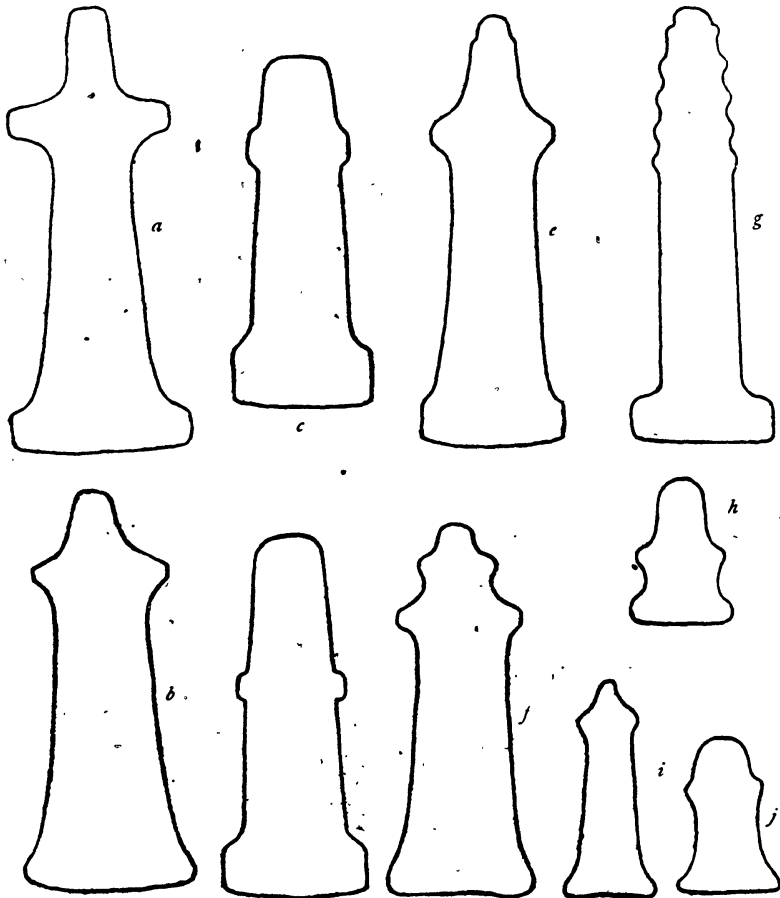


FIG. 19.—Forms of hammers or pestles from Alaska. *a*, Prince of Wales island, No. E-53; *b*, Sitka, No. E-21; *c*, Yakutat, No. E-64; *d*, Chilcat, No. E-44; *e*, Chilcat, No. E-35; *f*, Sitka, No. 19-70; *g*, Chilcat, No. 19-88; *h*, Fort Wrangel, No. E-20; *i*, Sitka, No. 19-73; *j*, Auk, No. 19-74. (One-fourth nat.)

eral were found in a shell-heap in the delta of Fraser river, at considerable depth below many undisturbed shell-layers, over which was a stump of a Douglas fir more than six feet in diameter.

The curious handles of the Alaskan type—resembling those of

paddles, saws, and native adzes—are such as convenience might suggest. Since these hammers have many features in common with the prehistoric hammers of the northwest coast, the special-

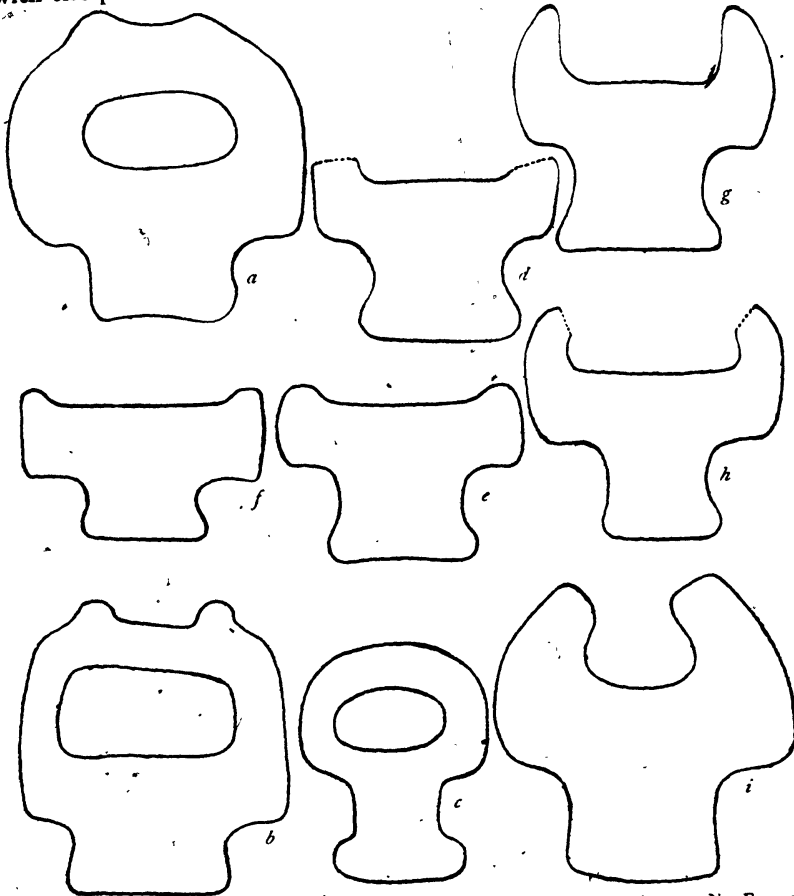


FIG. 13.—Forms of hammers or pestles from Alaska, and British Columbia. *a*, Angoon, No. E-1945; *b*, Prince of Wales island, No. E-48; *c*, Stickeen river, No. 19-59; *d*, Juneau, No. E-25; *e*, Takoo, No. E-47; *f*, Yakutat, No. E-94; *g*, Northern British Columbia, No. 16-164; *h*, Juneau, No. E-24; *i*, Tongass, No. E-1318. (One-fourth nat.)

ization of the handle does not seem to be sufficient reason for differentiating this form from the others. If this form of hammer were introduced from the Hawaiian islands,¹ as Professor Mason sug-

¹ In vol. I, No. 1, p. 9, of the *Occasional Papers of the Bernice Pauahi Bishop Museum*, Honolulu, the specimens to which Professor Mason refers are described as coming from the Society islands.

gests,¹ it might be expected that it would not present so many differences from the *poi* pounders, and so many similarities to the three types of hammers described above and known to be old in America.

All the *poi* pounders that have thus far been brought to my attention, have very convex bases and no heads (figure 14). The bodies are slender, and always flare to meet the base with a very acute angle, forming an implement of bell shape. In this respect they resemble some Ohio and Kentucky pestles as much as they do those from Alaska. The handles resemble paddle-handles, but are much more graceful. A considerable variety of forms is found in certain groups of islands of the Pacific.²

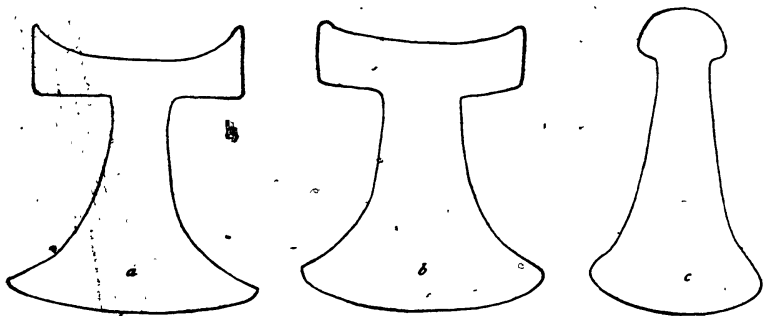


FIG. 14.—Forms of hammers or pestles from the Hawaiian islands (?). a, No. S-5220; b, No. S-5219; c, No. S-5221. (One-fourth nat.)

Although the surfaces of some of the Alaskan hammers are disintegrated, and appear very old, yet it will be important to note if this form is discovered, as the three mentioned types have been, under circumstances that prove it beyond dispute to have been made before contact with white people. It seems hardly credible that the vast number of these curiously handled specimens, each of which required much patient labor, should have been made within the short period since Russian colonization; and we look forward with interest to more definite information on the subject.

¹ *American Anthropologist*, vol. XI, p. 382.

² Gill, *Life in the Southern Isles*, p. 204. Wilkes, *Exploring Expedition*, vol. IV, p. 48. Finsch, *Ethnologische Erfahrungen*, pp. 206, 329.

