

## NOTES ON KONIAG MATERIAL CULTURE

*Robert F. Heizer*

In the University of California Museum of Anthropology at Berkeley is a large collection of Eskimo material culture which was amassed as incidental to the activities of the Alaska Commercial Company some 60 to 70 years ago (Johnston, 1940). Included in this larger collection, and described here, is a small lot of artifacts from Kodiak Island, and the presumption is that these specimens are to be attributed to the indigenous Koniag or Pacific Eskimo of the locale. Most of the articles are likely to have been secured from resident natives, the majority of whom were Koniag of the island, but the minority doubtless included some Aleuts from the islands to westward, and Athabascans from the Cook Inlet region. A few items in the collection are obviously of Athabascan Indian type and may be presumed to have been imported from the mainland to the east.

The only first-rate study of Koniag material culture is by Kaj Birket-Smith (1941), who has published a careful description of the materials collected by H. J. Holmberg in 1851. There exists no single printed source which contains an adequate summary of the culture of the Eskimoan people of Kodiak. Among the more important single works are those of Birket-Smith (1942), Holmberg (1856), Hrdlicka (1944), Lantis (1938), Merck (1937), and Petroff (1884).

The Koniag belong to the Eskimoan stock, and are closely affiliated both culturally and linguistically to the Chugach of Prince William Sound (Birket-Smith, 1941, p. 124). No doubt through this mainland connection some of the obvious Northwest Coast traits present on Kodiak (e.g., the decorations on the basketry hats shown by Birket-Smith, 1941, Fig. 7 and Sauer, 1892, Pl. 17) were transmitted from groups such as the northern Tlingit.

The Koniag economy was based upon salmon and sea-mammals which they took with a variety of hooks and harpoons. Whales were hunted by means of slate-tipped lances poisoned with an extract of aconite plants (Heizer, 1943). Such familiar Eskimo items as the large, open women's boat or umiak, the kayak and bidarks, spearthrower, fur and gutskin clothing, oil lamp, semilunar slate knife or ulu, and pottery (Heizer, 1949) were known to the Koniag. The dog sled was not used, though dogs were present. The Koniag culture was, to use Kroeber's words, "heavily charged with elements usually regarded as Northwest Coast or Asiatic and lacking much of the inventory of 'typical' Eskimo life" (Kroeber, 1939, p. 157).

<sup>1</sup>I am indebted to Professor E. W. Gifford, Director of the Museum of Anthropology for making the Eskimo collections available for study, and to Dr. C. Meighan for the photographs of the Kodiak material.

<sup>2</sup>Petroff records 1943 Koniag in the 1880 census. Holmberg in 1851, believed their number to be about 1,500.

## OBJECTS OF DRESS AND ADORNMENT

### *Boots (Pl. 1a)*

A pair of boots of soft tanned leather (Museum No. 2-6557) is decorated with red flannel and fur strips, red paint and small glass beads. The sole is a single, rather stiff piece of tanned, dehaired leather to which is affixed, with fine two-ply, left-twist sinew thread, the upper. The sole seam is flat and there is no welt or puckering. The upper consists of a small triangular section to form the toe curve and the top has a vertical seam up the back. The decoration comprises a vertical strip of alternating blue, white, yellow and red seed-beads, 15 beads wide, running vertically down the front of the top which splits to cover the seams of the upper. Around the bottom run alternating strips of red and white beads. The beaded strips are outlined in faint red pigment, and on each side of the top are crosses marked in red. The opening has soft gray fur edging sewed to a red flannel strip, and there are four double tassels of fur and flannel.

These boots are decorated in precisely the same fashion as those shown by Osgood (1937, Pls. 4, 5) from the Tanaina of the Cook Inlet region.

## HUNTING IMPLEMENTS

### *Spearthrower (Pl. 1b)*

A spearthrower (2-4337) 60 cm. long of the same general shape as those shown by Birket-Smith (1941, Fig. 17) is in the Kodiak collection. This form is unlike that attributed by Mason (1885, Pl. 17) to Kodiak Island, and is similar to one shown by Mason (*op. cit.*, Pl. 6) of doubtful provenience, and to that depicted by Lisiansky (1814, Pl. III) from Kodiak. Mason's Kodiak spearthrower is probably nothing more than an imported Aleutian (Unalaskan?) specimen.

### *Bows (Pl. 1g, h)*

Two wooden bows are quite similar to each other. Birket-Smith's (1941, p. 140)<sup>3</sup> statement that "in contradistinction to other Eskimo bows, sinew backing does not seem to have been employed," does not hold, for both of these Kodiak bows have a sinew cable backing of the general type which Murdock (1890, pp. 308-310, Pl. 12) has called "Southern."

No. 2-6358 is 134.5 cm. long. The grip is nearly cylindrical and the front is flat (max. width 5 cm.) and the back rounded. The sinew cord consists of 12 small two-ply right-twist sinew cords laid together and bound with a spiral wrap of a single two-ply sinew cord. On either side of the grip are three sinew cord wrappings which fasten the cable to the wood. Between the grip and the nock are two other sets of double two-ply sinew cord attachments, the first set having three double cords, the second set having four double cords. The cable or composite backing-cord is not anchored at the nock, but as each set of attachment cords is taken off the cable is diminished by a certain number of elements so that the last wrap uses the last remaining sinew strand of the cable.

<sup>3</sup>Holmberg (1856, p. 106) also denies sinew-backing on bows.

One end of the bow string has a looped end formed by splicing; the other end is free and was probably knotted into a loop when the bow was strung. The bowstring consists of three right-twist sinew strands.

The second bow (No. 2-6363) is 131 cm. long and is of similar construction. The slightly rounded back is 4.0 cm. at the widest point. The multiple cord cable consists of 10 fine braided sinew strings into which are inserted numerous short red cotton threads and tufts of blue thread for decoration.

*Darts and Harpoon Arrows* (Pl. 1c-d, Pl. 2d-g)

A sea-otter dart (2-3043) practically identical to those shown by Birket-Smith (1941, Fig. 15g-h) is 126 cm. long, including the bone socket piece which is 20 cm. in length (Pl. 1c). The bone head (Fig. 1, No. 2) is barbed, has a line guard to which the braided sinew line is looped, and has a straight tang. The wooden shaft is painted red. The braided line at the distance of 74 cm. from the barbed head divides, and each leg of the Y is tied to the dart shaft 24 cm. apart. The feathering is radial and is attached to the shaft in the manner described by Birket-Smith (1941, p. 138).

Four harpoon arrows (2-6359, 2-6360, 2-6364, 2-6365) have necks for engaging a bowstring (Pl. 2g). Each is about 78 cm. long including the bone socketpieces (Pl. 2d-f) which range from 22 to 26 cm. in length and are 1 cm. in diameter. The small heads (Pl. 2d-f) are unilaterally barbed and have line holes to which the braided retrieving line is attached. In each instance the line divides with the ends tied to the shaft. The shafts are painted red, and under the fine sinew wrap which attaches the socketpiece to the shaft, is a piece of thin birchbark. Filed notches and incised lines on the heads (Fig. 1, Nos. 1, 3) probably represent property marks.

A dart shaft 106 cm. long which is now equipped only with feathers (2-3042) has a tapered socketpiece made in the fashion shown in Fig. 1, No. 6. The longer and thinner socketpieces of the sea-otter darts and harpoon arrows described above are similarly constructed. In all of the socketpieces the cavity for receiving the butt of the point is too large and has been partly filled with a wooden bushing.

*Seal Harpoon* (Pl. 1f)

A complete seal harpoon with float attached to the shaft (2-6350) is like one shown by Lisiansky (1814, Pl. III) and Birket-Smith (1941, Fig. 13). A similar Cook Inlet Tanaina specimen is illustrated by Osgood (1937, Fig. 16).

The harpoon shaft is cylindrical and from a maximum diameter of 3 cm. at the proximal end, it tapers regularly to 1.2 cm. diameter at the butt end. The unilaterally barbed head is 17.6 cm. long, and rests in a simple socket in the end of the wooden shaft. There is no separate socketpiece or foreshaft, the end of the shaft being simply bound with a twisted sinew cord. The harpoon line consists of a heavy, flat braid of sinew 105 cm. long into which have been inserted long hairs. The heavy line has attached at one end a sinew cord loop to which is attached the "leader" for the barbed head, and at the other end divides into a Y or martingale, the ends of which are attached to the shaft 77 cm.

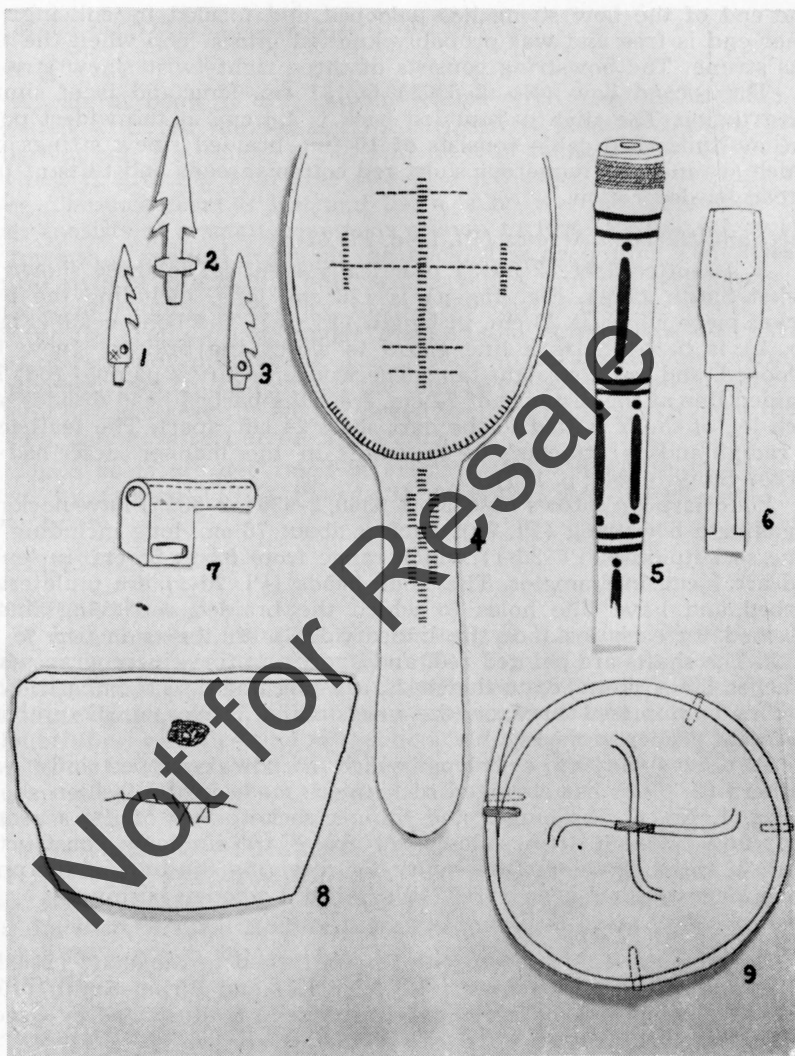


Figure I

apart at the points where the black-painted central section of the shaft meet the red-painted fore and aft sections. The fore-branch of the Y is 85 cm. long, the aft-branch is 92 cm.

The skin float is attached to the shaft by sinew cord bindings, and there is a bone mouthpiece (Fig. 1, No. 7) with the (wooden ?) plug missing.

The shaft is painted red with designs in black for the upper 81 cm.



of its length (Fig. 1, No. 5). The central portion of the shaft is painted black, and the lower 105 cm. repeats the black-on-red decoration of the top third. All sinew bindings affixed to the shaft are underlaid by neatly trimmed wraps of b'rchbark. In all respects our specimen is a duplicate of that shown and described by Birket-Smith (1941, p. 135, Fig. 13).

*Lance (Pl. 1e)*

A heavy casting lance with a wood shaft and bone head with a copper tip (2-6288) was probably used for whale hunting. The heavy barbed bone head is 29 cm. long, fits directly into a socket hole excavated in the wood and has neither line hole nor line guard for attachment of a retrieving line. The Kodiak method of whale hunting by throwing non-retrievable spears whose loosely socketed tips were poisoned with an extract of aconite is well known (Heizer 1943), and this implement would serve such a purpose. The wooden shaft is 105.5 cm. long. The smaller end is flat and could have been fitted to a spearthrower, though the spear could have just as well been cast by hand in the manner shown by de Mofras (1844 Vol. 2, frontispiece). Just below the copper tip in the thin edge of the bone head are three small notches which may be property marks which served to identify the hunter's weapon.

*Wooden Quiver (Pl. 2b)*

The beautifully made and decorated wooden quiver (2-6570) is 94 cm. long. The top, which is fitted with a flat mortised round lid, is 10 cm. in diameter and the bottom is 7 cm. in diameter. The thickness of the walls is .7 cm. The quiver is in two pieces and was apparently made by splitting the cylindrical solid wood vertically and then hollowing out each half. The seam is offset slightly in several places to prevent vertical slipping of the joint. The halves are tightly joined by sinew braid strings at the bottom and center which lie in grooves. At the top the joint is held tight by crack-sewing a braided sinew cord through two holes.

The exterior design (Pl. 4) is a combination of incising and painting, using black and red pigment. Taken all together, this is as neat a piece of aboriginal woodwork as one would want. The indications are clear that a metal knife was used to carve the wood. Such quivers were used in bidarka hunting.

*Whaling Lance Heads of Slate (Pl. 2j-1)*

What are almost certainly 3 tips for poisoned whale spears (2-3021, 2-4010, 2-4009) are shown in Pl. 2j-1. One has a short wooden handle attached by a thin spiral wrap of baleen; the other two are unhafted. What are probably property marks for identifying the hunter's weapon are a series of short incised lines along one edge of one specimen. The hafted blade is 33.5 cm. overall length; the other two measure 19.5 and 25.5 cm. long. These specimens are rather similar to ones collected by Holmberg and described by Birket-Smith (1941, Fig. 16).

*Skin Boat Models (Pl. 2a, c)*

A model (2-6340) of a three-hatch skin boat (bidarka) is 70 cm. long, 9.0 cm. wide, and 6.0 cm. high (Pl. 2a). From the bow, the center

of the hatches are at 20.3, 30.8 and 50.5 cm.; their diameters are, respectively, 4.0, 4.5 and 4.0 cm. The deck is decorated with single strand strings of alternating red and blue glass seed beads.

In the features of the vertical stern, bifurcated bow curving upward, and frame construction, our specimen is like that described by Birket-Smith (1941, p. 147).

The second model (2-5817) is 50 cm. long, 6.0 cm. high and 9.0 wide. The hatch is 7.5 cm. in diameter. In construction it differs from the other model described above in the mode of support of the hatch coaming. A flat, circular piece with two tenons fitting into the heavy gunwale at the bottom and the coaming at the top help to support the man-hole frame which is additionally supported by fore and aft curved deck beams arched between the gunwales. The shape of the bow bifurcation and the notch in the vertical stern are additional points of difference.

#### *Fishing Equipment (Pl. 2i)*

The contrivance shown in Pl. 2i (Museum No. 2-7530) was apparently for catching codfish. Holmberg (1856, p. 385) describes a similar rig where the hook was the composite angled bone type characteristic of Kodiak and the Aleutians (cf. Birket-Smith, 1941, Fig. 23) in the following words: "The (hook) was connected, by the means of a cord about a foot long with the end of a stick, to the other extremity of which was tied a cord twice as long with a sinker (usually a round stone), to the middle of the stick was tied the fishline, and the whole apparatus was allowed to sink to 50 or 60 fathoms, or until the sinker touched the bottom." The long fishing lines were made of kelp (cf. Hrdlicka, 1944, p. 59).

The piece shown here consists of a round, red-painted wooden stick 53 cm. long and 1.0 cm. in diameter. The end of the braided sinew line is wrapped around a knot of dried kelp (the remnant of the original fishing line) and is doubled as far as a knot where it separates in a Y to attach, at points 16 cm. apart, to the wooden bar and is then carried out to the ends of the bar, being tied along it at three points with a fine two-ply right-twist sinew cord in much the same manner that the heavy sinew cable is attached to the back of the bows described above. The braided cords seat in notches in the ends of the stick and extend 39 cm. to where they attach to heavy, handmade copper hooks. Fine, doubled sinew cords are attached to the wrappings of each hook, but what their purpose was is uncertain.

The round stone sinker (9 cm. in diameter) has an equatorial groove and is attached to a braided sinew cord about half again as long as the hook leaders. Toward the parallel bar this braid bifurcates and has two tied loops at the termini which slip around the bar and are held in position with a fine sinew cord tie.

#### *Small Nooses (Pl. 2h)*

A dozen identical nooses (2-4430) may have served for catching fish or small mammals (cf. Nelson, 1899, Pl. L1). Osgood (1937, p. 79) mentions that the Iliamna Indians make ground squirrel snares from the stem or shaft of feathers. Our snares may have served such a

purpose. A fine two-ply right-twist sinew cord, 49 cm. long, is tied to a small round shaft of wood. Under this cord is run one end of a split feather or quill 2 mm. wide which has a simple overhand knot tied in it to prevent its being drawn back under the cord. The noose is then formed by tying the other end of the quill in an open slip-knot around the quill shaft.

## HOUSEHOLD IMPLEMENTS AND TOOLS

### *Wooden Ladle (Pl. 3e)*

A handled ladle (2-6273), made by steam-bending a piece of soft wood in a circle and attaching a separate bottom, is 10 cm. in diameter, 22.5 cm. high and has walls of 0.6 cm. thick. The joint is made by 6 coarse vertical stitches of split root. One stitch catches the bottom which is also attached by 4 round wooden pegs. The inner rim is bevelled, and there are 2 raised interior prominences or lugs 2 cm. below the lip and opposite each other—their purpose is unknown. The bottom is decorated, as shown in Fig. 1, No. 9, with the lightly engraved design of a swastika. The entire exterior surface has been painted red, but the color is now somewhat worn.

### *Wooden Spoon (Pl. 3a)*

A large red-painted wooden spoon (2-3024) is 32 cm. long. The handle, 3.0 cm. wide and 14.0 cm. long, is decorated on its upper surface, and the bowl, 9.5 cm. wide and 3.0 cm. deep, is incised both inside and on the bottom (Fig. 1, No. 4).

### *Slate Ulo*

A polished slate ulo (2-3905) with a pecked (not drilled) hole in the middle near the back is typical of Kodiak ulos (cf. Hrdlicka, 1944). It is labelled in pencil "Kaniuk" (a village on the north shore of the island) and may be either a recent or ancient archaeological piece—I incline, on the basis of its appearance, to the latter probability. Its only notable aspect is a simple incised design (Fig. 1, No. 8) on one surface, an interesting feature in view of the distinctive Kodiak trait of incising small flat slate pebbles (cf. Heizer, 1947, Fig. 6; Heizer, 1952).

### *Skin Bag (Pl. 3d)*

A rectangular skin bag (2-4527) in the collection is basically similar to one of somewhat uncertain provenience, but attributed to Kodiak Island, by Birket-Smith (1941, p. 150, Fig. 28). The same style of decoration occurs on a head-dress from Kodiak pictured and described by Birket-Smith (1941, p. 129).

The bag is 41 cm. long and 23 cm. wide. The pouch is 27 cm. long, the balance being the decorated top. The curved upper portion has a black background (from graphite rubbed on the surface). A red-colored leather border is edged with colored sinew braid and the edge has a hair fringe. Two designs, apparently representing plants (note "leaves" or "flowers") and a "cross" are applied on the black background in stained red leather bordered with sinew embroidery. Below this is a horizontal band of black with red-flannel ends and a red leather edging with hair and sinew braid loop fringing. On the lower body is a similar

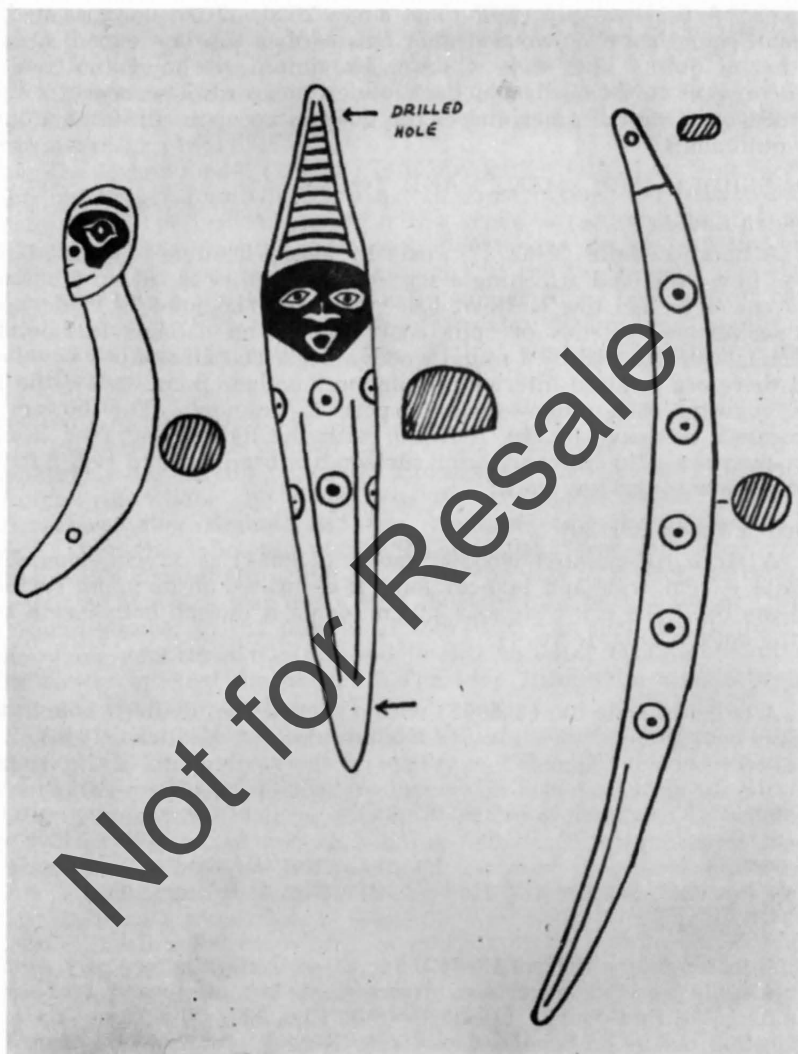


Figure 2

horizontal panel so placed that when the bag is folded the two bands lie opposite each other. The back is of plain yellowish thin tanned skin and consists of a number of separate pieces sewed together with the seams inside.

*Fur Cap (Pl. 3c)*

A soft fur-covered cap (2-6564) has a flat cotton cloth top. The fur sides are 8 cm. high and the round cloth top is 14 cm. in diameter. Four carved ivory ornaments (Fig. 2) are attached to the sides.



*Skin Pouch* (Pl. 3b)

A pouch with two pockets (2-3022) has a leather backing, red-stained skin edging and cotton cloth lining. It measures 28 cm. long and 12 cm. wide. At the top is attached a coarse sinew braid. The upper pocket is 10 cm. deep; the lower pocket is 11 cm. deep.

OBJECTS FOR CEREMONIAL USE

*Puffin-Beak Rattles*

Two rattles (2-6409, 2-6480) consisting of two concentric round wooden rings (scarfed at the ends) joined by a flat crossbar handle and with beaks of sea-parrot or puffin (*Lunda cirrhata*) tied on either in pairs or singly, are not figured here. The diameters of the two rings of each rattle are 14.0, 17.5 and 14.0, 16.5 cm.

These rattles were used for dances (Birket-Smith, 1941, fn. 92) and similar ones are shown by Birket-Smith (1941, Figs. 35, 36) and Langsdorff (1813). A wooden rattle from Prince of Wales Island with attached puffin beaks is shown by Niblack (1890, Pl. IV), and Osgood (1937, Pl. 6, F) illustrates straight dance rattles with clusters of puffin beaks from the Tanaina of the Cook Inlet area.

*Bibliography*

Birket-Smith, Kaj

1941. Early Collections from the Pacific Eskimo. **Nationalmuseets Skrifter, Etnografisk Raekke, I**, pp. 121-163. Copenhagen.

Heizer, Robert F.

1943. Aconite Poison Whaling in Asia and America. **Bureau of American Ethnology**, Bulletin 133, Anthropological Paper No. 24. Washington.
1947. Petroglyphs from Southwestern Kodiak Island, Alaska. **Proceedings of the American Philosophical Society**, Vol. 91, pp. 284-293. Philadelphia.
1949. Pottery from the Southern Eskimo Region. **Proceedings of the American Philosophical Society**, Vol. 93, pp. 48-66. Philadelphia.
1952. Incised Slate Figurines from Kodiak Island, Alaska. **American Antiquity**, Vol. 17, p. 266. Salt Lake City.

Holmberg, H. J.

1856. Ethnographische Skizzen uber die Volker des russischen Amerika. **Acta Societatis Scientiarum Fennicae**, Vol. 4. Helsingfors.

Hrdlicka, Ales

1944. The Anthropology of Kodiak Island. **Wistar Institute**. Philadelphia.

Johnston, S. P. (ed.)

1940. Alaska Commercial Company, 1868-1940.

Kroeber, A. L.

1939. Cultural and Natural Areas of Native North America. **University of California Publications in American Archaeology and Ethnology**, Vol. 38, Berkeley.

Langsdorff, G. H. von

1813. Voyages and Travels in Various Parts of the World, During the Years 1803 - 1807. London.

Lantis, Margaret

1938. The Mythology of Kodiak Island, Alaska. **Journal of American Folklore**, Vol. 51, pp. 123-172. Richmond.

Lisiansky, U.

1814. A Voyage Round the World in the Years 1803 - 1806 in the Ship Neva. London.

Mason, Otis T.

1885. Throwing-Sticks in the National Museum. **Annual Report of the U.S. National Museum for 1884**, pp. 279-289. Washington.

Merck, C. H.

1937. Ethnographische Beobachtungen uber die Volker des Beringsmeeres 1789-91. **Baessler-Archiv**, Vol. 20, pp. 113-137. Berlin.

de Mofras, E. D.

1844. Exploration du Territoire de l'Oregon, des Californies, et de la Mer Vermeille . . . 1840-1842. 2 Vols. Paris.

*Notes on Koniag Material Culture*

Murdock, John

1890. A Study of the Eskimo Bows in the U.S. National Museum. **Report of the Smithsonian Institution for 1883-1884**, Part 2, pp. 307-316. Washington.

Nelson, Edward W.

1899. The Eskimo about Bering Strait. **18th Annual Report, Bureau of American Ethnology, 1896-97**, Part 1. Washington.

Niblack, Albert P.

1890. The Coast Indians of Southern Alaska and Northern British Columbia. **Annual Report of the U.S. National Museum for 1888**, pp. 225-386. Washington.

Osgood, Cornelius

1937. The Ethnography of the Tanaina. **Yale University Publications in Anthropology**, No. 16. New Haven.

Petroff, Ivan

1884. Report on the Population, Industries and Resources of Alaska. **Department of Interior, Census Office**. Washington.

Sauer, M.

1802. An Account of a Geographical and Astronomical Expedition . . . by Commodore Joseph Billings in the Years 1785-1794.

Department of Anthropology  
University of California  
Berkeley, California



PLATE 1



PLATE 2





PLATE 3

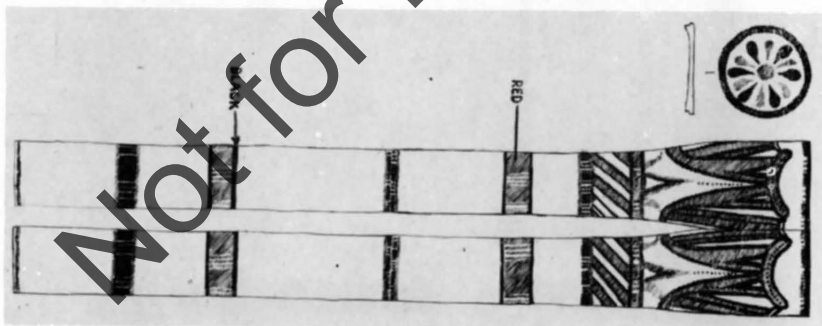


PLATE 4