THE ESKIMO OF BAFFIN LAND AND HUDSON BAY

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CUMBERLAND SOUND

The collection made by Captain Mutch supplements in many respects the types described in my previous publication. A kayak¹ was obtained from Cumberland Sound by Lieut. R. E. Peary in 1896 (Fig. 1). It is 6 m long. It has a flat bottom, the framework of which consists of one central strip of wood and two curved lateral strips. The former is 2.5 cm by 2 cm; the latter two are 4 cm by 2 cm. They are held together by a considerable number of ribs, to which these strips are sewed with sinew and thong.

The ribs are placed over the long strips. They are about 26 cm apart. The length of the bottom is about 4.40 m; its greatest width, near the center, is 38 cm. At the sides of the bottom the ribs are sharply bent upward. Their outer ends are mortised into two strips 11 cm high, which form the gunwale of the boat. The gunwale extends much farther forward and abaft than the bottom, its projection forward being about 127 cm, abaft 33 cm. The height of the tip of the bow over the bottom is 32 cm, that of the stern 12 cm. The deck rises slightly from the ends of the flat bottom towards stem and stern. The central strip of the bottom turns up at the ends of the flat bottom, and continues as a keel towards bow and stern (Fig. 1d and 1f). The cross section of the body of the kayak is therefore flat at the bottom (Fig. 1b). The bow has a sharp keel (Fig. 1a), while the stern is rounded.

The gunwale is kept on a stretch by a number of beams. The width of the deck at the bow end of the bottom is 22 cm; at its widest part, just behind the hole, 56.5 cm; and at the stem end of the bottom, 17 cm. The two central beams are particularly strong. Between them is situated the manhole. The beam in front of the manhole is 3 m from the bow end.

It is bent upward so that its top is 31 cm above the bottom. The beam abaft the manhole is flat. The centre of the manhole is 200 cm from the bow end of the flat bottom and 240 cm

from its stern end, or 333 cm from the extreme bow and 267 cm from the extreme stern. The ribs are strengthened by an additional strip, which is lashed to them on the outside, between the gunwale and the side strips of the bottom. This strip extends forward from the manhole to a point near the end of the flat bottom. The bottom under the manhole is strengthened by a number of broad and thin pieces of wood, which are fastened between the ribs by thongs attached to the boards and slung around the ribs (Fig. 1e).

This framework is covered with seal skins that are drawn tightly over it. The skins are held taut by means of thongs, which are firmly sewed on. The position of some of these is indicated in Fig. 1f. The skins are sewed together with sunken stitches, the thread, which is made of sinew, being evidently applied with a curved needle. Only the terminal knot of each thread shows on the outer side. At the manhole these skins are fastened to a hoop 7 cm wide. It is flat abaft, and has a rather sharp curve in the fore part.

The deck is fitted with a number of lines, which serve to hold the hunting gear. Two ivory pegs are inserted outside of the frame, one on each side, at the point where the stem projection begins. They have slender stems, that are put into holes drilled in each end of the deck beam. Their outer ends are thicker, and each has a perforation, in which a line is inserted that runs across the deck from one side to the other. The point of the harpoon is placed under this line, while its butt end rests under a pair of lines just in front of the manhole. This pair of lines also holds the receptacle for the harpoon line. The specimen here figured (Fig. 2) has a bottom consisting of three boards. The middle one extends beyond the rim of the receptacle in the form of a handle, which is shoved under the deck lines of the boat. The rim is pegged and tied to the bottom. On the right hand side of the receptacle is an ivory hook for holding the shaft of the harpoon. Attached to the end of a line about 5 cm long, on the right hand side of the manhole, is a small ivory implement (Fig. 3) which probably serves to hold the harpoon line, the coils of which are placed on the receptacle, while its hind end is attached to the seal skin float which is carried on the kayak behind the manhole.

The paddle of the kayak above described is 305 cm long; the handle part is 74 cm long, square in the middle, and round at the outer ends, where it is held by the hand. The blades are rounded and narrow, about 6 cm wide and 3 cm thick, with bone tips 5 cm long mortised on to the shaft. The handle is separated from the blades by a ring with a notch in the middle, around which a narrow strip of fur is fastened.

A kayak from Savage Islands, Hudson Strait, collected by Lieut. R. E. Peary, is practically identical in structure with that from Cumberland Sound. A comparison of this kayak with that of the Smith Sound Eskimo brings out clearly the similarity of their types.² The art of steaming wood does not seem to be known to the latter tribe. For this reason the ribs of their kayaks are made of three pieces, one for the bottom, and one for each side. In all other respects the kayaks are of similar construction; only the stern projection of the Smith Sound kayak is shorter, and therefore rises more steeply from the flat bottom. The following table of measurements illustrates the similarity of these kayaks.

	Cumberland Sound	Savage Is.	Smith Sound
Total length	600 cm	640 cm	560 cm
Length of bottom	440	475	456
Length of stem projection	127	126	72
Length of stern projection	33	39	32
Distance from bow to center of manhole	333	360	300
Distance from stern to center of	267	280	260
manhole			
Length of manhole	65	57	40
Height of bow over bottom	32	39	27
Height of deck at bow end of bottom	27	34	26
Height of deck at center of manhole	20	22	22
Height of stern over bottom	12	18	16
Width of deck at bow end of bottom	22	20	10
Width of deck at widest part	56	62	56
Width of deck at stern end of bottom	17	17	18
Width of bottom at widest part	38	44	45
Width of manhole	48	51	47
Elevation, of front beam of manhole	13	10	12
over deck			
Weight	61 lbs	95 lbs	41 lbs

The deck attachments are also much alike.3

The kayak harpoon⁴, of which I have measured six specimens, varies from 155 cm to 166 cm in length, including the movable tusk. The harpoon head (*to'kang*) is rather large and wide, with two barbs, and blade parallel to the plane of the barbs (Fig. 4a). No specimen has been found in which the blade is at right angles to the plane of the barbs, as is sometimes the case on Southampton Island⁵ and on the west coast of Hudson Bay.

The bladder dart (Fig. 5) is also used in the kayak. Its blade resembles that of the large harpoon, but is much smaller (Fig. 4c). One specimen in the collection has a single barb (Fig. 4h). The line of the detachable point is fastened to the harpoon shaft, which is kept afloat by the attached bladder, and serves to exhaust the animal and to prevent its sinking. The dart is hurled with the throwing board (Fig. 6). For this reason its butt end is flattened to fit the groove of the throwing board, and it has a small depression in its end, into which the peg at the rear end of the groove of the throwing board fits.

The lance with detachable point (Fig. 7) is much used in hunting caribou in ponds. Its point is very short, and has no barbs. Its blade resembles that of the lance used for dispatching walrus.⁶

A number of peculiar bone points, the uses of which are unknown to me, are represented in Fig. 4e, 4f and 4g.

The modern winter harpoon is made of wood with iron point⁷ while the ancient harpoon had a bone point firmly attached to the wooden shaft (Fig. 8). Its butt end was provided with a stout bone point, which served to break ice, hard snow, etc.

The head of the winter harpoon (*nau'lang*)⁸ is much smaller than that of the kayak harpoon. Fig. 4b, shows a specimen similar to the one figured on page 473 of my paper on the "Central Eskimo" but in better preservation. It had two points like the large harpoon head. The perforation at the tip shows that the inserted blade was either of slate⁹ or metal. These heads are much thinner than the ones before described. Partly for this reason, and partly on account of the difficulty of drilling a deep socket for the point of the shaft, the socket has been drilled from the side, and only a slight hole is drilled parallel to the axis of the harpoon head at the end of the groove thus produced. In order to hold the point of the shaft in this groove, a string, probably made of sinew, was tied around it, passing through the holes on each side of the groove. A similar arrangement is found on the primitive harpoon points

from Southampton Island.¹⁰ The harpoon head shown in Fig. 4d, is evidently made in imitation of the modern iron *nau'lang*.

The harpoon line of the *nau'lang* passes through a small loop which is provided near the butt end of the shaft. Attached to the line is a small hook (*akparaiktung*). When the harpoon head strikes an animal and becomes detached, the line slips through this loop until the hook catches in the loop, thus holding harpoon and shaft together. The three specimens here shown (Fig. 9) illustrate a tendency to give the hook the form of a long necked bird (compare Fig. 81f). The small ivory attachments shown in Fig. 10 probably serve another purpose. They are slightly grooved on their lower sides, which suggests that they are also attachments to lines, but their form is not serviceable for catches like those here described. The hand support of the shaft of the winter harpoon is generally long and slender, and has a notched head¹¹

(Fig. 11). The series shows that the implement suggested to the makers the hind part of a seal, and that to a greater or less extent some of its forms may be considered as conventionalized representations of the hind part of the seal. The notch between the flippers is in some cases absent (Fig. 11e and 11f), while in others the flippers are represented by knobs placed at the sides of the implement (Fig. 11j).

When the hunter starts for the sealing ground or returns from hunting, the line of the *nau'lang* is coiled up, and the coils are held together by a small leather strip and hooks.¹² Most of these hooks have the form of birds (Fig. 12a, 12b and 12c), whose back is a concave surface, into which the coils of the line fit. In a few cases they have the forms of simple hooks (Fig. 12d).

WEST COAST OF HUDSON BAY

The implements used by the Kinipetu and Aivilik are, on the whole, very much alike, and may be described together. The kayak used by the tribes of the west coast of Hudson Bay differs from the kayak of Davis Strait and Baffin Bay in being much lighter and in having a rounded bottom. Instead of the flat bottom described above, the kayak has rounded ribs, which are attached to eight longitudinal strips (Figs. 105 and 106). The kayak is covered with the inner skin of the seal, and for this reason is much lighter than the kayaks of Greenland and Baffin Land. The kayak of the Aivilik is shorter than that of the Kinipetu, and its stem and stern projections are, comparatively speaking, lower. The kayak of tie Kinipetu has a very long, flat stem projection and a long, rising stern projection. It is painted with a number of black and red hands. Following is list of measurements of a Kinipetu canoe in the Museum (60/3547).

Total length	860 cm
Length of bow, projection	104
Length of stern projection	106
Bow to centre of manhole	463
Stern tee centre of manhole	397
Length of manhole	44
Width of manhole	42
Greatest with of deck	47
Height of extreme end of bow over bottom	15.5
height of extreme end of stern over bottom	28
Height fight of deck at centre Of manhole	30
Elevation of front beam of manhole	42
Space between ribs in manhole	8
Space between ribs fore mad aft of manhole	15
Weight	36 lbs.

The Aivilik build their kayaks for hunting caribou in ponds with a rounder bottom than those which are used for seal hunting in the sea. The paddle of the Kinipetu kayak has a longer blade than that of the Aivilik kayak (Fig. 107). The blades are painted red, their tips black.

The kayak harpoons differ in detail from those used by the Eastern tribes. Most of them

have a wide barb provided with a number of notches (Fig. 108). The blade is generally parallel to the barb, but in some cases it stands at right angles to it. The harpoon shaft resembles in every respect the one described before. The bladder dart is used in hunting seals from the kayak (Fig. 109). The bladder is attached to the shaft nearer to the butt end than to the tip. It is tied to a wooden support attached to the shaft. The bladder has a special mouthpiece with a stopper, similar to the mouthpiece by means of which the seal buoy is blown up. The point of the bladder dart resembles the ordinary harpoon point (Fig. 108e). The harpoon line is tied to the middle of the shaft, rolled up around it, and passed through a small loop near the tip of the harpoon shaft. After the animal has been hit, the harpoon point becomes disengaged, and gradually unrolls the line which is wound around the shaft. The bladder dart is thrown with the throwing board (Fig. 110), which is still ruder in form than the throwing board of Cumberland Sound. It is provided with a notch for the thumb, and a hole for the first finger, but it has no grooves for the other fingers.

No winter harpoons for hunting seals at their holes were obtained by Captain Comer, probably for the reason that this mode of hunting is not much practiced on the west coast of Hudson Bay, since the Eskimo hunt principally near the edge of the land floe. When locating the breathing hole of a seal under the snow, the Aivilik use a curved probing bone (Fig. 111), which is thrust into the snow in order to ascertain the center of the breathing hole of the seal, and to make sure that the seal still visits it. If the hole is deserted, it is covered, with ice. After the breathing hole has been located, a very delicate rod of ivory, attached to a fine string of sinew and a leather ring is inserted in the seal hole (Fig. 112). When the seal reaches the, breathing hole, it strikes the light rod, and by this means the approach of the seal is indicated.

In hunting caribou in ponds, the Kinipetu use a very long harpoon with detachable point (Fig. 113). The harpoon has an iron fore shaft. The harpoon head is connected with the harpoon shaft by two strings made of sinew.

The bows are made of musk ox horn riveted together in the middle. In many cases the tips are made of separate pieces. The bow represented in Fig. 114a, consists of two pieces of musk ox horn, joined in the center of the bow by a V-shaped joint through which four iron rivets are driven. Each end has a tip of hone placed under the horn with a slanting joint and riveted to it. The back of each tip is covered with skin, which extends a little farther than the bone tips. Over these is applied a sinew backing of the same kind as that found on

Southampton Island (see p. 65). A sinew string is wound nine times up and down the whole length of the bow. Then the two sets of strands are twisted in the center, and the twist is secured by a cross tie, the strands of which pass several times between the two sets of twisted sinews, then. around the body of the bow, and finally a number of times under the backing and over the cross tie which secures the twist. The central twisted part of the backing is furthermore held together by a sinew string tied several times around it between the backing and the body of the bow. At each end the wrapping is secured by a number of secondary strands or rings of the same character as those described before (p. 65). These are here also held in place by a number of notches in the sides of the bow. On the inner side, at a distance of 9 cm. from the middle, are two very small horn pegs placed in an eccentric position, the one a little to the right, the other a little to the left, of the middle line of the bow. They protrude about 3 mm above the surface. Possibly they may serve to hold the bowstring in position when the bow is strung.

SMALL CARVINGS AND IMPLEMENTS

A number of additional type forms are shown in the following figures. Among the specimens collected by Captain Mutch at Ponds Bay, the types of ivory carvings shown in Fig. 11a and 11f, p. 17 of this volume, occur repeatedly. In Fig. 222a, a characteristic piece belonging to the group of types shown in Fig. 11h and 11f, is represented. It is characterized by the two bulbs at its end. A type almost identical with this one has been figured by Bessels. 14 It is not quite certain, however, that this specimen was found at Smith Sound. The two line attachments represented in "b", and "c" are illustrated here on account of the similarity of their types. Their use is not quite clear, but it seems probable that they were attached to a wooden or bone shaft, the line passing through the semicircular notch on one side of the specimen. Fig. 222d and 222e, represents two small toggles, probably used at the ends of seal dragging lines. The type is the same as that of some of the specimens shown in Fig. 16, p. 20 of this volume. It will be noticed that the hole drilled through the centre of the implement is always much wider at one end than at the other. This serves for the insertion of the Turk's head knot at the end of the line, as indicated in Fig. 16k. The two bear's heads shown in Fig. 222f and 222g, have the same kind of a double perforation, and evidently served to hold together two parts of a loop.

In Fig. 223 are shown two clasps for seal thongs from Ponds Bay, identical in shape with those shown in Fig. 12, p. 18 of this volume, from Cumberland Sound. The decoration of these two specimens here selected is somewhat elaborate; Fig. 223a, being decorated with a number of black notches along the lower rim, while Fig. 223b, has a sharp edged decorative rim along both the lower surface and the curved edge. A specimen practically identical with the one shown in Fig. 12a, was obtained by Captain Comer from Iglulik. Another one of the type shown in Fig. 12b, was obtained by Captain Mutch in Ponds Bay. It is therefore evident that this clasp is characteristic of the whole area from Melville Peninsula to the southern part of Baffin Land.

Three attachments for the manhole of the kayak, shown in Fig. 224, may be compared to the specimen Fig. 3, p. 12 of this volume. It will at once be seen that they are of the same general type. Fig. 224c, is made of ivory, and was collected on Southampton Island; "b" is made of musk ox horn, and was obtained from the Aivilik; while "a" is also from Southampton Island. It is made of bone, and resembles in shape the one just described.

A very elaborate specimen serving the same purpose, and obtained from the Netchillik, is shown in Fig. 225. The sides of this implement are hollowed out to a thickness of about 5 mm. I do not know the exact use of this attachment; but it is interesting to note that, in Nourse's description of Hall's Arctic expeditions¹⁵, an object of exactly the same form and with exactly the same decoration, is figured, exhibiting the remarkable stability of this type.

The swivels represented in Fig. 226a through 226c, and the eyes shown in Fig. 226d and 226e, do not require any particular discussion. The first two specimens, which were collected in Ponds Bay, are of the same form as Fig. 45i, p. 36 of this volume; and the large swivel, Fig. 226c, belongs to the type represented in "d" and "g" of the same figure. The two small eyes shown in "d" and "e", for suspending the needle case, are also characteristic.

That marked "e" may be compared with Fig. 14k, on p. 19 of this volume. It is from Ponds Bay; while "d", a specimen from Southampton Island, in the rudeness of its form and in the irregularity of the black dot ornament, shows the characteristic modern type of the implements from that district.

The series of eyes for dogs' traces, illustrated in Fig. 227, all from Southampton Island, are also of some interest in illustrating types. The eye shown at "a" is made of a flat piece of bone. It is cut irregularly, the lower edge being almost straight. The hole is drilled out, and the intervening sections of the bone are then broken out. The perforation for attaching the dog line passes in the same direction as the larger hole through the flat bone. That represented in "b" is made of ivory.

NOTES

- 1. L. C. p. 485.
- 2. A. L. Kroeber, The Eskimo of Smith Sound (Bulletin Am. Mus. Nat. History, Vol. XII, p. 272)
- 3. The specimen figured in Vol. XII, p. 281, Fig. 17, as a hand support of a harpoon shaft, probably served the same purpose as the one shown in Fig. 4 of this paper, and was an attachment at the right hand side of the manhole.
- 4. Boas, The Central Eskimo, etc., p. 489.
- 5. See pages 68, 78.
- 6. L. C. page 484.
- 7. L. C. page 471.
- 8. L. C. pages 471, 473.
- 9. L. C. page 506.
- 10. See page 69.
- 11. L. C. pages 488, 489 b, c, d, Fig. 418, ibid, seem to be supports for the winter spear, not for kayak spears.
- 12. L. C. page 474.
- 13. See page 13.
- 14. Die Amerikanische Nord Pol Expedition, Fig. 8, page 363.
- 15. Narrative of the Second Arctic Expedition made by Charles F. Hall.