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| Transcriber's Note: |

| A number of obvious typographical errors have |

| been corrected in this text. |

| For a complete list, please see the bottom of this document. |

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SMITHSONIAN INSTITUTION.

UNITED STATES NATIONAL MUSEUM.

THROWING-STICKS IN THE NATIONAL

MUSEUM.

OTIS T. MASON,

\_Curator of the Department of Ethnology\_

From the Report of the Smithsonian Institution, 1883-'84,

Part II, pages 279-289, and plates I-XVII

WASHINGTON:

GOVERNMENT PRINTING OFFICE.

1890.

I.--THROWING-STICKS IN THE NATIONAL MUSEUM.

By Otis T. Mason.

Col. Lane Fox tells us there are three areas of the throwing-stick:

Australia, where it is simply an elongated spindle with a hook at the

end; the country of the Conibos and the Purus, on the Upper Amazon,

where the implement resembles that of the Australians, and the

hyperborean regions of North America.

It is of this last group that we shall now speak, since the National

Museum possesses only two specimens from the first-named area and none

whatever from the second.

The researches and collections of Bessels, Turner, Boas, Hall, Mintzner,

Kennicott, Ray, Murdoch, Nelson, Herendeen, and Dall, to all of whom I

acknowledge my obligations, enable me to compare widely separated

regions of the hyperborean area, and to distinguish these regions by the

details in the structure of the throwing-stick.

The method of holding the throwing-stick is indicated in Fig. 1 by a

drawing of H.W. Elliott. The Eskimo is just in the act of launching the

light seal harpoon. The barbed point will fasten itself into the animal,

detach itself from the ivory foreshaft, and unwind the rawhide or sinew

line, which is securely tied to both ends of the light wooden shaft by a

martingale device. The heavy ivory foreshaft will cause the shaft to

assume an upright position in the water, and the whole will act as a

drag to impede the progress of the game. The same idea of impeding

progress and of retrieving is carried out by a multitude of devices not

necessary to mention here.

The Eskimo spend much time in their skin kyaks, from which it would be

difficult to launch an arrow from a bow, or a harpoon from the unsteady,

cold, and greasy hand. This device of the throwing-stick, therefore, is

the substitute for the bow or the sling, to be used in the kyak, by a

people who cannot procure the proper materials for a heavier

lance-shaft, or at least whose environment is prejudicial to the use of

such a weapon. Just as soon as we pass Mount St. Elias going southward,

the throwing-stick, plus the spear or dart of the Eskimo and the Aleut,

gives place to the harpoon with a long, heavy, cedar shaft, weighing 15

or 20 pounds, whose momentum from both hands of the Indian, without the

throw-stick, exceeds that of the Eskimo and Aleut darts and harpoons,

with the additional velocity imparted by the throwing-stick. It must not

be forgotten, also, that the kyak is a very frail, unsteady thing, and

therefore not much of the momentum of the body can be utilized, as it is

by the Northwest Indians in making a lunge with a heavy shaft. The

throwing-stick is also said by some arctic voyagers to be useful in

giving directness of aim. Perhaps no other savage device comes so near

in this respect to a gun barrel or the groove of a bow-gun. Its greatest

advantages, however, are the firm grip which it gives in handling a

harpoon or dart, and the longer time which it permits the hunter to

apply the force of his arm to the propulsion of his weapon. Having

practiced with a throwing-stick somewhat, I have imagined also that

there was a certain amount of leverage acquired by the particular method

of holding the stick and straightening the arm, as in a toggle joint.

That implement, which seems so simple, and which is usually mentioned

and dismissed in a word, possesses several marks or organs, which help

to distinguish the locality in which each form occurs, as well as to

define the associations of the implement as regards the weapon thrown

from it and the game pursued. These marks are:

1. Shape, or general outline in face and side view, and size.

2. Handle, the part grasped in the hand.

3. Thumb-groove or thumb-lock, provision for the firm and comfortable

insertion of the phalanx and ball of the thumb.

4. Finger-grooves, provision for each finger according to its use in the

manipulation of the implement.

5. Finger-pegs, little plugs of wood or ivory to give more certain grip

for the fingers and to prevent their slipping. The devices for the

fingers are the more necessary where the hands are cold and everything

is covered with grease.

6. Finger-tip cavities, excavations on the front face of the implement,

into which the tips of the three last fingers descend to assist in

grasping and to afford a rest on the back of these fingers for the

weapon shaft.

7. Index-finger cavity or hole, provision for the insertion of the index

finger, which plays a very important part in the use of the

throwing-stick.

8. Spear shaft groove, in which the shaft of the weapon lies, as an

arrow or bolt in the groove of a bow-gun.

9. Hook or spur, provision for seizing the butt end of the weapon while

it is being launched. These may be ridges left in the wood by

excavation, or pieces of wood, bone, ivory, &c., inserted. The size and

shape of this part, and the manner of insertion, are also worthy of

notice.

10. Edges: this feature is allied to the form and not to the function of

the implement.

11. Faces: upper, on which the weapon rests; lower, into which the index

finger is inserted.

The figures illustrating this article are drawn to a scale indicated by

inch marks in the margin, every dot on the line standing for an inch.

By the presence or absence, by the number or the shape of some of these

marks or structural characteristics, the type and locality can be easily

detected. The Eskimo have everywhere bows and arrows for land hunting,

the former made of several pieces of bone lashed together, or of a piece

of driftwood lashed and re-enforced with sinew. The arrows are of

endless variety.

It should also be noticed that the kind of game and the season of the

year, the shape and size of the spear accompanying the stick, and the

bare or gloved hand, are all indicated by language expressed in various

parts of this wonderful throwing-stick.

GREENLAND TYPE.

The Greenland throwing-stick is a long, flat trapezoid, slightly ridged

along the back (Fig. 2). It has no distinct handle at the wide end,

although it will be readily seen that the expanding of this part secures

a firm grip. A chamfered groove on one side for the thumb, and a smaller

groove on the other side for the index finger, insure the implement

against slipping from the hunter's grasp. Marks 5, 6, 7 of the series on

page 280 are wanting in the Greenland type. The shaft-groove, in which

lies the shaft of the great harpoon, is wide, deep, and rounded at the

bottom. There is no hook, as in all the other types, to fit the end of

the harpoon shaft, but in its stead are two holes, one in the front end

of the shaft-groove, between the thumb-groove and the finger-groove,

with an ivory eyelet or grommet for a lining, the other at the distal

end of the shaft-groove, in the ivory piece which is ingeniously

inserted there to form that extremity. This last-mentioned hole is not

cylindrical like the one in front, but is so constructed as to allow the

shaft-peg to slide off easily. These holes exactly fit two ivory pegs

projecting from the harpoon shaft. When the hunter has taken his

throwing-stick in his hand he lays his harpoon shaft upon it so that the

pegs will fall in the two little holes of the stick. By a sudden jerk of

his hand the harpoon is thrown forward and released, the pegs drawing

out of the holes in the stick. At the front end of the throwing-stick a

narrow piece of ivory is pegged to prevent splitting. As before

intimated, this type of throwing-stick is radically different from all

others in its adjustment to the pegs on the heavy harpoon. In all other

examples in the world the hook or spur is on the stick and not on the

weapon.

UNGAVA TYPE.

One specimen from Fort Chimo in this region, southeast of Hudson Bay,

kindly lent by Mr. Lucien Turner, is very interesting, having little

relation with that from Greenland (which is so near geographically), and

connecting itself with all the other types as far as Kadiak, in Alaska

(Fig. 3). The outline of the implement is quite elaborate and

symmetrical, resembling at the hook end a fiddle-head, and widening

continuously by lateral and facial curves to the front, where it is thin

and flat. A slight rounded notch for the thumb, and a longer chamfer for

three fingers, form the handle. Marks 5 and 6 are wanting. The cavity

for the index finger extends quite through the implement, as it does in

all cases where it is on the side of the harpoon-shaft groove, and not

directly under it. The shaft groove is shallow, and the hook at the

lower extremity is formed by a piece of ivory inserted in a parallel

groove in the fiddle-head and fastened with pegs. It is as though a

saw-cut one-eighth inch wide had been made longitudinally through the

fiddle-head and one-half inch beyond, and the space had been filled with

a plate of ivory pared down flush with the wood all round, excepting at

the projection left to form the hook or spur for the harpoon shaft. This

peg or spur fits in a small hole in the butt of the harpoon or spear

shaft and serves to keep the weapon in its place until it is launched

from the hand. The Ungava spear is heavier than that of the western

Eskimo, hence the stick and its spur are proportionately larger. It is

well to observe carefully the purport of the spur. A javelin, assegai,

or other weapon hurled from the hand is seized in the center of gravity.

The Greenland spears have the pegs for the throwing-stick sometimes at

the center of gravity, sometimes at the butt end. In all other uses of

the throwing-stick the point of support is behind the center of gravity,

and if the weapon is not fastened in its groove it cannot be hurled.

This fastening is accomplished by the backward leaning of the peg in the

Greenland example, and by the spur on the distal end of the

throwing-stick in all other cases.

CUMBERLAND GULF TYPE.

The Cumberland Gulf type is the clumsiest throwing-stick in the Museum,

and Dr. Franz Boas recognizes it as a faithful sample of those in use

throughout Baffin Land (Fig. 4).

In general style it resembles Mr. Turner's specimens from Ungava; but

every part is coarser and heavier. It is made of oak, probably obtained

from a whaling vessel. Instead of the fiddle-head at the distal end we

have a declined and thickened prolongation of the stick without

ornament. There is no distinct handle, but provision is made for the

thumb by a deep, sloping groove; for the index-finger by a perforation,

and for the other three fingers by separate grooves. These give a

splendid grip for the hunter, but the extraordinary width of the handle

is certainly a disadvantage. There are two longitudinal grooves on the

upper face; the principal one is squared to receive the rectangular

shaft of the bird spear; the other is chipped out for the tips of the

fingers, which do not reach across to the harpoon shaft, owing to the

clumsy width of the throwing-stick. In this example, the hook for the

end of the bird-spear shaft is the canine tooth of some animal driven

into the wood at the distal end of the long-shaft groove.

FURY AND HECLA STRAITS TYPE.

In Parry's Second Voyage (p. 508) is described a throwing-stick of

Igloolik, 18 inches long, grooved for the shaft of the bird-spear, and

having a spike for the hole of the shaft, and a groove for the thumb and

for the fingers. The index-finger hole is not mentioned, but more than

probably it existed, since it is nowhere else wanting between Ungava and

Cape Romanzoff in Alaska. This form, if properly described by Parry, is

between the Ungava and the Cumberland Gulf specimen, having no kinship

with the throwing-stick of Greenland. The National Museum should possess

an example of throwing-stick from the Fury and Hecla Straits.

ANDERSON RIVER TYPE.

The Anderson River throwing-stick (and we should include the Mackenzie

River district) is a very primitive affair in the National Museum, being

only a tapering flat stick of hard wood (Fig. 5). Marks 2, 3, 4, 5, and

6 are wanting. The index-finger cavity is large and eccentric and

furnishes a firm hold. The shaft-groove is a rambling shallow slit, not

over half an inch wide. There is no hook or spur of foreign material

inserted for the spear end; but simply an excavation of the hard wood

which furnishes an edge to catch a notch in the end of the dart. Only

one specimen has been collected from this area for the National Museum;

therefore it is unsafe to make it typical, but the form is so unique

that it is well to notice that the throwing-stick in Eskimoland has its

simplest form in the center and not in the extremities of its whole

area. It is as yet unsafe to speculate concerning the origin of this

implement. A rude form is as likely to be a degenerate son as to be the

relic of a barbaric ancestry. Among the theories of origin respecting

the Eskimo, that which claims for them a more southern habitat long ago

is of great force. If, following retreating ice, they first struck the

frozen ocean at the mouth of Mackenzie's River and then invented the

kyak and the throwing-stick, thence we may follow both of these in two

directions as they depart from a single source.

POINT BARROW TYPE.

Through the kindness of Mr. John Murdoch, I have examined a number from

this locality, all alike, collected in the expedition of Lieutenant Ray,

U.S.A. (Fig. 6). They are all of soft wood, and in general outline they

resemble a tall amphora, bisected, or with a slice cut out of the middle

longitudinally. There is a distinct "razor-strop" handle, while in those

previously described the handle is scarcely distinct from the body.

Marks 3, 4, 5, and 6 are wanting. The index-finger hole is very large

and eccentric, forming the handle of the "amphora." The groove for the

harpoon or spear-shaft commences opposite the index-finger cavity as a

shallow depression, and deepens gradually to its other extremity, where

the hook for the spear-shaft is formed by an ivory peg. This form is

structurally almost the same as the Anderson River type, only it is much

better finished.

KOTZEBUE SOUND TYPE.

The Kotzebue Sound type is an elongated truncated pyramid, or obelisk,

fluted on all sides (Fig. 7). The handle is in the spiral shape so

frequent in Eskimo skin-scrapers from Norton Sound and vicinity, and

exactly fits the thumb and the last three fingers. Marks 5 and 6 are

wanting. The index cavity is a \_cul de sac\_, into which the forefinger

is to be hooked when the implement is in use. Especial attention is

called to this characteristic because it occurs here for the first time

and will not be seen again after we pass Cape Vancouver. From Ungava to

Point Barrow the index-finger hole is eccentric and the finger passes

quite through the implement and to the right of the harpoon or

spear-shaft. In the Kotzebue type the index finger cavity is subjacent

to the spear-shaft groove, consequently the forefinger would be wounded

or at least in the way by passing through the stick. The spear or

harpoon-shaft groove is wide and shallow and passes immediately over the

index cavity. The hook is of ivory and stands up above the wood. It

needs only to be mentioned that this type, as well as those with

eccentric forefinger perforations are used with the naked hand.

In the quarto volume of Beechey's Voyage, page 324, is mentioned a

throwing-stick from Eschscholtz Bay, with a hole for the forefinger and

a notch for the thumb, the spear being placed in the groove and embraced

by the middle finger and the thumb. This last assertion is very

important. When I first began to examine a large number of the

implements, I could not explain the cavities for the finger-tips until

this note suggested that the shaft rides outside of and not under the

fingers. To test the matter I had a throwing-stick made to fit my hand,

and found that the spear could get no start if clamped close to the

throwing-stick by all the fingers; but if allowed to rest on the back of

the fingers or a part of them, and it is held fast, by the thumb and

middle finger, it had just that small rise which gave it a start from

the propelling instrument.

In the national collection is a specimen marked Russian America,

collected by Commodore John Rodgers, resembling in many respects the

Kotzebue Sound type. The handle is of the same razor-strop shape, but on

the upper side are three deep depressions for the finger-tips. In

several of the objects already described provision is made for the tips

of the last three fingers by means of a gutter or slight indentations.

But in no other examples is there such pronounced separation of the

fingers. In very many of the Norton Sound skin-dressers, composed of a

stone blade and ivory handle, the fingers are separated in exactly the

same manner. These skin-dressers are from the area just south of

Kotzebue Sound. The back of the Rodgers specimen is ornamented in its

lower half by means of grooves. In its upper half are represented the

legs and feet of some animal carved out in a graceful manner. The

index-finger cavity is central and is seen on the upper side by a very

slight rectangular perforation, which, however, does not admit the

extrusion of any part of the index-finger. The upper surface is formed

by two inclined planes meeting in the center. Along this central ridge

is excavated the groove for the spear-shaft, deep at its lower end and

quite running out at its upper extremity. The hook for the end of the

harpoon-shaft in this specimen resembles that seen on the

throwing-sticks of the region south of Cape Vancouver. The whole

execution of this specimen is so much superior to that of any other in

the Museum and the material so different as to create the suspicion that

it was made by a white man, with steel tools (Fig 8).

EASTERN SIBERIAN TYPE.

The National Museum has no throwing-stick from this region, but

Nordenskjöld figures one in the Voyage of Vega (p. 477, Fig. 5), which

is as simple as the one from Anderson River, excepting that the former

has a hook of ivory, while the latter has a mere excavation to receive

the cavity on the end of the weapon. Nordenskjöld's bird-spear

accompanying the stick has a bulb or enlargement of the shaft at the

point opposite the handle of the throwing-stick, which is new to the

collection of the National Museum. Indeed, a systematic study should now

be made of the Siberian throwing-sticks to decide concerning the

commercial relationships if not the consanguinities of the people of

that region.

PORT CLARENCE AND CAPE NOME TYPE.

The specimens from this area are more or less spatulate in form, but

very irregular, with the handle varying from that of the razor-strop to

the spiral, twisted form of the Eskimo skin-scraper (Fig. 9). On the

whole, these implements are quite similar to the next group. A section

across the middle of the implement would be trapezoidal with incurved

sides. In two of the specimens not figured these curved sides are

brought upward until they join the upper surface, making a graceful

ornament. The handles are not symmetrical, the sides for the thumb being

shaved out so as to fit the muscles conveniently. Places for the fingers

are provided thus: There is an index-finger cavity quite through the

stick indeed, but the index-finger catches in the interior of the wood

and does not pass through as in the eastern Arctic types. The middle

finger rests against an ivory or wooden peg. This is the first

appearance of this feature. It will be noted after this on all the

throwing-sticks as the most prominent feature until we come to Kadiak,

but the Unalashkans do not use it on their throwing-sticks. Cavities for

the three last finger-tips are not always present, and the hooks at the

distal ends for the extremities of the weapons are very large plugs of

wood or ivory and have beveled edges rather than points for the

reception of the butt end of the weapon to be thrown.

NORTON SOUND TYPES.

These types extend from Cape Darby around to Cape Dyer, including part

of Kaviagmut, the Mahlemut, the Unaligmut, and the Ekogmut area of Dall,

and extending up the Yukon River as far as the Eskimo, who use this

weapon. The characteristics are the same as those of the last named

area, excepting that in many specimens there are two finger-pegs instead

of one, the first peg inclosing the middle finger, the second the

ring-finger and the little finger (Figs. 10-13). A single specimen

collected by Lucien Turner at Saint Michael's has no index cavity, the

forefinger resting on the first peg and the other three fingers passing

between this and the outer peg (Fig. 14). Another specimen of Nelson's,

marked Sabotinsky, has the index-finger cavity and one finger-peg. The

finger-tip cavity on the upper surface of the handle forms the figure of

a water-bird, in which the heart is connected with the mouth by a curved

line, just as in the pictography of the more southern Indians.

The Yukon River Eskimo use a throwing-stick quite similar to the Norton

Sound type. The characteristics are very pronounced. Thumb-groove deep,

index-finger cavity so long as to include the first joint. The hook for

the spear-end formed by the edge of a plug of hard wood. The middle

finger is separated by a deep groove and peg. The ring and little finger

are inclosed by the peg and a sharp projection at the upper end of the

handle.

NUNIVAK ISLAND AND CAPE VANCOUVER TYPE.

In this region a great change comes over the throwing-stick, just as

though it had been stopped by Cape Romanzoff, or new game had called for

modification, or a mixing of new peoples had modified their tools (Figs.

15-17). The index-finger cavity and the hole for the index finger are

here dropped entirely, after extending from Greenland uninterruptedly to

Cape Romanzoff. The handle is conspicuously wide, while the body of the

implement is very slender and light. The thumb-groove is usually

chamfered out very thoroughly so as to fit the flexor muscle

conveniently. There are frequently finger-grooves and finger-tip

cavities in addition to the pegs. The cavity for the index finger having

disappeared, provision is made for that important part of the hand by a

separate peg and groove. The middle finger is also pegged off, and the

last two fingers have to shift for themselves. The hook for the shaft of

the weapon has a fine point like a little bead, the whole implement

being adapted to the light seal-harpoon darts. Mr. Dall collected a

large number of two-pegged sticks from Nunivak Island and four

three-pegged sticks labeled the same. Mr. Nelson also collected four

three-pegged sticks, but labels them Kushunuk; Cape Vancouver, on the

mainland opposite Nunivak (Fig. 17). In these three-pegged sticks the

ring-finger and the little finger are inclosed together. This should be

compared with Mr. Turner's Saint Michael specimen, in which the last

three fingers are inclosed together (Fig. 14). It remains to be seen and

is worthy of investigation whether crossing a narrow channel would add a

peg to the throwing-stick. One of these Nunivak specimens is

left-handed.

BRISTOL BAY TYPE.

The throwing-stick from Bristol Bay resembles in general characteristics

those from Nunivak Island and Cape Vancouver. In outline it has the

shape of the broadsword. Its cross-section is bayonet-shaped. It has no

distinct handle beyond a slight projection from the end. The

thumb-groove is shallow and chamfered on the lower side to fit exactly.

There is a long, continuous notch for the four fingers, in which the

index finger and the middle finger are set off by pegs. There is a

depression, more or less profound, to receive the tips of the fingers.

The groove for the harpoon or spear-shaft is at the lower extremity and

runs out entirely near the index finger. The ivory plug at its lower

extremity is beveled to receive a notch in the end of the spear or

harpoon shaft (Figs. 18-19).

A freshly-made implement, looking as if cut out by machinery, resembling

closely those just described, is labeled Kadiak. The constant traffic

between Bristol Bay and Kadiak, across the Alaskan peninsula, may

account for the great similarity of these implements. Furthermore, since

the natives in this region and southward have been engaged for more than

a century in fur-sealing for the whites, there is not the slightest

doubt that implements made by whites have been introduced and slightly

modified by the wearer to fit his hand.

KADIAK OR UNALASHKA TYPE.

In the National Museum are four throwing-sticks, one of them

left-handed, exactly alike--two of them marked Kadiak and two Unalashka

(Figs. 20-22). They return to the more primitive type of the area from

Kotzebue Sound to Greenland, indicating that the implement culminated in

Norton Sound. In outline this southern form is thin and straight-sided,

and those in possession are all of hard wood. The back is carved in

ridges to fit the palm of the hand and muscles of the thumb. There is no

thumb-groove, the eccentric index-finger hole of the Northern and

Eastern Eskimo is present in place of the central cavity of the area

from Kotzebue Sound to Cape Vancouver, and there is a slight groove for

the middle finger. Marks 5 and 6 are wanting. The shaft-groove is very

slight, even at its lower extremity, and runs out in a few inches toward

the handle. The hook for the end of the weapon resembles that of

Nunivak, but is more rounded at the point. Of the Eskimo of Prince

William Sound, the extreme southern area of the Eskimo on the Pacific,

Captain Cook says, in the narrative of his last voyage: "Their longer

darts are thrown by means of a piece of wood about a foot long, with a

small groove in the middle which receives the dart. At the bottom is a

hole for the reception of one finger, which enables them to grasp the

piece of wood much firmer and to throw with greater force." Captain

Cook's implement corresponds exactly to the specimens just described and

renders it probable that this thin, parallel-sided, shallow-grooved

throwing-stick, with index-finger hole placed at one side of the

spear-shaft groove, extended all along the southern border of Eskimoland

as far as the Aleuts of Unalashka and Attoo. In addition to the

information furnished by the specimens in hand, Dr. Stejneger describes

a similar stick in use in the island of Attoo. On the contrary, Mr.

Elliott assures me that Aleutian fur-sealers of Pribylov Island use

throwing-sticks precisely similar to those of Norton Sound and Nunivak.

This list might be extended further by reference to authorities, but

that is from the purpose of this article and the series of ethnological

papers commenced in this volume. The most perfect throwing-stick of all

is that of the Mahlemut, in Norton Sound, in which are present the

handle, thumb-groove, finger-grooves, and pegs, cavities for the

finger-tips, index finger cavity, shaft-groove, and hook for the

harpoon. In short, all the characteristics present on the rest are

combined here.

Classifications of these implements may be varied according to the organ

selected. As to the hook for the attachment of the weapon, in Greenland

this is on the shaft, in all other parts of the world it is on the

throwing-stick. As to the index finger, there is for its reception, from

Point Barrow to Greenland, an eccentric hole quite through which the

finger passes. From Kotzebue Sound to Norton Sound there is a central

pocket on the back of the weapon, directly under the groove, for the

shaft of the weapon to receive the index finger. From Cape Vancouver to

Bristol Bay an ivory or wooden peg serves this purpose. At Kadiak and

Unalashka the eccentric index-finger hole returns.

It is more than probable that further investigation will destroy some of

the types herein enumerated or merge two more of them into one; but it

will not destroy the fact that in changing from one environment to

another the hyperboreans were driven to modify their throwing-stick.

A still more interesting inquiry is that concerning the origin of the

implement. It is hardly to be supposed that the simplest type, that of

Anderson River, was invented at once in its present form, for the

Australian form is ruder still, having neither hole for the index finger

nor groove for the weapon shaft. When we recall that the chief benefit

conferred by the throwing-stick is the ability to grasp firmly and

launch truly a greasy weapon from a cold hand, we naturally ask, have

the Eskimo any other device for the same purpose? They have. On the

shaft of the light-seal harpoon, thrown without the stick, and on the

heavy, ivory-weighted walrus-harpoon-shaft an ivory hand-rest is lashed

just behind the center of gravity. This little object is often

beautifully carved and prevents effectually the hand from slipping on

the shaft, even with the greatest lunge of the hunter. From this object

to the throwing-stick the way may be long and crooked, or there may be

no way at all. So far as the National Museum is concerned there is

nothing to guide us over this waste of ignorance.

THROWING-STICKS IN THE U.S. NATIONAL MUSEUM.

------+------------------------------------------+----------------------

No. | Locality. | Collector.

------+------------------------------------------+----------------------

32995 | Norton's Sound, Alaska | E.W. Nelson.

30013 | Cumberland Gulf | W.A. Mintzner, U.S.N.

33942 | Norton's Sound, Alaska | E.W. Nelson.

33897 | do. | Do.

33960 | do. | Do.

24336 | Saint Michael's Sound, Alaska | Lucien M. Turner.

24337 | do. | Do.

24338 | do. | Do.

46052 | Port Clarence, Alaska | W.H. Dall.

46053 | do. | Do.

49036 | Rasbonisky, L. Yukon | E.W. Nelson.

38849 | Yukon River | Do.

38605 | do. | Do.

36014 | Kushunuk, Sabotnisky, Alaska | Do.

36018 | Kuskunuk, Alaska | Do.

49001 | Sabotnisky, Alaska | Do.

49002 | do. | Do.

73327 | Unalashka | Catlin.

2267 | Anderson River | R. Kennicott.

90467 | Ugashak | William J. Fisher.

44392 | Cape Nome, Alaska | E.W. Nelson.

72519 | Cook's Inlet | William J. Fisher.

16242 | Nunivak Island, Alaska | W.H. Dall.

16238 | do. | Do.

74126 | Holsteinberg, Greenland | George Merchant, jr.

12981 | Unalashka | W.H. Dall.

89901 | Point Barrow, Alaska | Lieut. P.H. Ray.

38669 | Chalitmut | E.W. Nelson.

24335 | Saint Michael's, Norton's Sound, Alaska | Lucien M. Turner.

33914 | do. | E.W. Nelson.

7933 | Kadiak Island, Alaska | Dr. T.T. Minor, U.S.R.M.

36013 | Sabotnisky, Alaska | E.W. Nelson.

72398 | Bristol Bay, Alaska | Charles L. McKay.

16244 | Nunivak Island, Alaska | W.H. Dall.

11346 | Bristol Bay, Alaska | Vincent Colyer.

16235 | Kotzebue Sound, Alaska | E.P. Herenden.

15641 | Nunivak, Alaska | W.H. Dall.

16237 | do. | Do.

16239 | do. | Do.

16076 | Unalashka, Aleutian Islands | Sylvanus Bailey.

15647 | Nunivak, Alaska | W.H. Dall.

15645 | do. | Do.

16236 | do. | Do.

15642 | do. | Do.

15646 | do. | Do.

------+------------------------------------------+----------------------

PLATE I.

(Mason. Throwing-sticks.)

Fig. 1. Eskimo launching a seal harpoon by means of the

throwing-stick. Mr. John Murdoch states that the hand is held much lower

by the Point Barrow Eskimo, the harpoon resting as low as the shoulder,

and that the movement of throwing the harpoon is quick, as in casting a

fly in fishing.

[Illustration: Fig. 1. Eskimo using the throwing-stick.]

PLATE II.

(Mason. Throwing-sticks.)

Fig. 2. Greenland type of throwing-stick. The specific

characteristics are the broad form; the scanty grooves for thumb and

fingers; the absence of pegs, separate finger grooves, or index

perforation; but the most noteworthy are the two grommets or eyelets to

fit ivory pegs on the harpoon-shaft. The peculiar method of

strengthening the ends with ivory pieces should also be noted. From

Holsteinburg, Greenland, 1884. Catalogue number, 74126.

[Illustration: Fig. 2. Greenland throwing-stick, back and

front.]

PLATE III.

(Mason. Throwing-sticks.)

Fig. 3. Ungava type of throwing-stick. The specific marks are

the general outline, especially the fiddle-head ornament at the bottom;

the bend upward at the lower extremity, the eccentric perforation for

the index finger, and the groove for three fingers. Collected at Ungava,

by Lucien M. Turner, 1884. Museum number, 76700.

[Illustration: Fig. 3. Ungava throwing-stick, front and back.]

PLATE IV.

(Mason. Throwing-sticks.)

Fig. 4. Cumberland Gulf type of throwing-stick. The specific

marks are the broad clumsy form, the separate provision for the thumb

and each finger, the bent lower extremity, and the broad furrow for the

bird-spear. Accidental marks are the mending of the handle, the material

of the stick, and the canine tooth for the spur at the bottom of the

square groove. Collected in Cumberland Gulf, by W.A. Mintzer, in 1876.

Museum number, 30013.

[Illustration: Fig. 4. Cumberland Gulf throwing-stick, back and

front.]

PLATE V.

(Mason. Throwing-sticks.)

Fig. 5. Anderson River type. The specific marks are the extreme

plainness of form, the lack of accommodations for the thumb and fingers,

excepting the eccentric index-finger hole, the poor groove for the

harpoon-shaft, and the absence of a hook or spur at the bottom of this

groove. The accidental marks are cuts running diagonally across the

back. In another specimen seen from the same locality the shaft groove

is squared after the manner of the Cumberland Gulf type. Collected at

the mouth of Anderson River, by R. Kennicott, in 1866. Museum number,

2267.

Fig. 6. Point Barrow type. The specific marks are the distinct

handle without finger grooves, the very eccentric index-finger hole, the

method of inserting the spur for the shaft, and the harpoon-shaft groove

very shallow above and deep below. In the specimens shown by Mr. Murdoch

there is great uniformity of shape. Collected at Point Barrow, by Lieut.

P.H. Ray, in 1883. Museum number, 89902.

[Illustration: Fig. 5. Anderson River throwing-stick, front and

back.

Fig. 6. Point Barrow throwing-stick, front and back.]

PLATE VI.

(Mason. Throwing-sticks.)

Fig. 7. Kotzebue Sound type. The specific marks are the twisted

handle, the broad shallow shaft groove, and, notably, the pocket for the

index-finger tip-visible on the lower side, but nearly absent from the

upper side, and lying directly under the shaft groove. In the examples

before noted all the holes for the index finger are to one side of this

shaft groove. Collected in Kotzebue Sound, by E.P. Herendeen, in 1874.

Museum number, 16235.

Fig. 8. The Rodgers type, so called because the locality is

doubtful. In specific characters it resembles Fig. 7. The differences

are the three cavities for finger tips in the handle, the shaft groove

very shallow and running out before reaching the index-finger cavity,

and the delicate hook for the spear shaft resembling those farther

south. Since writing this paper two throwing-sticks from Sitka have been

seen in many respects resembling this form, but covered all over their

surfaces with characteristic Thlinkit mythological figures, and having

iron hooks at the lower end of the shaft groove. Collected by Commodore

John Rodgers, in 1867. Museum number, 2533.

[Illustration: Fig. 7. Kotzebue Sound throwing-stick, front and

back.

Fig. 8. The Commodore Rodgers throwing-stick, front and back.]

PLATE VII.

(Mason. Throwing-sticks.)

Fig. 9. The Port Clarence and Cape Nome type. The notable

characteristics are the occurrence of an ivory peg in the handle for the

middle finger, the very small size of the handle, and the central

index-finger pocket central in position but quite piercing the stick.

Collected by E.W. Nelson, at Cape Nome, in 1880. Museum number, 44392.

[Illustration: Fig. 9. Port Clarence and Cape Nome

throwing-stick, front and back.]

PLATE VIII.

(Mason. Throwing-sticks.)

Fig. 10. Norton Sound type, single-pegged variety. Except in

the better finish, this type resembles the one last described. Collected

by L.M. Turner, at Saint Michael's Island, in 1876. Museum number,

24338.

[Illustration: Fig. 10. Norton Sound throwing-stick, front and

back.]

PLATE IX.

(Mason. Throwing-sticks.)

Fig. 11. Norton Sound type, two-pegged variety. In all

respects, excepting the number of pegs, this resembles Figs. 9 and 10.

In all of them the peg at the bottom of the groove is very clumsy.

Collected in Norton Sound, by E.W. Nelson, in 1878. Museum number,

32995.

Fig. 12. Throwing-stick from Sabotnisky, on the Lower Yukon. It

belongs to the Norton Sound type. The cavity on the upper side of the

handle for the finger-tips is remarkable for the carving of a bird

resembling figures seen on objects made by the Western Indians of the

United States. Collected by E.W. Nelson, at Sabotnisky, in 1879. Museum

number, 36013.

[Illustration: Fig. 11. Norton Sound throwing-stick, front and

back.

Fig. 12. Sabotnisky throwing-stick, front and back.]

PLATE X.

(Mason. Throwing-sticks.)

Fig. 13. Specimen from Yukon River, belonging to the Northern

Sound one-pegged variety. Collected by E.W. Nelson, in 1879. Museum

number, 38849.

[Illustration: Fig. 13. Yukon River throwing-stick, front and

back.]

PLATE XI.

(Mason. Throwing-sticks.)

Fig. 14. Throwing-stick from Saint Michael's. This specimen is

very noteworthy on account of the absence of the index-finger pocket, a

mark characteristic of the Vancouver type, Fig. 17. If the middle peg of

the Vancouver example were removed the resemblance would be close, but

the clumsy spur at the bottom of the shaft groove is Norton Sound rather

than Nunivak. Collected by Lucien M. Turner, at Saint Michael's, in

1876. Museum number, 24335.

[Illustration: Fig. 14. Saint Michael's throwing-stick, front

and back.]

PLATE XII.

(Mason. Throwing-sticks.)

Fig. 15. Nunivak type. The characteristic marks are the absence

of any cavity for the index finger, the nicely-fitting handle, the

disposition of the finger-pegs, and the delicate point on the ivory spur

at the bottom of the shaft groove. Collected by W.H. Dall, at Nunivak

Island, in 1874. Museum number, 16239. (This specimen is left-handed.)

[Illustration: Fig. 15. Nunivak Island throwing-stick, front

and back, left-handed.]

PLATE XIII.

(Mason. Throwing-sticks.)

Fig. 16. Specimen from Nunivak, right-handed. The cuts on the

front and back are noteworthy. Collected by W.H. Dall, at Nunivak

Island, in 1874. Museum number, 16238.

[Illustration: Fig. 16. Nunivak Island throwing-stick, front

and back.]

PLATE XIV.

(Mason. Throwing-sticks.)

Fig. 17. Specimen from Cape Vancouver. In all respects it is

like those of Nunivak, excepting a peg-rest for the little finger.

Collected by E.W. Nelson, at Cape Vancouver, in 1879. Museum number,

38669.

[Illustration: Fig. 17. Cape Vancouver throwing-stick, front

and back.]

PLATE XV.

(Mason. Throwing-sticks.)

Figs. 18, 19. Bristol Bay type. In no essential characters do

these sticks differ from those of Nunivak. The handle is smaller, and

they appear to have been made with steel tools. Fig. 18 collected by

C.L. McKay, at Bristol Bay, Alaska, in 1883. Museum number, 72398. Fig.

19 collected by William J. Fisher, at Kadiak, in 1884. Museum number,

90467.

[Illustration: Fig. 18. Bristol Bay throwing-stick, front and

back.

Fig. 19. Bristol Bay throwing-stick, front and back.]

PLATE XVI.

(Mason. Throwing-sticks.)

Fig. 20. Unalashkan throwing-stick. It would be better to call

this form the Southern type. The noticeable features in all our

specimens are the parallel sides, the hard material, thinness, the

carving for the fingers, but above all the reappearance of the eccentric

cavity for the index finger. This cavity is not a great perforation, as

in the Point Barrow type, but an eccentric pocket, a compromise between

the Northern cavity and that of the East. Collected by Sylvanus Bailey,

at Unalashka, in 1874. Museum number, 16076.

[Illustration: Fig. 20. Unalashkan throwing-stick, front and

back.]

PLATE XVII.

(Mason. Throwing-sticks.)

Figs. 21, 22. Throwing-sticks of the Southern type. Fig. 21 is

left-handed, collected by Dr. T.T. Minor, at Kadiak, in 1869. Museum

number, 7933. Fig. 22 collected by W.H. Dall, at Unalashka, in 1873.

Museum number, 12981. At Sitka two specimens were collected,

unfortunately not figured, with the following characters laid down in

the beginning of this paper: 1. Short, very narrow and deep, and carved

all over with devices. 2. No handle distinct from the body. 3, 4, 5, 6.

All wanting. 7. The index-finger cavity is near the center of the back,

very like a thimble. Indeed this is a very striking feature. 8. The

shaft groove occupies only the lower half of the upper surface. 9. The

spur for the end of the weapon shaft is a long piece of iron like a

knife-blade driven into the wood, with the edge toward the weapon

shaft.

[Illustration: Fig. 21. Kadiak throwing-stick, front and back,

left handed.

Fig. 22. Unalashkan throwing-stick, front and back.]

\* \* \* \* \*

Typographical errors corrected in text:

Page 282: "not fastened in its groove in cannot be hurled." changed to

"not fastened in its groove it cannot be hurled."

Page 286: Sabotinsky replaced with Sabotnisky.

\* \* \* \* \*

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