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### ADVERTISEMENT.

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It has been prepared at the request of the Institution, and printed by authority of the honorable Secretary of the Interior.

SPENCER F. BAIRD,

Secretary of the Smithsonian Institution.

SMITHSONIAN INSTITUTION,
Washington, April 15, 1879.

### CONTRIBUTIONS

TO THE

# NATURAL HISTORY

OF

# ARCTIC AMERICA,

MADE IN CONNECTION WITH

THE HOWGATE POLAR EXPEDITION, 1877-78,

BY

## LUDWIG KUMLIEN,

NATURALIST OF THE EXPEDITION.

WASHINGTON:
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### ETHNOLOGY.

FRAGMENTARY NOTES ON THE ESKIMO OF CUMBERLAND SOUND.

#### BY LUDWIG KUMLIEN.

The Cumberland Straits, Sound, Gulf, or Inlet, extends from about lat. 65° N. to lat. 67° + N. It is the Cumberland Straits of Baffin, its original discoverer at the end of the sixteenth century; the Hogarth Sound of Captain Penny, who rediscovered it in 1839; and the North-umberland Inlet of Captain Wareham in 1841.

During the last quarter century it has often been visited by Scotch and American whalemen, ships frequently wintering on the southwestern shores.

It is at present unknown if it be a sound or gulf; it is generally considered as a gulf, but some Eskimo say that the Kingwah Fjord, one of the arms extending to the NE., opens into a large expanse of water, to them unknown. Icebergs are also sometimes found in this fjord that, from their positions, seem to have come from the northward, and not from the south.

The eastern shore of this sound forms the western boundary of that portion of Cumberland Island which lies between its waters and Davis Straits, and known as the Penny Peninsula.

In about lat. 66° N. the Kingnite Fjord extends from the sound in an ENE. direction, and nearly joins Exeter Sound from Davis Straits; they are separated only by a portage of a few miles. The Cumberland Eskimo make frequent excursions to the eastern shore via these fjords, but seem to have extended their migrations but a short distance northward, finding Cumberland Sound more to their tastes.

The width of Cumberland Sound opposite Niantilic is about thirty miles, possibly its widest part. It is indented by numerous and large fjords, few, if any, of them having been explored; many islands are scattered along both shores, and in some instances form quite considerable groups.

The present Eskimo are few in numbers. We would estimate the entire population, men, women, and children, on both sides of the sound,

from Cape Mercy on the east to Nugumente on the west, not to exceed four hundred individuals. It is certain that within the last thirty years the mortality has been very great among them; even the whalemen remark an astonishing diminution in their numbers at the present day, as compared with twenty years ago.

Numerous traditions exist among them of the time when they warred with other tribes, and old men, now living, have pointed out to us islands that were once the scene of battles, where the besieged party was starved into submission by their enemies. According to the usual story, the hurling of stones was one of the most effective and common modes of warfare; this was especially the case when one party could get upon a ledge above the other. At the present day they are peaceful and quiet, have no recognized leader, and no desire to fight, even if their numbers would permit of it.

As the story goes, the present population were the victors in those fights, and took possession of the country they now inhabit. Some say they came from the northwest, and found another tribe, which they overcame and drove away. Their stories on this subject vary, and sometimes with this unusually interesting tradition, as well as many others, they get events of a very recent date hopelessly mixed up with the rest; and it is no unusual instance to find that some whaler with a good imagination has supplied and restored lost portions of the narrative, to their entire satisfaction; but these restorations are chiefly remarkable for their utter disregard of truth or possibility.

The following tradition is a translation from one of the most reliable natives we became acquainted with:

"A long time ago (tichemaniadlo)\* other Innuits (Eskimo) were found here; they were called "Tunak";† they were very strong, very large, and had short legs and large arms; they had very wide chests. Their clothes were made of bear skins, and their knives from walrus tusks. Did not use bows and arrows, but only the harpoon-lance; they harpooned the reindeer in the water, from their kyacks; used very large kyacks. The

<sup>\*</sup>Here arises a great difficulty: tichemani signifies a long time, i.c., it may be anywhere from a week to a year; tichemaniadlo is a very much longer period, generally conceded to antedate the advent of the whites; at least, this was the only example we could bring up which they could understand, except their own ages, which we could ascertain with less certainty. When a very long period (as in this case) is represented as having intervened, they repeat tichemaniadlo several times, but how much time is added by each repetition we are unable to say.

<sup>†</sup>Variously pronounced, "Tunare," "Tunnuk," or "Tunnak."

Tunuks made houses out of stone.\* They were able to lift large stones. We were afraid of them; we fought with them and killed them. They (the Tunuks) came in the first place from Greenland.† The women made clothes from their own hair. They had no dogs at that time, but they made sledges and harnesses, and finally (witchou = by and by) put the harnesses on three rocks, one white, one red, and one black; they then called, and when they looked they found the stones had been transformed into dogs. After a time they got plenty dogs; then they went about more. The present Eskimo could not understand their language. They lived to a great age (E. tukewouk nami = did not die!). Far to the west some Eskimo lately saw some Tunuks; they had bear-skin clothing. In the Tunuks land (where?) the musk ox (oming muk), bear, and seals are abundant. They build walls of stones on the land, and drive the reindeer into ponds, and eatch them in kyacks. They have a large, long callytong (coat, or jumper jacket) that they fasten down around them on the ice while they are watching a seal's hole; underneath this

These foundations are now mere ruins. Some of the stones in the walls are so large that it must have required the united efforts of several men to place them in position. The stones gradually diminish in size from the foundation upward. Standing walls are from two to three feet high, and might have been a foot higher, to judge from the loose stones lying about. There was probably a frame-work of whale ribs, over which the seal-skin covering was spread.

On the north side of this foundation were seven kyacks, built of small stones; they lie parallel to each other, and are from ten to fifteen feet in length; they are built of a single row of stones, and only one tier high. These are said to indicate the number of inmates that have died. They appear to us more like the work of children. In the lamp-places we found the remains of Pagomys factidus (abundant), Phoca barbata, Cistophora cristata, Trichechus rosmarus, Ursus maritimus (the three last-named species occur now only as stragglers in the vicinity), Rangifer tarandus, Beluga catodon, Larus——?, and Somateria——? (mollissima, probably). Other bones are found, but not recognizable from decay. No implements were found except a stone skin-scraper. The present Eskimo say these stone foundations were made by the Tunuks. They are found in various out-of-the-way places, especially in the greater Kingwah Fjord.

†About twenty years ago, a man and women (Greenlanders) landed near Cape Mercy, having got adrift on a piece of ice on the Greenland coast. From this occurrence we conjecture that the story has received a modern addition.

<sup>\*</sup> Vide sketch of foundation, No. 1. Stone foundations of a somewhat peculiar pattern are found in many of the larger fjords. The subject of the sketch was about fourteen feet in its greatest diameter (the larger enclosure) inside; the smaller one about ten feet. The arrangement is much the same as the Eskimo use at the present day, a raised platform in the end opposite the entrance for a sleeping and general lounging place, and two smaller platforms on either side, where the lamps are kept, and where the garbage accumulates.

g rment, on the ice, they place a lamp; over this lamp they cook meat. Their eyes are sore all the time. We are afraid of them; do not like them; glad they have gone away."

This tradition differs somewhat in the particulars when told by different individuals, but the main points are essentially the same. Many will not tell it all; some, only parts of it. The ridiculous story about the dogs is firmly believed by the present Eskimo as the origin of these animals.

That the Tunuks have been seen of late years in the west is not improbable,—that is, natives, different in dress and stature; but they were most likely the tribe known as the Pelly Bay Eskimo from the north shores of Hudson's Straits and from Fox Channel, they being larger and more robust than the Cumberland Eskimo of the present day. It is certain that since the whalers have begun coming among the Cumberland Eskimo, and introduced venereal diseases, they have deteriorated very much. They now almost depend upon ships coming, and as a consequence are becoming less expert hunters, and more careless in the construction of their habitations, which are merely rude temporary shelters made at a few minutes' notice. Great suffering often ensues from living in these miserable huts. The seal skin that should have gone to repair the tent is bartered to the whalemen for a little tobacco, or some. valueless trinket, which is soon thrown aside. The men are employed to eatch whales, when they should be hunting in order to supply the wants of their families; and the women, half clad, but sporting a gaudy calico gown, instead of their comfortable skin clothes, and dying of a quick consumption in consequence, when they should be repairing garments or preparing skins, are loafing around the ships, doing nothing for themselves or any one else.

The Cumberland Eskimo of to-day, with his breech-loading rifle, steel knives, cotton jacket, and all the various trinkets he succeeds in procuring from the ships, is worse clad, lives poorer, and gets less to eat than did his forefathers, who had never seen or heard of a white man.

There is a practice among them that is probably of long standing, and is regularly carried out every season, of going into the interior or up some of the large fjords after reindeer. They generally go during the months of July and August, returning in September, to be on hand when the fall whaling begins. The purpose of this reindeer hunt is to procure skins for their winter clothing. Nearly all return to the sound to winter. They have regular settlements, which are hardly ever entirely deserted

at any season. The principal ones are known as Nugumeute, Niantilic, Newboyant, Kemesuit, Annanactook, Oosooadluin, Ejujuajuin, Kikkerton, and Middliejuacktuack Islands, and Shaumeer, situate at different points on both sides of Cumberland Sound. During the winter they congregate at these points in little villages of snow-huts.

The present principal headquarters are at the Kikkerton Islands, or at Niantilic, according to which point the whalers winter. The old harbor of Kemasuit, once the winter harbor of whalers and a favorite resort of the Eskimo, is now deserted, except by a few superannuated couples, who manage to catch enough seal to live on.

As a rule, the present race is of short stature, the men from five feet three inches to five feet six. There are some exceptions, but they are in favor of a less rather than a greater height. The women are a little shorter. The lower extremities are rather short in proportion to the body, and bow-legs are almost the rule. This probably arises from the manner in which the children are carried in the mother's hood, as well as the early age at which they attempt to walk. The habit of sitting cross-legged may also have a tendency to produce this deformity. Their hands and feet are small and well formed. Their hands are almost covered with the scars of cuts and bruises. It seems that in healing the injured part rises, and is always afterwards disgustingly prominent. There is a great variation in the color of their skin, and a description that would answer for one might not apply at all to another. Even among those that are of pure breed there are some whose skins are no darker than a white man's would be if subjected to the rigors of wind and cold, and the never-removed accumulation of soot and grease. Others again seem to have been "born so." The children, when young, are quite fair. The eyes are small, oblique, and black or very dark brown. The hair is black, straight, coarse, and very abundant. It is rarely wavy or curly among the full-blooded Innuits.

There are, of course, exceptions to the above in cases of half-breeds. Their faces are broad and flat, with rather large lips and prominent cheek-bones.

Infanticide is not practiced among the Cumberland Eskimo at the present day. I have learned from some of the most intelligent that this barbarous custom was in vogue in former times, however. Among the natives of Repulse Bay and those living on the north shores of Hudson's Straits, it is practiced to a considerable extent, especially with the tribe known as the Pelly Bay natives. The practice is confined almost en-

tirely to female children, the reason being, they tell us, that they are unable to hunt, and consequently of little account. It seems to have been referable to the same cause among the Cumberland Eskimo. Their intercourse with the whites seems to have modified some of the most barbarous of their primitive habits.

Twins are not common, and triplets very rare. The males outnumber the females. Infanticide may, to some extent, be the cause; but lung diseases, which are alarmingly prevalent, seem more fatal to the women than to the men.

Children are often mated by the parents while they are still mere infants. There is such an extreme laxity of morals that the young women almost invarially become wives only a short time before they are mothers.

It is impossible to say at what age the women cease to bear children, as they have no idea of their own age, and few are able to count above ten. Puberty takes place at an early age, possibly at fourteen with the female. They are not a prolific race, and it is seldom a woman has more than two or three children, and often only one, of her own; still many, or almost all, have children; but inquiry will generally divulge the fact that some of the children have been bought. Almost every young woman has or has had a child, but the identity of the father is in no wise necessary in order to insure the respectability of the mother or child. Such children are generally traded or given away to some elderly couple as soon as they are old enough to leave the mother. The foster-parents take quite as good care of such adopted children as if they were their own.

So far as we could learn, they do not generally practice any rites or ceremonies of marriage. The best hunter, or the owner of the largest number of dogs and hunting-gear, will seldom have any difficulty in procuring the woman of his choice for a wife, even though she has a husband at the time. It is a common practice to trade wives for short periods or for good. They appear to have marriage rites sometimes, but we could induce no one to tell us, except one squaw, who agreed to, but only on condition that we became one of the interested parties and she the other. This was more than we had bargained for, and, although generally willing to be a martyr for the cause of science, we allowed this opportunity to pass without improving it.

Monogamy is at the present time the most prevalent. Polygamy is practiced only in the case of a man being able to provide for two or more wives. Three, and even four, are known of, but rare. Neither do two

or three wives in one hut make an altogether harmonious household; but all little difficulties are generally settled by the husband, in a manner better calculated to insure reverence to masculine strength than respect for superior intelligence.

The scarcity of women at present in proportion to the men makes polygamy a luxury only to be indulged in by the wealthy. Divorce, if it can be called by that name, is very frequent among them. All that is needed is that the husband tires of his wife, or knows of a better one that he is able to procure. Neither does it seem to trouble the woman much: she is quite sure to have another offer before long; and a change of this kind seems to benefit both parties. One rather remarkable and very laudable practice among these people is the adoption of young children whose parents are dead, or, as often happens, whose mother is the only recognized parent. Orphans, so to speak, are thus twice as common as among civilized nations. These children, whether bought or received as a gift, are always taken as good care of as if they were their own, especially if they are boys.

Among the Eskimo employed by the Florence was a family that had two children, who passed for brother and sister. One, the boy, was a nephew of "Eskimo Joe," of Polaris fame. He had been bought from the Hudson's Straits Eskimo, some two hundred miles to the south. He was a perfect little satan; and, though he gave us much annoyance, he was a never-failing source of amusement to us all. The girl, again, was a native of Exeter Sound, on the west coast of Davis Staits; still, both were considered as their own children, and well cared for.

Half-breeds are said to be of more irritable temperaments, and less able to bear exposure and fatigue, than the full-blooded Eskimo.

The food of the Cumberland Eskimo consists entirely of flesh, and in most sections of the sound of *Pagomys fætidus*. In fact, this animal is their principal dependence for food, fuel, clothing, and light. The Eskimo will eat a few of the berries of *Vaccinium uliginosum* and *Empetrum nigrum*, the roots of *Pedicularis*, and occasionally a little *Fucus vesiculosus* in winter, but this constitutes a very small and unimportant part of their food.

As soon as the ice has fairly left the sound, the Eskimo hunter leaves the winter encampment, with his family and such portions of his household goods as will be needed, and takes a tour inland or up some of the large fjords after reindeer. The larger part of his possessions, including sledge, dogs, harnesses, winter clothing, &c., he secretes among the rocks in some unfrequented spot. His dogs are put on some little rocky islet, to shift for themselves. They eke out a scanty subsistence by making good use of their time at low tide, *Cottus scorpius* constituting the greater part of their food at this season.

There are at present so many whaleboats owned by these Eskimo, that they experience little difficulty in making quite extensive cruises, three or four families constituting a boat's crew. They will load a whaleboat to within an inch or two of the gunwale, and then set out for a few weeks of enjoyment and abundance. The squaws do the rowing and the "captain" stands majestically in the stern with the steering oar, while the rest of the men are either asleep or on the lookout for game. cargo consists of their tent-poles, the skin-tents, pots, and lamps, with sundry skin-bags containing the women's sewing and skinning utensils. Their hunting-gear, of course, forms a quite conspicuous portion of the contents of the boat. Very few there are at present who have not become the possessors of a half-barrel, and this vessel occupies a conspicnous place in the boat, and is almost constantly receiving additions of animal matter in some shape; a few young eiders or gulls will soon be covered up with the intestines of a seal and its flesh. From this receptacle all obtain a piece of meat whenever they feel hungry. This vessel is never emptied of its contents, except by accident or when scarcity of material forbids its repletion; and, as the temperature at this season is well up in the "sixties" during the day, this garbage heap becomes so offensive as to be unbearable to any one but an Eskimo.

They proceed at a very leisurely rate, rowing for a few minutes and then stopping for a time, chatting, smoking, or eating. When they feel tired they haul up on the rocks and have  $\varepsilon$  sleep, and then resume the journey in the same vagabond manner. If, while thus cruising, any live creature that they think there is any possibility they can capture comes in sight, all hands become animated, the oars are plied with redoubled energy, gans and spears are in readiness, and every one is eager for the sport. Hours are often consumed in chasing half-grown duck or young loon, which when procured is but a bite; but the fun of the chase seems to be the principal object, and they enjoy it hugely. Thus they journey till they reach some suitable locality, when the boat is unloaded, the toopiks raised, the lamps put in their places, and all is ready for a grand hunt. The men divide and scatter over the mountains, leaving the camp in charge of the women and children; these busy themselves by hunting for and destroying every living creature that they can find.

On the return of the hunters, who perchance have brought some skins and a hunk of venison, there are joyous times in camp; the meat is dis-

posed of first, and then the younger people engage in various games, while the older ones gather around some aged erone, who excitedly recounts the hunts of her girlhood days, plentifully intermixing stray portions of the old sagas and legends with which her memory is replete. Thus they live from day to day, the men hunting and the women stretching the skins, till the season comes around when they must return to the coast. Happy, contented, vagabond race! no thoughts of the morrow disturb the tranquillity of their minds.

When a deer is killed any distance from camp, the meat is eached, with the intention of returning after it in winter; but with what the wolves and foxes devour and what the Eskimo never can find again, very little is brought back.

Many have now firearms of some pattern or other; and though they will hunt for a ball that has missed its mark for half a day, they do not hesitate to fire at any useless creature that comes in their way. Those that have no guns use bows and arrows made from reindeer antlers. Sometimes the deer are driven into ponds, and even into the salt water, and captured in kyacks with harpoons.

They have an interesting custom or superstition, namely, the killing of the evil spirit of the deer; some time during the winter or early in spring, at any rate before they can go deer-hunting, they congregate together and dispose of this imaginary evil. The chief ancoot, angekok, or medicine-man, is the main performer. He goes through a number of gyrations and contortions, constantly hallooing and calling, till suddenly the imaginary deer is among them. Now begins a lively time. Every one is screaming, running, jumping, spearing, and stabbing at the imaginary deer, till one would think a whole mad-house was let loose. Often this deer proves very agile, and must be hard to kill, for I have known them to keep this performance up for days; in fact, till they were completely exhausted.

During one of these performances an old man speared the deer, another knocked out an eye, a third stabbed him, and so on till he was dead. Those who are able or fortunate enough to inflict some injury on this bad deer, especially he who inflicts the death-blow, is considered extremely lucky, as he will have no difficulty in procuring as many deer as he wants, for there is no longer an evil spirit to turn his bullets or arrows from their course.

They seldom kill a deer after the regular hunting season is over, till this performance has been gone through with, even though a very good opportunity presents itself. Salmo salar, and one other species of Salmo that I could not procure enough of to identify, are caught to some extent in June and September in some of the larger fjords; they are mostly caught with a spear, but sometimes with a hook. (For description vide under hunting-gear, &c.)

When these fish are eaught, they are put into a seal-skin bag, and it remains tied up till the whole becomes a mass of putrid and fermenting fish, about as repulsive to taste, sight, and smell as can be imagined. Cottus seorpius, which contributes so largely towards the Greenlander's larder, is not utilized by the Cumberland Eskimo, except in cases of a searcity of other food supplies; the fish is abundant in their waters, however, and fully as good eating as they are on the Greenland coast.

Birds and their eggs also contribute towards their sustenance in season; they are extremely fond of eggs, and devour them in astonishing quantities.

The "black skin" of the whale, called by them muktuk, is esteemed the greatest delicacy. When they first procure a supply of this food, they almost invariably eat themselves sick, especially the children. We found this black skin not unpleasant tasting when boiled and then pickled in strong vinegar and eaten cold; but the first attempts at masticating it will remind one of chewing India rubber. When eaten to excess, especially when raw, it aets as a powerful laxative. It is generally eaten with about half an inch of blubber adhering.

The greater portion of their food is eaten raw, especially in winter. When they cook at all, they only "simmer" it over their lamps in a pot of soapstone. These pots are from eight to twenty inches in length, usually about sixteen inches, and though of variable patterns, the length is generally three times the width or depth. Among such Eskimo as are able to procure old cast-away meat-cans from around the ships, tin has superseded the soapstone both for lamps and boiling-pots.

In summer, especially when on hunting excursions, they very often "fry" meat by making a little fireplace of stones, and laying a flat piece of stone on the top. The opening to receive the fuel supply is to windward. For fuel at such times they use Cassiope tetragona and Ledum palustre; these shrubs make a quick and very hot fire. It would be comparatively an easy task for these people to gather enough Cassiope tetragona during the summer to burn during the coldest weather, and not rely wholly upon blubber.

When the Eskimo have been simmering meat, especially seal, in their boiling-pots, they pour off the liquor and mix it with about an equal

quantity of blood; this makes a thick and rather greasy soup that must be quite nourishing; the children are very fond of it. It seems possible that from this dish has originated the popular error that these people drink oil, a notion that is simply preposterous.

I found among some of these people a little spoon, or rather a miniature scoop, made of ivory, which they used to drink the soup with; it appears to be an old utensil, now fast going out of use, for they can now procure tin mugs. A reindeer's rib, pointed at one end, is used to fish up the meat with, and sometimes to convey it to the mouth. These instruments are found in the graves, but seem to be but little used at the present day.

When a seal is brought to the encampment, especially if they have not been plenty for some days, all the villagers are invited to the hut of the lucky hunter, and the seal is soon dispatched. A couple of the younger men skin the animal and distribute the pieces to the assembled company as fast as needed. The testicles, being considered as the choicest titbit, are usually handed over to the hostess; the spinal cord is also rated as one of the choicest portions of the animal. During these feasts they gorge themselves to their utmost capacity, and are in good humor and hilarious. Though there may be ever so poor prospects to procure more food for the morrow, this does not deter them from gluttonously devouring the last morsel, and then go on allowance till they can get a fresh supply. I have seen them thus gorge themselves, and then lie down to sleep with a piece of seal meat by their side, which they attacked every time they awoke.

The intestines of birds, notably Lagopus and Somateria, are looked upon as choice parts, and birds brought to the encampment are generally "drawn" by the hunters. The fatty excrescence at the base of the upper mandible of the male Som. spectabilis is too great a temptation for them. It was with great difficulty that we could induce them to bring these birds to eamp without having them thus mutilated.

Since whalers began to cruise in the Cumberland waters, they have found that it is decidedly to their advantage to hire boats' crews of natives to assist in the capture of whales. They make good whalemen. When such crews are secured, they wisely count in all of their family in the bargain, so that to secure the services of a crew of seven men one must feed thirty or more. While working for whalers, these Eskimo depend almost wholly on the ship for their food supply; as a consequence, they are fast becoming poor hunters, and prefer to lounge around a vessel

and pick up such scraps as offer themselves rather than to strike out for themselves and live independently and in comparative plenty.

As to meals, or regular meal-times, they eat when hungry, if they have anything. They always eat in the morning before going out to hunt; but the principal meal is in the evening, on their return. When supplied with rations by the ships, they often have their regular meals aboard; but this does in no wise hinder them from taking their usual evening allowance of raw meat when they return to their huts.

That the Eskimo possess considerable powers of abstinence cannot be disputed; but it is not so remarkable after all, for they certainly have had ample experience in this direction. That they are able to bear temporary or sustained exertion better than the whites is doubtful. They are acclimated and have clothing suited to the climate, and readily adapt themselves to the rude shelter of a snow-bank, if necessary; but give a healthy white man as good clothes, and he will stand as much fatigue, and perhaps more.

While hunting with the Eskimo, we often had our nose and face frozen, when it did not seem to affect the Eskimo in the least; but when it came to a tramp through the snow all day long, few of them would stand it any better than we could.

Some have judged their powers of endurance from the manner in which they will follow their game; but it seems to us it is rather their wonderful patience, for we have known them to follow animal tracks for a whole day, when we confess we could not discover the faintest trace of a track, except at long distances apart. They will discover any traces of animals on the snow that a white man would pass by and not notice. When traveling either on the ice or water, they make the journey by short, easy stages, stopping as soon as they feel the least tired, and recruiting; if they were required to walk a given distance, as on a regular march, they would give out.

The Cumberland Eskimo are known to make better and more beautiful clothing than the tribes of Northern Hudson's Bay and Straits. During the summer, and, in fact, at all seasons, except when the weather is very severe, the outer garment of the men is made from the skins of adult—or, more properly speaking, yearlings, as they are the best—Pagomys fætidus. In very cold weather, they betake themselves to deerskin clothing; but as these clothes are less strong than the seal-skin, they make the change as soon as the weather permits. The women wear the deer-skin clothes much later in the season than the men; their dress

is also made of the same kind of seal, unless they are fortunate enough to procure *Callocephalus vitulinus*, which skins are so highly prized that they use them even though there is only sufficient for a part of the fronts of their jackets.

Both the men and women wear a garment the exact duplicate in shape under the outer one; this garment is made either from the young seal in the white coat or of reindeer.

The coat of the men does not open in front, but is drawn on over the head like a shirt, and has a hood that fits the head snugly, while the woman's hood is large and loose, and the jacket is quite loose-fitting, so as to receive the child, which is always carried in the hood. The woman's jacket further differs from the men's in being shorter in front, and ending in a rounded point, while behind it reaches quite to the ground in the form of a lance-shaped train. This appendage is caught up in the same manner as the fashionable train of the present day among civilized nations, when the condition of the ground is unfavorable for its trailing. After all, is not this fashion borrowed from the Eskimo? There is often an approach towards this prolongation in the men's jackets, especially when made of deer skin, but never so long as on the woman's. Neither do little girls have a long train to the jacket; but as soon as they arrive at the age when they are no longer looked upon as children, they learn to imitate their mothers. There are never any pockets in the jackets of either sex, the hood serving for this purpose.

The pants of the men are made from the same material as the coat, with the exception that the young seal in the white coat is often used for the outer as well as the inner garment. The pants reach only to the upper part of the pelvis, and are kept up by means of a string around the body. They reach a little below the knee, where they are met by the boots. When made of deer skin, they are usually ornamented by fringes of cut skin around the lower edges.

The women's pants differ from the men's in being composed of two separate pieces, the lower reaching from a little below the knee to the middle of the thigh, and are kept in place by a string which runs to the upper edge of the other portion. The lower portion of these pantaloons is removed while they are at work in their igloos, and the bare thigh used, as a board would be, to lay the seal skin on while cleaning the blubber from it. The women have the habit of thrusting their hands between the upper and lower pantaloons the same as we do in a pocket; in fact, they use this space as a sort of pocket.

Little girls wear their breeches like the men till they get to be ten or

twelve years of age. Very small children are dressed in a fawn-skin jacket without attached hood; but their heads are, nevertheless, well bundled up in a double fawn-skin hood that fits the scalp closely. This hood is never removed, except perchance by accident, till the child outgrows it. The lower extremities are usually not clad at all.

The children are carried on the mother's back inside her jacket. The cut of the jacket is such that the child goes down as far as the mother's waist, when the closeness of the jacket prevents it going any farther. The hood allows the child freedom for its arms and head, but the legs are cramped underneath its body, and this is probably one cause of bow-leggedness and possibly the shortness of the lower extremities. I have seen the Eskimo mother, with a child fast asleep in her hood, building a toopik. This work often necessitated her stooping over so much as to seemingly endanger the dumping of the infant over her head on the ground; still, it did not seem to inconvenience the child in the least, as it slept soundly through the whole proceeding.

The kámik, or, as generally pronounced, kumming, or boots, are principally made from the skins of adult Pagomys fætidus, with the hair off, the soles being made from the skin of Phoca barbata. For winter wear a very beautiful and serviceable boot is made from the skin of reindeer legs sewed together lengthwise; they are used only in dry snow, being quite useless when the snow is wet. Another style of boot is to have the leg of netsick skin, but with the hair on. These boots reach nearly to the knee, and are kept in place by means of a string around the top, and also secured by a seal-skin cord passing over the instep and around the heel. They are generally sewed with sinews from reindeer; but for boots the sinews from the dorsal vertebræ of Beluga catodon are preferred when they can be procured.

The stocking worn next to the foot is of heavy reindeer skin, the hair side next the foot; they reach above the knee. Over the stocking is worn a sort of slipper made from the eider-duck. The bird is skinned by making an incision on the back near one wing; through this opening the body is removed. The skin is cleaned of the fat by the Eskimo's teeth, and the skin farther prepared by chewing it. The tail-feathers are removed, and this end becomes the toe of the slipper, the feather side being worn inside. Its upper edges are bound with some kind of skin to give it additional strength, and if the entire slipper is covered with cloth will last a long time. They are very warm and comfortable. Larus glaucus is often used for this purpose. For children they use Uria grylle and Rissa tridactylus skins. Over all this is worn another slipper

made from the netsick skin, with the hair on, and the hair side worn outward and the hair pointing from the toe backwards. This very much facilitates the drawing on of the boot.

For summer wear the young of the netsick in the woolly coat is substituted for reindeer for the stockings. Dog skin is also sometimes used for stockings, but not so commonly among the Cumberland Eskimo as among those of Hudson's Straits, who use dog skins for pants as well as stockings.

All the clothing is sewed with sinews, reindeer or white whale. The reindeer sinews are dried in bulk as they come from the animal, and are split off as needed. The fibres are separated as fine as necessary, and then drawn quickly between the teeth to secure a more uniform size. The women all sew towards themselves, using the thimble on the first finger; they seldom use but one kind of seam; the edges of the skin are carefully matched together, and joined by sewing over and over the overcast seam. Their thimbles (called tikik, also signifies first finger) are made from the skin of Phoca barbata; in shape they are merely an oblong piece sufficiently large to cover the point of the finger. A rim is cut around the outside edge for about one half its length; this forms a sort of loop under which the finger is passed, and in this manner it is kept in place. We found this style of thimble much more convenient than the metal one of the usual form.

Very few of the Cumberland Eskimo at the present day use anything but steel needles, or bone ones made after the same pattern. We have seen an instrument said to have been used, as a needle that is considerably different from anything we ever saw before. An Eskimo brought it to us, and wanted a hatchet in exchange. We thought it certain he would return and offer to trade at our terms, but he did not, and we never saw him again. This tool was almost exactly like an awl in shape, but had an eye near the point. They must have had to thread this instrument for each stitch. The needle part was apparently of deer horn and the handle of walrus ivory.

The favorite and principal tool of the women is a knife shaped like an ordinary mineing-knife. Nearly all the Cumberland Eskimo have now procured iron enough from some source or other so that they can have an iron knife of this pattern. Before they could procure enough iron, they made the knife of ivory, and merely sank flakes or pieces of iron into the edge, in the same manner as the natives of North Greenland do at the present time. This same practice of sinking iron flakes into the

edge was also used on their large skinning-knives, which were made from a walrus tusk, and much after the pattern of an ordinary steel butcher-knife. Some of these ivory knives have no iron in them; but at the present time they are used principally, if not entirely, for cutting snow and removing ice from their kyacks.

The women seldom use any other kind of knife than such as just described. With them they remove the blubber from the skins, split skins, eut up meat, and when sewing this instrument is used instead of seissors. They begin a garment by sewing together two pieces of skin and shaping them as they go along by means of the knife, cutting for an inch or two and then sewing. They always *push* the knife *from* them when working it.

Tattooing does not seem to be as prevalent now as formerly, for it is mostly on the aged women that one finds it at present. The markings resemble India ink in appearance, and are done with gunpowder at present. Still, some use the old method, by taking the juice of *Fucus resiculosus* L. (or a closely allied species), and some small algae that apparently contain a good deal of iodine, and mixing with lampblack.

Instances came under our observation of people of apparently great age,—say seventy years and over, to judge from appearances; they had gray hair (a rare thing among the Eskimo), and were nearly blind; the women had the teeth worn close to the gums by chewing skins.

It is impossible to arrive at any definite conclusion regarding their age, as they keep no record of time and cannot refer to any past event by any means of notation. We could not learn of the rudest attempt at picture-writing or hieroglyphics; and, as they possess no records whatever, their traditions are handed down from generation to generation without being fixed by any means which allow even an approximate estimate of their growth and prosperity.

Most of them are unable to count beyond their ten fingers, and many are unable to go over six; some, again, are said to have names for numbers to twenty, but they are few. The numerals are differently pronounced, and we found difficulty in getting one sufficiently conversant with them to give us the numerals to ten.

One=Atáusa, or atausat.

Two=Mácho.

Three=Pingasuit, or pingasat.

Four=Séseminé, or sesemat.

Five=Tódlimené, or tódlimát.

Six = Aúkbinigan.

Seven=Pingashuing (?).

Eight=Aukbinigan-machoni (6 and 2).

Nine=Schischimani (??).

Ten = Kowolin.

Above ten they are said to count their toes and take ten and one, ten and two, &c.; but we were unable to find one who knew their names. They will tell you they have eaught seals or birds up to six, but if more they generally put it *amashuadly* (a good many), which may be any number from seven upwards.

In the treatment of the sick they are very superstitious, and in fact they resort almost entirely to their ancoot, angekoks, or medicine-men.

The following is a Greenlander's legend that proposes to give a reason why people die: "The cause of people's dying is laid to a woman, said to have discoursed thus: 'Let the people die gradually, otherwise they will not have room in the world."

Others relate it in this manner: "Two of the first people quarreled. One said: 'Let it be day and let it be night, and let the people die.' The other said: 'Let it only be night and not day, and let the people live. After a long wrangle it came to pass as the first had said."

. It is interesting that this same curious legend exists among the Eskimo of Cumberland Sound; they say though that "those who quarreled finally arranged matters and had both *entire* day and *entire* night at the different seasons, so that both parties might be suited."

The lungs of *Lepus glacialis* are considered as a sure cure for boils and all manner of sores; they draw, they say, and their manner of applying them is the same as we would a poultice. They must be applied as soon after the animal's death as possible, and while they are yet warm.

In cases of scurvy they never use *Cochliaria*, but the stomach of a freshly killed reindeer, with the vegetable contents, instead. If the scurvy patient be very bad, the limbs are bound with pieces of the deer's stomach, whale or seal's blubber, or any kind of fresh meat. If a whale can be caught at such a time, the patient is sometimes bodily shoved into the earcass, or the lower extremities only are sunken into the flesh.

The most prevalent disease among them seems to be lung disease; it is alarmingly common, and consumption probably kills more than all other diseases combined.

The whalemen have introduced venereal diseases among them, which have spread at a terrible rate, and devastate the natives almost like a pest.

I could not learn that they have any knowledge of the medical properties of any plant or shrub. Some of the coarser kinds of algor are procured at low tide from the cracks in the ice, and eaten raw, but only because they are fit to eat, they say; the roots of *Pedicularis* are also sometimes eaten.

When the women are about to be confined they are placed in a small snow-hut, if it be winter, and in a little skin tent, if summer, by themselves. Their only attendant is a little girl, who is appointed by the head ancoot of the encampment. A little raw meat—deer, if they have it—is put into the hut with her, and she is left to give birth to the child as best she can. The reason she is removed from her tent is, that should mother or child die in the tent nothing pertaining to the equipment of the establishment could ever be used again, not even the tent-covering or the husband's hunting-gear. In some instances they are obliged to modify this custom somewhat. We have known them to cut the tentcover about two feet from the ground all around and use the upper portion. A man's wife accidentally shot herself in her igloo, but the gun was too great a sacrifice; he used it, but the rest of his household effects were left to waste away where they lay. We knew of another instance where the tent-poles were brought into use again in the course of a year after a death had occurred beneath them.

As soon as the mother with her new-born babe is able to get up and go out, usually but a few hours, they are taken in charge by an aged female ancoot, who seems to have some particular mission to perform in such cases. She conducts them to some level spot on the ice, if near the sea, and begins a sort of march in circles on the ice, the mother following with the child on her back; this manœuvre is kept up some time, the old woman going through a number of performances the nature of which we could not learn, and continually muttering something equally unintelligible to us.

The next act is to wade through snow-drifts, the aged *ancoot* leading the way. We have been informed that it is customary for the mother to wade thus bare-legged, but (whether from modesty or the temperature of  $-50^{\circ}$  F. we cannot say) on some occasions this part of the performance is dispensed with.

When a sick person gets so far gone that they deem recovery improbable, he is removed from the hut, and either dragged out upon the rocks to die, or a little snow shelter may be constructed for him, and some scraps of raw meat thrown in to him. Usually such proceedings are apt

to end fatally o the patient, even though his ailment might not have been so dangerous had proper care been taken. We know of one instance where a man was thus put out to die seven different times; but he recovered and crawled back to his igloo, and looks now as if he was good for a number of years yet. Stories are common of how aged and infirm people are put out of the way by the younger ones, to rid themselves of a useless burden; but of this we know nothing from personal observations, or from reliable sources.

Occasional instances of suicide happen, generally when the person is afflicted with some incurable disease. Hanging seems to be the favorite mode of killing themselves.

The ancoot's manner of operating is various, and almost every one has some method peculiar to himself. We could get but a glimpse of some of them, as they are averse to having a white man witness their performances, and we had the greatest difficulty in getting any one to explain to us their meaning. The following legend is supposed to give the directions for becoming an ancoot; it is interesting that this legend does not differ essentially from the Greenlander's. (Vide Grænlands nye Perlustration, Eller Naturel-Historie, Hans Egede, 1741.)

We would here add that those who become *ancoots* are only such as are naturally possessed of a more penetrating mind than their fellows, generally the biggest rascals in the encampment, who seldom pay any attention to what is right or just, but ply their vocation so as to win for themselves renown among their fellows, and possess themselves of any coveted article as remuneration for their services.

The manner in which one may become an ancoot, or angekok.

Any one wishing to become an *ancoot* must go away a long distance from where there is any other person. Then he must find a large stone, and seat himself by it, and eall on *Torngarsuk*.\* This spirit will then make himself present to him. The would-be *ancoot* will at first be very much frightened at the arrival and appearance of this spirit, so much so that he is seized with severe pains, and falls down and dies, and remains dead for three days. Then he comes to life again, and returns home a very wise man.

<sup>\*</sup> Torngarsuk of the natives of South Greenland, and Tornarsuk of North Greenland, is the highest oracle, the master spirit of these people. There are many spirits of less power, called Tornat; these can be seen only by the angekoks, after their meeting with Torngarsuk. It appears that this word signifies the greatest spirit of Good, as well as of Evil. They now call the Devil Torngarsuk, and in their ancient belief their God, so to speak, the same.

An ancoot's duty is, first, to mutter over the sick, that they may become well again; secondly, he will talk with *Torngarsuk*, and get information from him as to how he must manage so that they will have success in their undertakings; thirdly, of him he learns if any one is about to die, and what the cause is, or if some unusual death or misfortune is about to occur to the people.

Their devotion and belief in the *ancoots* are unlimited; they can never be induced to trespass on the commands or disbelieve the prophecies of these important personages. When one has been a very successful ancoot for a long time he may become a great ancoot; this necessitates a period of fasting, and then, as the story goes, an animal they eall amarook (the same word is used for wolf, and for an animal which is probably mythical, unless it can be a Gulo) comes into his hut and bites the man, who immediately falls to pieces; his bones are then conveyed to the sea, where he lives for some time as a walrus; he finally returns among his people, a man in appearance, but a God in power.

If the prophecy of an *ancoot* does not come to pass as he had said it would, any phenomenon of nature, as a halo, corona, aurora, &c., is sufficient to have broken the spell, and the *ancoot* loses nothing of his reputation by the failure, for it is then believed that the measure, whatever it might have been, was not pleasing to *Torngarsuk*.

The people come to these soothsayers after all manner of information. We knew of one case where a young woman asked an ancoot if her yet unborn child would be a boy or girl. He retired outside the hut for a few moments, and when he returned he said it would "be a boy"; but he adds, "If it is not a boy, it will be a girl"! For this valuable information he charged three seal-skins and a knife. As a general thing, the ancoots are paid according to their reputation; still, it is very seldom they refuse to give them what they ask for in return for their valuable services.

They seem to have an idea of a future state, but what we denominate as the region down below they consider as the best place. In Egede's Grænlands nye Perlustration, year 1741, is given a legend which is almost exactly the same as one that is found among the Cumberland Eskimo at the present day. But Egede says, in the Danish translation, "Himmel," heaven, as though this was the equivalent for the Greenlander's word; the Eskimo of Cumberland say "topani," which means simply "up." They do not distinguish any difference in the soul's condition after death, or rather of the two places where they expect to live

hereafter; one differs from the other only in this wise, that if death is caused by certain means they go to the one, and if they die a natural death they go to the other.

The following is their idea of the future: "In the spirit-land all will have it as good as or better than they had it on earth." Yet they designate two places where the soul goes after death, viz: "Some go up; others far down into the earth." But the lower place is considered preferable. This is described as a beautiful land, with everlasting sunshine, where the seal and reindeer abound in fabulous quantities, and food is consequently abundant. To this latter place go only such as are killed by other Eskimo, women who die in childbirth, such as drown in salt water, and whalers; they think, this being the better place, it is a sort of recompense for the suffering they underwent on earth; all the rest go up.

In this connection we will mention that the Cumberland Eskimo think the *aurora borealis* is the spirits of dead Eskimo dancing and having a good time generally. It has even considerable influence over them, and they are well pleased to see a bright *aurora*. The Greenlanders, on the other hand, say it is the spirits of dead Eskimo *fighting*.

We have been told by some that those who hunt in the kyack and get lost or driven upon the ice or some uninhabited island are supplied with food from these regions; that is, living game is thrown in their way for them to capture, so they will not starve. This is firmly believed by them.

Unlike the Greenlanders, the Cumberland Eskimo of the present day have no permanent habitations. They may live at the same locality for several winters in succession, but each year construct a new snow-house. The Greenlander has a permanent sod or stone hut, and lives in tents only while away hunting. The Cumberland natives live in snow-houses from the time the snow gets firm enough to be fit to build with till it melts, in June. They generally begin the construction of the snow-house, or igloo, in the latter part of October. A place is chosen which is sheltered from the north, under the lee of a rock, if possible, and where there is a considerable depth of snow. They begin by treading a circular space about sixteen feet in diameter; on this they keep piling snow and stamping it down as hard as possible till the whole mass is a raised platform as hard as ice. They then cut out a square block from the middle, about eighteen inches deep. After this block is removed they have a chance to cut others from around the sides, and this space is enlarged till it becomes of the desired dimensions. The sleeping platform is left as they finished treading it, no blocks being cut from this portion; it also serves to stand on while constructing the wall, which is always done from the inside, the builder being furnished with fresh snow-blocks from the outside when his supply gives out. The wall is built in a spiral form, so that, if viewed from above, it would have the appearance of a conical coil.

The only tools used in building are a saw, if they can get it, for sawing out the blocks, and a long knife, made from a walrus tusk, for trimming them into shape. In cutting and fitting the blocks of snow, they show skill and ingenuity, so that they make as perfect an arch as the best mason. When the hut is done, or rather enclosed, there is neither door nor window, and the builder is a prisoner. A door, however, is soon made, but at the opposite end from where the entrance is to be; through this aperture the women and children begin dragging in the "furniture," while the men "chink" up the places where the blocks join each other. The structure is so strong that it readily bears a man's weight on the top. When everything is ready inside and out, the lamps are lit; sometimes more than the usual number are procured, and trimmed to burn as brightly as possible; the heat begins to melt the inner surface of the structure, but it soon freezes and forms quite a coating of ice; this, of course, adds considerably to the strength of the building. The inside is now lined with the seal-skin tent of their summer toopiks, fastened up, all around the sides and top by means of small pegs of wood or bone. A window is cut through the wall over the entrance-way, facing the south; it consists of a half-moon-shaped bow of whalebone, over which are stretched the intestines of *Phoca barbata*, sewed together lengthwise. This window admits the light quite well.

The entrances are long, low structures, sometimes only two, often four or even five. They gradually diminish in size from the igloo, but each one has a door, which is so low and narrow that a large person is unable to get through them, even on hands and knees. The door to the hut proper is barricaded at night with a slab of ice or the scapula of a whale. Ice is also sometimes substituted instead of seals' intestines for the window. On either side of the entrance-ways, the dogs are allowed to lie, but never inside the dwelling apartment.

About one-half of the floor at the end opposite the entrance-way is from one to two feet higher than the rest. On this platform they keep all their skins, and it is used for a general lounging and sleeping place. On the top of the snow they lay a coating of *Cassiope tetragona*, or something of this sort, and neatly spread the skins over it. One can see at

almost any time an impish-looking head, covered with a thick mat of tangled black hair, plentifully powdered with reindeer-hair of various lengths and colors, protruding from among the pile of skins. The whole family crowd together on this platform, like so many pigs. The lamps are kept burning day and night, and the woman's place is directly in front of them on the sleeping-platform. Here they sit cross-legged and work. Back of the lamps and around them they pile up their meat. This accumulation of garbage is only cleaned out when it becomes necessary to make room for a fresh supply. This pile of putrifying flesh soon becomes extremely offensive both to sight and smell. Meat is sometimes brought in the huts that is already spoiled, even though the temperature may be 50 degrees below zero. This often happens with deer. We think the cause may be that the body of the animal immediately freezes on the outside and forms a coating of non-conducting ice, which prevents the escape of gas, which instead permeates the tissues. If the animal is disemboweled as soon as killed, it does not happen. Several careasses, still warm, are often piled one upon the other, and the animal heat is probably sufficient to start decomposition before the mass freezes.

Around the lamps lie the bones they have picked the meat from, and such other parts as are discarded in time of plenty. This rubbish is not thrown out, but rooted among after a fresh supply, as it is needed.

Nearly every igloo has a little addition on one side, with an opening to it from the inside of the main hut. In this they keep their deer-skin clothes when not in use, and also an extra blubber supply. Over the lamp is hung a half-moon-shaped frame of whalebone, with seal-skin thongs drawn tightly across. On this they put their foot-gear to dry during the night.

When the snow begins to melt, and their igloos tumble, they have a sad time for a few days. The skin-tent, or toopik, must now be brought into requisition and do service alone. For the toopik they select a flat rock, from which the snow has melted, and by means of two sets of poles, those for the front end of the structure the shortest, and lashed together at the top, like an Indian wigwam, with a ridge-pole between them. Over this the skin cover is spread, and secured to the rock by means of stones laid on the lower edge. All the after portion of this tent is made from seal-skin, with the hair on, on the back generally a large male Pagophilus granlandicus. The forward part is made from what they term mamma, which is prepared from the skins of the netsick in the following manner: After the blubber has been removed in the usual

way (the skins of pregnant females and those suckling young are the best), they *split* the skins, or rather remove a membrane that lies between the blubber and the skin proper. The splitting is done with the woman's knife. The skin is laid upon a flat surface and the knife pushed away from the operator. When the *mamma* is removed from the skin it is treated in the same manner as the skins, stretched, and dried in the sun. It is tough and transparent, and, being very oily, does not easily get saturated with water.

When the toopik is about to be raised, the skin covering is first stretched out upon the rock, and the poles are pushed underneath, and then raised up, stretching the cover as tightly on the poles as possible. The toopik is carried with them when they go hunting in summer.

Such habitations are of variable dimensions, regulated by the number of occupants somewhat, but more by the industry of the hunter and the economy of his wife, for the skins need repairing very often; and, as a consequence, many of the more shiftless natives have extremely poor shelters, patched up with dog and bear skin and old cast-away pieces of canvas, which they have paid well for in serviceable seal-skins.

Their greatest concern is to procure the poles. At present many get broken oars, lance-poles, &c., from the whalers; but still, ingeniously lashed together, bone supports for the tent are yet found among them. The inside arrangement of the toopik does not differ essentially from that of the igloo, except it may be a little nastier as a rule and smell a trifle stronger. Sometimes whale-ribs are made use of instead of poles, and are very ingeniously lashed together. These were more in vogue formerly, before they could procure poles from the ships.

We think they were perhaps less nomadic in past times, as there are still extant sod foundations, which were no doubt used as permanent abodes.

At the present day, so many of the Cumberland Eskimo have procured some kind of firearms that their primitive modes of hunting and their hunting implements have, to a great measure, been modified, and even in some instances altogether lost. Bows and arrows are fast becoming an institution of the past; they do not now rely on them for killing reindeer as they did at one time. Bows and arrows are found around the settlements, broken and out of repair; the arrows, of different kinds, lying about unused, or doing service as some other tool. The children all have bows and arrows; but they seldom kill larger game than snowbirds and lemmings. Of prime importance to the Eskimo is his waang, or spear. At the present day, the sealing spear is often made from an old whale-lance, having a wooden handle and an iron harpoon-head (vide sketches). The socket of the lance is put on the opposite end of the handle, and is used for a variety of purposes. This kind of spear is very useful to the Eskimo in catching the seals in their atluks through the ice. They are extremely expert in the use of this weapon, and possess such marvelous patience that they will stand by a seal's atluk all day awaiting the return of the animal.

This spear is carried on all occasions wherever they go and whatever kind of game they pursue. The opposite end of the spear from which the harpoon is fastened is also their principal tool in building fox-traps of ice, cutting down hummocks so as to get their sledges over the shoreice, &c. Not the least important use of this instrument is to sound the ice with it. In traveling they very often come to places where the rapid running tide has worn the ice very thin, and by means of this spear they carefully feel their way along. They will even cross on a floe that is completely rotten by feeling around till they get upon a more solid spot and then advancing. They are very much averse to getting into the water, as none of them are able to swim.

The harpoon-head used with this spear is made of iron, and is about three and a half inches in length and one inch between the outside tips of the barbs. They manufacture them entirely by filing, and will sit and file for many days till they get the instrument in the desired form.

For whales and walrus they use a much different weapon, the same, we imagine, as they used before the whites came among them. It is a large, awkward, bulky-looking affair, with a shaft made from the horn of *Monodon monoceros*, or from parts of a whale's jawbone, ingeniously lashed together, when wood is not procurable. Some have the handle composed of as many as eight to a dozen pieces, beautifully and compactly lashed together, till the whole is as firm as though it were composed of a single piece.

Although such large spears were not rare among these natives, we found difficulty in getting them to part with them. A favorite harpoonhead is also hard to procure, though they may not have used it for years. Some considerable value seems to be attached to these old implements, especially if they have been successful with them in former times. We depend more upon the illustration here given of this spear than upon the choice of words. Their old harpoon-head for seals was probably

of the pattern here figured. This specimen is from a grave at Exeter Sound, and greatly resembles in pattern the iron seal harpoon-heads of the present day. Others were made like the walrus harpoon, but having barbs, instead of being iron-tipped. A very ingenious contrivance about these old spears is the perfect ball-and-socket joint which unites the echeemung, or bone portion (on which the harpoon is placed), with the shaft. The shaft, if made of wood, has a bone tip, which is cupped to receive the rounded end of the echeemung; they are kept in place by two thongs of seal-skin, which makes it sufficiently firm to use, but at the same time will allow the echeemung to double upon the shaft without breaking when an animal is struck.

As before mentioned, so few bows and arrows are now in use that it is almost impossible to procure a bow and set of arrows that are actually or have been in use. In the following illustration, no less than eight different patterns of arrows are represented. We have derived our information from various sources besides our own observations. We had instructed some of the most intelligent Eskimo to make for us wooden models of all the different kinds of arrows that they ever knew were in use. So far as we were able to procure or see the original, these models were faithfully and well executed, and leaves us no reason to think that they in any instance imposed upon us. Some of the arrows we have seen in the possession of sailors that had bartered for them for a mere song, but would not trade them to us, under the impression that they would bring fabulous sums in the States. They now probably adorn some third-rate gin-shop.

Of the arrows figured, No. 1 is made from reindeer antlers, with short wooden shaft, an old and very common form of arrow. No. 2 is perhaps still older. This is also made of reindeer horn. It is more common on the Greenland coast than among the Cumberland Eskimo. No. 3 is the only one of the kind I saw, and this I was unable to procure; the head was of flint, and the next piece of bone, with the wooden shaft lashed in two places, showing probably a scarcity of wood. No. 4 was a rare (?) form of arrow among the Cumberland Eskimo. The head was made of stone, with the forward portion of the shaft of bone and the rest of wood. No. 5 was iron-tipped, a favorite pattern when iron was scarce. No. 7 is now the style used by the children, and was probably the next pattern suggested after No. 5, as any pointed piece of iron can be utilized for this form of arrow. No. 6 has a lance-shaped and somewhat elongated iron head; such arrows were made only when they could get a considera-

ble iron supply. No. 8 is bone-tipped. I could not learn why the point should be so bent, but many had them so, and even preferred it. All their arrows were lashed with finely separated deer sinews. The feather-vanes were nearly always made from the primaries of *Strix scandiaca* or *Graculus carbo*. The arrows were all short; in fact, their length depended somewhat on the wood supply. We were unable to find but a single specimen of flint arrow-heads in the graves.

The bow is made from reindeer antlers; these are split, using only one of the halves in the construction of the bow. It is always made in three pieces, ingeniously lashed together. On the back of the bow are three or more strings, made like the bow-string; these are fastened at both ends of the bow, and also securely at the middle of the back. This of course gives additional strength to the affair, and is a convenient place to carry an extra string. The bows are very short, often not more than thirty inches. Not every Eskimo is able to manufacture his own bow; but each encampment has generally at least one skilled mechanic, who supplies the rest.

Bows and arrows were principally used in the capture of the reindeer, hare, and birds, seldom seals. These bows are surprisingly elastic, and the Eskimo are able to use them with wonderful dexterity. In shooting this weapon, the string is placed on the first joint of the first and second fingers of the right hand.

Another Eskimo implement fast going out of use is the kakivak, or salmon spear. A glance at the figure will give a better idea of this instrument than we can express in words. The two outside tines are each about seven inches in length, and are made of reindeer antlers. Near the tip and curving inward is a tooth-like prong about one and threefourths inches in length. The points of these teeth come to the end of the middle tine, which is about six inches in length, perfectly straight, and made from walrus ivory. The three times are securely lashed to a piece of the jaw-bone of the whale, of varying length, sometimes only a foot, but often two or three feet. When the bone shaft is too short to use, they generally have a short wooden handle lashed to it to make it the desired length. The two outside times of this spear are very elastic, and spring out when a fish is struck, but close again when the body of the fish has passed beyond the tooth points which project inward. It is thus impossible for it to escape, the central tine having entered the body.

Another instrument, generally used in connection with the kakívak, is

the aják-kaljújak, or ivory fish-bait. It is about four inches in length, and is made to look as much like a fish as possible. A line is passed through the middle of the back, and is fastened on the belly; here is a small ivory hook that reaches from an inch to two inches below the fish. The principal use of the ajakkaljujak is not, however, to hook fish, but to lure them within reach of the spear. The Eskimo takes his ivory fish and bobs it up and down in the water, generally in a tide crack or a hole in the ice on purpose, and watches till he spies a fish making for it. He then gently begins to haul in on his line, if the fish follows the lure, till it is within reach of his spear; sometimes a greedy fish will swallow the bait and get caught with this primitive gear. At the present day they seldom use this implement. Iron fish-hooks are supplied them from the ships; but they are poor fishermen compared with the Greenlanders.

One little implement of comparatively insignificant importance seems not to have been superseded by any modern substitute as yet. It is the kadjuk, a small piece of ivory of different shapes, used to insert in the lips of the seals while dragging them over the ice. We have given illustrations of the principal patterns we found in use. No. 8 is the same as No. 7 when seen from the top. This is a very ingenious piece of work. The main body of the piece is hollow, and the portion No. 11 has a head which prevents it pulling through, but at the same time turns freely, and prevents the line from twisting when the seal turns over. It is so well made that the inside piece cannot be got through any of the openings. No. 3. is No. 2 seen from the top. No. 10 is sometimes used as a part of the clasp on the sealing line. Nos. 1, 4, and 9 are the commonest patterns. No sealer's line is without one or more of these implements of some pattern or other; they are all made from walrus ivory.

Of prime importance to the Eskimo hunter is his hook for catching the young seal. Here again their old pattern has been modified by their contact with the whites. A glance at the accompanying figures will sufficiently explain the shape of these implements. The upper figure represents the ancient pattern; it was found in a grave in the Greater Kingwah Fjord, but so much decayed as to fall to pieces when handled; the hook part was made from a portion of a reindeer's antler, with a small barb cut near the point. Its resemblance to the iron book of the present day is very apparent.

The sealing hook of the present day is made generally from a discarded whale lance; the handle is a light wooden shaft about five feet in length.

This instrument is used only to catch the young of Pagomys fætidus, while they are still in the white coats; they are caught either while lying beside the atluk on the ice or while still in the snow-burrow. When an Eskimo sees a young seal on the ice, he begins to make his way cautiously toward it, stopping frequently, and giving the animal ample opportunity to satisfy its curiosity. The seal will work its head and fore part of the body in a jerky, awkward manner, and keep edging nearer and nearer to its atluk; the Eskimo watches every movement of the seal, and knows just the proper moment to advance a step or two and then stop. This manœuvre is kept up till he gets near enough to reach the seal with his hook. He then makes a quick jump, at the same time striking the hook into the animal. Sealing among the Cumberland Eskimo is sufficiently described under our notes on Pagomys fætidus, in the report of the mammals, for us to leave it out of this paper.

When a seal-skin is about to be prepared for drying, the blubber is first removed somewhat roughly; the skin is then laid on a board, and with the woman's knife the membrane underneath the blubber is separated from the skin. The knife must be very sharp to do this successfully. The operators always push the knife from them; it takes considerable experience in order to do the jeb well. When all the blubber is removed, which will take three or four hours of faithful work, the skin is taken outside, and by means of the feet is rolled and rubbed around in the snow for some time, and by this process they succeed in removing every trace of grease from the hair. When thoroughly washed, the skin is put upon the stretchers, if it be winter, to dry; these stretchers are merely four poles, which are lashed together at the corners like a quiltframe, the proper distance apart to suit the size of the skin. The skin is secured in place by seal-skin thongs passed through little slits along its edges and made fast to the poles. When the skin is properly stretched upon the frame, it is put above the lamps inside the snow-hut to dry. As the sun gets higher and begins to have some effect, the skins are stretched, flesh side up, on the southern slopes of snow-banks, and are secured by means of wooden or bone pegs about a foot in length. As the season advances and the snow melts they begin to stretch the skins upon the ground by means of the before-mentioned pegs. The skins are not allowed to rest upon the ground, but are raised a few inches to allow the air to circulate underneath. Skins dry very fast when exposed in this manner.

The first days of spring are always a busy time with the Eskimo

women. One thing is, they get more freshly killed skins to prepare, and then they generally have a surplus stock of the winter's catch which they could not take care of by the slow process of drying over the lamps in the huts during winter. The skins of the young in the white coats are dried in some considerable quantities, as it takes about fifteen to make a *single* suit of clothes, and many have *double* suits made from this material. They have no idea of any tan, and prepare the skins merely by rubbing them with their skin-scrapers.

We insert a sketch of a very old skin-scraper, such as are now found only in the old graves. It is made of stone, with a wooden handle, which is fastened to the stone by means of a strip of whalebone. other and later pattern is made from the scapula of a reindeer. A better idea of its make can be got from the sketch than by a description. Such scrapers are still in use, but serve as a sort of auxiliary to a scraper made from a tin can, resembling a little scoop in shape, and having a wooden handle. This is the style of scraper made at the present day, and is by far the most effective instrument of the three. The manner of using these scrapers is to take the skin firmly in the left hand and putting the knee or foot upon the lower part of it holding it securely, while the scraper is worked with the right hand, pushing downward with some force. If the skins are very dry, when they begin they are somewhat softened by rubbing with the hands, or even chewing the most stubborn parts. They continue using these tools upon a hide till it gains the desired pliability. All the work of stretching, drying, cleaning, washing, and softening the skins falls upon the women.

The skins of *Phoca barbata* are stretched on a frame like those of the netsick, but not till the hair has been removed. The cutting of the hair is one of the nastiest and most disgusting sights one can imagine. It generally falls to the lot of some old woman to do this. The skins are allowed to lie and become somewhat putrid, a portion of the blubber remaining on. The only tool used is the woman's knife before mentioned. When about to clean one of these skins, the squaw takes off her boots, stockings, and pantaloons, and, tucking her feet under her body, lays this dirty, bloody, greasy, stinking skin on her bare thigh, the flesh side down. She then pushes the knife against the hair, cutting, or rather shaving it off. As her hand becomes too oily to hold on to the skin, she puts her fingers into her mouth, and thus cleans them. When properly cleaned, it is dried in the manner already spoken of, except that the back and belly of the animal are dried separately, as the skin is different on those por-

tions of the body, and would dry unevenly. When dry, it is almost as stiff and hard as a board. This skin is used mainly for the soles of boots; the pattern is cut from the hide, and then *ehewed* till it becomes sufficiently softened to sew. This last operation is also mainly performed by the old squaws. When they are too old to sew, they become *oojook* ehewers as the last resort, and when their teeth fail them they are better off in the grave.

Seal-skins are also manufactured into drinking cups; such cups generally have a depth and diameter of about three inches. A short, straight piece of bone, mostly the humerus of a gull or duck, is sewed into the upper rim on one side, projecting outside about two inches and a half; this serves for a handle. The hair side of the skin is used for the inside of the vessel. Larger vessels, somewhat resembling a small sack, were used to carry water in at their encampments; but when out traveling, they mostly carry their water supply in a seal's stomach, prepared for the purpose.

We would naturally expect these people to be very expert in making various devices for capturing their game in traps or snares. This does not seem to be the case, however. They make a fox-trap, which is nothing more than a little round but of ice, with a hole in one side just large enough for the fox to crawl into. Inside the but is a large slab of ice, which rests horizontally upon a small upright piece of ice; the end of the upright rests on the bait, and when the fox pulls at the meat he draws the upright down, and the ice slab falls upon him and he is a sure prisoner.

Another manner of catching foxes is to make an ice house much larger, so high that a man can readily stand up in it. A small funnel-shaped hole, just large enough to admit the fox, is made at the top of the structure, and the bait is hung inside just out of his reach. The fox will work a long time trying to secure it, and finally crawl in and jump down upon the floor of the hut, but then he is unable to get out again.

A sort of snare is sometimes made for hares. It is nothing more than a seal-skin line, with a number of slip-nooses upon it; this is laid across the runs of the animals, or upon their feeding-grounds. They are often caught in this manner; but the foxes are generally the only ones benefited by the capture; all that the Eskimo finds is a little hair and a few bones the next morning.

Birds are sometimes snared in about the same manner, except that

they use finely braided deer sinews for the snares, instead of seal-skin. They take a good many eiders on their nests in this manner.

When traveling over the frozen wastes in winter they use snow-shoes. These are half-moon-shaped, of whalebone, with seal-skin thongs tightly drawn across. They are about sixteen inches long. Another pattern is merely a frame of wood, about the same length, and eight or ten inches wide, with seal-skin thongs for the foot to rest on. As their dogs' feet often get very sore while traveling on crusty snow, they make them little moccasins of seal-skin to protect the feet.

Nearly all the Eskimo become snow-blind in spring, though they use eye-blinkers of wood. These are only a piece of wood fitting closely over the eyes, and having a horizontal slit about one-sixteenth of an inch wide; it affords a good deal of protection to the eyes, but they are generally not put on till the condition of their eyes forbids them going without. Some eye-blinkers of bone were found in a grave; they were apparently very old, and of a different pattern, but so much decayed as not to admit of handling.

All the Cumberland Eskimo of the present day have sledges of wood. This has either been bartered from the whalemen or secured from the wrecks of ships. There are, nevertheless, some remains occasionally found of sledges that were composed entirely of bone, whales' jaw-bone apparently. They were made in many pieces, and ingeniously lashed together. All their sledges of the present day are shod with bone, and when about to undertake a journey they pour warmed blood upon the under surface of the bone shoeing; some use water, but this does not last nearly so long as blood, and is more apt to chip off. This coating makes a very smooth surface, and also protects the runners. All their sledges have a sort of upright on the back end. This is nothing more than a deer's head, with the antlers attached, the antlers being lashed on the top edge of either runner. This serves for a variety of purposes, and is very handy indeed.

The kyack of the Cumberland Inuit does not seem to have undergone any change in pattern since the whites came among them. Still, these craft are extremely rude and bulky, compared with the Greenlanders' kyack; neither do they compare with the Greenlanders in expertness in its use. These kyacks are mostly so large that they would readily carry two persons, and quite heavy. They do not carry so much gear upon their kyacks as the Greenlanders; the seal spear, walrus spear, and bird spear, with their respective lines, are about all, unless they are after some

special kind of game, as, for instance, bears; then they carry a bear lance, which, however, does not materially differ from the whale lance. The *omiak*, or woman's skin boat, is now rare among them, as they are able to procure whale-boats from ships, and one boat will accommodate several families. Some of these boats still exist in the vicinity of Nugumente and farther south. It required about fifteen skins of *Phoca barbata* to construct one, and several years' accumulation of drift-wood.

It seems very probable that before the advent of whalemen they practiced a great many rites and ceremonies, many of which are now obsolete, or exist only in tradition. Sometimes one of these old customs will be repeated, but, as a general thing, not in the presence of a white man, if they can help it.

One of these customs, which possesses a good deal of interest, is their manner of greeting a stranger. When a stranger arrives at an encampment, and is personally unknown to all or the major portion of the inhabitants of the village, he receives an introduction after the following manner: The villagers (the men) form themselves into a single rank, all of them, with the exception of the stranger and the head ancoot of the village, having hare-skin mittens on; they then begin a monotonous singing chant, keeping time with their arms, swinging them in front, raising the hand as high as the shoulder, with arm slightly bent, and then describing a half circle by lowering the hands as far as the abdomen. Finally, the ancoot and the stranger step out from the ranks and face one another. Both have mittens of seal-skin. The stranger complacently folds his arms over his breast, and inclines his head to one side, so as to fully expose his cheek, while the ancoot deals him a terrible blow on it, sometimes felling him to the ground. The two actors now change parts, and it becomes the stranger's turn to strike, which he does with a vengeance; the two then kiss each other, and the ceremony is over. The stranger is now duly initiated to share in any and all their customs, and due hospitality is shown him by all. Among his privileges he can also choose for himself a wife during his sojourn.

Another custom, which was once very popular, is the following: An ancoot dresses himself up in the most hideous manner, having several pairs of pants on, among the rest, and a horrid-looking mask of skins. The men and women now range themselves in separate and opposite ranks, and the ancoot takes his place between them. He then picks out a man and conducts him to a woman in the opposite ranks. This couple then go to the woman's hut and have a grand spree for a day

or two. This manner of proceeding is kept up till all the women but one are disposed of. This one is always the *ancoot's* choice, and her he reserves for himself. The people thus assembled are, of course, all well known to him, and he understands pretty well how to mate them so as to meet general approbation.

When the women have their monthly courses, they will not work, nor visit the ship, or even each others' huts.

The dead are generally covered with a little pile of stones, so arched over as to form a sort of tomb. It is also quite common at the present time to leave the dead fully exposed upon the rocks. All the Eskimo have a great horror of handling a corpse, so that when a person is very sick he is carried out to die, and where he lays the stone pile is erected around him. The hunting implements and many of the valuables of the deceased are put by him; such things as he will need for a long time inside, and the rest outside of the grave. We have found in one grave the skeletons of two dogs, remains of a sledge, whip, &c., and the partial skeleton of a Pagomys fætidus. The right femur of the Eskimo skeleton in the grave was deformed, and had the appearance of having been broken and allowed to grow together without setting. He was probably lame during life, and the dogs and sledge had been given him in order to facilitate his traveling to the happy hunting-grounds. In another grave we discovered portions of a kyack. That decayed bow and arrows, spears, and all their hunting implements, were at one time plenty in graves, is very apparent; but of late years they have so amended this usage that it is no longer necessary for the articles to remain very long, so they are taken out and used by the relatives. In very recent graves we found tin cups and pots, knives, and even one fork and spoon, comb, pieces of cloth, needles, thread, thimble, and in one a photograph and a Harpers' Weekly newspaper, tub for meat, &c.; in fact, all the equipments and treasures of the deceased. The more valuable of these articles were outside, and would undoubtedly soon have been appropriated by the relatives. This is the reason that so little is found in graves at the present day. In the old graves the wood and bone implements seem to decay very fast, and can seldom be handled without falling to pieces. All the graves contain entire or partial skeletons of some animal or bird, mostly the netsick seal. This was put in for food, undoubtedly. Very few graves contain the perfect skeleton of the inmate. The dogs, wolves, and foxes despoil the graves, and scatter the bones in every direction. It is seldom that these tombs are so well constructed that the dogs cannot tear them down.

As a rule, they are not kind to the aged or feeble. We know of one instance where an old cripple, who had no one who would recognize his authority, was obliged to go sealing for himself. He had but one dog, and no sled; so, taking a seal-skin and allowing the dog to drag it, he was conveyed to the sealing-ground on this novel conveyance. There were every day large sleds leaving the encampment, but no one offered to help the old man, as there was no prospect of his being able to reciprocate the favor.

Among their many superstitious notions, the wearing of charms about the person is one of the most curious. These are called amgoouk, or amusit, and may be nothing but pieces of bone or wood, birds' bills or claws, or an animal's teeth or skin. To these charms they attribute supernatural powers, and believe them to be able to keep the wearer from sickness or misfortune. It is a common custom for the wife to throw a piece of seal's blubber on her husband's kyack when he is about to go hunting; this will give him success. Little strips of deer-skin are hung about the person in different places to insure success in some undertaking or to ward off some misfortune, real or imaginary. We discovered one of these charms, which seemed to possess unusual interest. It was worn by a little girl about eight years old. She had a small envelope of seal-skin that was worn on the back of her inside jacket. We succeeded in bribing her grandmother to show us the contents of the envelope, which proved to be two small stones, the one a bluish flint, the other apparently meteoric iron. The tradition connected with these stones, the grandmother said, is that a very long time ago an Eskimo, from whom she was a lineal descendant, had discovered the iron, and had picked up a stone to break a piece off and take home with him; but when he struck the iron fire flew from it, and he soon learned how to make use of this accidental discovery, and became a great man among the people. At this point we lost the thread of the old woman's narrative, and all we could further learn was that these two small pieces had been preserved in the family for successive generations, and were inherited by her from her mother, and that she had now given them to her grandchild, the child's mother being dead. The child will in turn give it to her children. She thought this charm of inestimable value, and could not be induced to part with it, for, she said, "No one has yet died while wearing this charm."

Another charm of great value to the mother who has a young babe is the canine tooth of the polar bear. This is used as a kind of clasp to

a seal-skin string, which passes around the body and keeps the breasts up. Her milk supply eannot fail while she wears this.

Many of the *ancoots* by long practice become quite competent jugglers, and often take advantage to show off their powers to the edification of their friends. A common trick with a full-fledged *ancoot* is to come suddenly into a hut with a harpoon toggled on his breast, and the handle sticking in his back, the wound bleeding profusely. Such demonstrations make a lasting impression upon the minds of those who witness it, and it becomes no less marvelous when they see that he survives, without even a mark after the wound.

A very interesting legend is one which they tell as to the origin of man, as regards creation, and the beginning of all things. They say it came so of itself. Of the creation of man they say: In the beginning there grew up from the earth a man; he got a wife from one of his thumbs (!), and from this pair the race has originated. But the whites, whom they call cablunet, or codlunak, they have sprung from dogs. An Eskimo woman at one time gave birth to human beings and dogs. These latter she put in an old boot, and threw them out into the sea, saying, "Go hence, and become white people." From this they say whites live on the sea, and their ships are like the Inuits' boots, round at both