CANADA
DEPARTMENT OF MINES
HON. P. E. BLONDIN, MINISTER; R. G. McCONNELL, DEPUTY MINISTER.
GEOLOGICAL SURVEY

MEMOIR 91

NO. 14, ANTHROPOLOGICAL SERIES

The Labrador Eskimo

BY
E. W. Hawkes

OTTAWA
GOVERNMENT PRINTING BUREAU
1916

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PREFACE.

The following account of the life of the Labrador Eskimo is the result of a trip undertaken in the season of 1914 to the coasts of Labrador, for the Geological Survey of Canada. As the author had already an intimate knowledge of the general culture of the Eskimo from a three years' residence among them in Alaska, an attempt was made to cover as much territory as possible, so as to get a comprehensive view of the culture of the Eskimo of the entire coast of the Labrador peninsula, and to note its variations from other sections. With this end in view, the early part of the summer was spent in Sandwich bay and Hamilton inlet, in an endeavour to ascertain the southern limit of the Labrador Eskimo, and the remainder of the summer and autumn in company with the Carnegie Magnetic Expedition¹ which continued up the coast as far as Cape Chidley, and then visited both sides of Hudson strait, and the east coast of Hudson bay as far south as Cape Dufferin. This completed the circuit of the Labrador peninsula. The west coast of Hudson bay, between Port Churchill and Chesterfield inlet, was also visited, as well as several islands in the bay. A considerable ethnological and archæological collection was obtained from these districts.

This paper does not attempt to offer a complete ethnology of the Labrador Eskimo, but to bring out the main facts of their life, and particularly those differences which mark them off as a separate division of the Eskimo world. After all, the ethnological divisions of the Eskimo are geographical rather than cultural. The author has drawn on his own experience for comparisons with the western Eskimo and on standard authors for other sections.

The ethnological literature on the Labrador Eskimo is scanty and devoted to sections of Labrador rather than to the Eskimo of the Labrador peninsula as a whole. Turner's interesting account is limited to Ungava; the Moravian writers have given us some descriptions of Eskimo life on the east coast,

¹Thanks are due to Captain Peters, leader of the expedition, for many courtesies.

from their own standpoint; there is little information on the west coast Eskimo except scattered references and a portion in C. H. and A. T. Leith's "A Summer and Winter on Hudson Bay." It is hoped that the present work will bring out the salient features of the Labrador Eskimo culture and serve for comparative study.

The Labrador Eskimo.

HISTORICAL SKETCH.

THE SKRAELINGS.

A correct understanding of the present habitat and condition of the Labrador Eskimo is hardly obtainable without a knowledge of their past history and the remarkable vicissitudes of fortune through which they have passed. The wiping out by the combined whites and Indians, of the entire southern branch south of Hamilton inlet, which remained hostile and pagan to the last, and the careful nourishing of the northern branch by Christian missionaries, form one of the many paradoxes with which the history of native races in their relation to the whites abounds.

The first mention of Eskimo, supposed to inhabit the present Labrador, occurs in the Saga of Eric the Red, where the encounter of the Northmen with the Skraelings (which should remind us that the Eskimo were probably the first people met by the whites in America) is thus described:

"They saw a great number of skin canoes, and staves were brandished from their boats with a noise like flails, and they were revolved in the same direction in which the sun moves."¹

This is evidently an attempt of the Norse singer to describe something so unusual to their economy as the appearance of Eskimo in kayaks (skin boats). The sound of the double-bladed paddles striking the water might be likened to the action of flails; while the motion in the air, dipping on one side and then the other, would give them the appearance of revolving to an

¹ It is interesting to note in passing that the movement "as the sun goes" is characteristic of the turning of the dancers in certain Eskimo ceremonial dances, and that the actual words, "Turn as the light of day (the sun) goes," occur in one of their ceremonies. See Nelson, *Eskimo about Bering strait*, 18th Annual Report B.A.E., p. 372.

observer to whom the sight was unusual. Farther on the Saga reads:

"A great multitude of Skraeling boats were discovered approaching from the south, and all their staves waved in a direction contrary to the sun." The apparent contradiction is easily explained. In the first case the kayaks were seen approaching from the north and in the second case from the south, when the apparent motion of the kayak paddles would be reversed.

Certain writers have attempted to associate this description of the Skraelings with the Beothuks or the Micmac Indians but the description of "skin canoes" and revolving paddles would not apply in this region to any other people than the Eskimo.

The difficulty of finding the Eskimo as far south as Vinland is not great, when we remember that in the sixteenth century they inhabited the north shore of the St. Lawrence and might have extended their wanderings farther south at an earlier period. Weapons closely resembling those used by the Eskimo have been dug up in Ontario¹ and New York State.² The specimens in the Beothuk collection in the museum at St. Johns, said to be from the Newfoundland coast, show a strong Eskimo influence. In each case this influence may be due to cultural borrowing by neighbouring tribes, but when we remember the summer visits of the Labrador Eskimo to the north of Newfoundland, it is not unlikely that a party may have been seen by the Norsemen, particularly as the location of this description has never been definitely ascertained to be farther south.

EARLY RELATIONS WITH THE FRENCH AND ENGLISH.

The next historical trace of the Labrador Eskimo is to be found in the account of the voyage of John Cabot. He saw some of the inhabitants of the new land he discovered (presumably Labrador), and brought back "snares for game and needles for making nets." Harisse, the foremost authority on the early exploration of Labrador, considers that these are Eskimo

¹ Wintemberg, *Bone and harpoon heads of the Ontario Indians*, Archæological Report of the Provincial Museum, Toronto, 1905.

² Verbal information from Alanson Skinner, Mus. of the Am. Indian.

utensils. Gosling, on the other hand, in his able and exhaustive history of Labrador, contends that the Labrador Eskimo had no knowledge of catching salmon by means of nets, and had to be instructed in the art by the Moravian missionaries in 1772.¹ It is possible that in this case the usually careful author confuses civilized with native implements. He is certainly mistaken when he goes on to say that "among the implements of the Eskimo, which have been many times carefully described, snares and nets are not mentioned."² The use of nets for seal and salmon and of snares for birds is common in Alaska,³ but rare among the eastern Eskimo. Still, John Davis mentions the use of nets in Greenland in 1586,⁴ and Thalbitzer in his recent publication on the East Greenland Eskimo⁵ is of the opinion that nets were used in Greenland in early days. Ancient implements for making nets have been found there according to Glahn and Fabricius. Thalbitzer⁶ thinks there is a close relation between the Labrador Eskimo and the tribes of south and central Greenland, due to former contact, which shows in phonetic similarities. If this is true, there may have been a cultural borrowing, particularly of so useful an instrument as the net. Boas⁷ mentions the use of the net by the Labrador Eskimo, which the Baffin-islanders, who belong culturally with the north Greenland group, do not employ. Turner ascribes the use of the net in Ungava to European influence.⁸ It seems probable, then, that the Labrador Eskimo may have made nets in older times, but given up their manufacture when they could procure the civilized article so much more easily in their summer raids to the south. The Moravians mention that when they went among them, they found the Labrador Eskimo well supplied with fishing gear and nets, the results of their plundering trips to the Gulf of St. Lawrence.

It is generally conceded by historical students that, even if Cabot landed first in Newfoundland, he continued up the

¹ Gosling, *Labrador, its discovery, exploration and development*, p. 29.

² *Ibid.* p. 30.

³ Nelson, *The Eskimo about Bering strait*, 18th Annual Report B.A.E., pp. 185 sqq.

⁴ "They make nets to take their fish of the finne of the whale." *Hakluyt's Voyages*, p. 782.

⁵ Thalbitzer, *The Ammassalik Eskimo*, Copenhagen, 1914, p. 402.

⁶ Thalbitzer, *ibid.*, p. 685.

⁷ Boas, *The Central Eskimo*, 6th Annual Report B.A.E., p. 516.

⁸ Murdoch, quoting Turner, p. 252.

Labrador coast as far as Hamilton inlet, where he could have procured "snares for game and needles for net-making" from the Eskimo of that vicinity.

Sebastian Cabot, son of John Cabot, in his memorable voyage brought back with him "three savage men," who "were clothed in the beastes skinnnes and *ate raw flesh*, and spake such speech that no man could understand them"; these are undeniably Eskimo.

Curiously enough, Jacques Cartier does not mention meeting any Eskimo in the Strait of Belle Isle. Gosling¹ takes this as evidence that the Eskimo did not begin to frequent the Gulf of St. Lawrence until drawn thither by the desire to obtain iron tools and fishing gear from the Basque, French, and English fishermen; but the inference is not conclusive. It might have been an off year for Eskimo migration, due to disease or some religious taboo, as often happens, or Cartier might have simply missed the wandering bands. One thing is certain; when the French began settling on the coast in 1702 they found the Eskimo in considerable numbers on the north shore of the Gulf of St. Lawrence, as far west as Mingan.

The first attempt to found a permanent settlement on the Labrador coast was by Courtemanche, about 1704, who established a fishing and trading post at Bay Philypeaux, now Bodore. His concession extended from Kegashet (now the Kegashka river) to Kessessasskiou (Hamilton inlet). Here, with a party of forty French-Canadian servants and thirty or forty Montagnais hunters, he lived the life of a grand seigneur, carrying on an extensive fishery, and trading with the natives. He was greatly annoyed by the Eskimo in the establishment of his fishing stations. During the winter, they tore down his stages, destroyed his nets, and stole his boats. He tried to make peace with them, but was unsuccessful. The number of Eskimo in southern Labrador at this time must have been considerable. A contemporary anonymous author estimated them at 30,000.²

¹ Gosling, *Op. cit.*, pp. 165-166.

² This number is evidently an exaggeration. 3,000 would probably be nearer the actual number. Courtemanche writes that a band who visited him in 1716 numbered about 800. Palliser made peace at Chateau in 1765 with 400 Eskimo, which may be considered the survivors, at that date, of the southern bands.

The Eskimo had compelled the Basques to give up their whale fishery in the strait, and kept up a continual and savage warfare with the French and Montagnais. The unknown writer mentioned above, who has left a quaint and charming description of the life of the French settlement, gives it as his opinion that "they (the Eskimo) fly from Europeans because they have been maltreated, fired on, and killed, and if they attack and kill Europeans it is only in way of reprisal."

Courtemanche was succeeded in 1717 by his son-in-law Brouage. His reports are an account of continual strife with the Eskimo. Brouage learned the Eskimo language from a woman taken captive in Courtemanche's time, and relates some marvellous tales which he obtained from her. He speaks of one tribe who were dwarfs, 2 or 3 feet high, but remarkably fierce and active. Have we to do here with the Agdlit, or dog-people, of Eskimo mythology? Another tribe had white (?) hair from the time of their birth (possibly the Bear-people); another tribe had one leg, one arm, and one eye (the Illokoq, "longitudinally split person" of Eskimo myths?). On Brouage's death, the post was abandoned. About the same time Labrador, together with the rest of Canada, fell into the hands of the English.

During the English occupation of Labrador, the Eskimo continued their depredations in the Strait of Belle Isle. Bands of them came down each summer, ostensibly to trade, but in reality to carry off everything they could lay hands on. Their system of attack was to creep up on the unsuspecting fishermen in a dense fog, and so terrify them with their unearthly yells that they would abandon their property and flee. At other times, when a party presented a bold front, the Eskimo would advance and engage in trade, but when they had thrown their adversaries off their guard for a moment, they would attack them and kill the whole crew. They told the Moravians that they used to carry knives and arrows for such purposes¹ concealed in their clothing and kayaks.

The fishermen were not behind in retaliation, and shot and plundered small parties of Eskimo at sight. There was probably

¹ Courtemanche, writing in 1716, mentions seeing firearms, probably plunder, in possession of the Eskimo; but it is doubtful if they knew how to use them.

as much wrong on one side as on the other. Whether the Eskimo or the whites began the trouble originally cannot be ascertained at this late day. The Eskimo of early Labrador appear to have been an exceedingly truculent race, as witness their attacks on early explorers and missionaries, and a knowledge of the terror they inspired would not make them less savage. But the reprisals made on them could not remedy the situation. Sir Hugh Palliser, the Governor of Newfoundland, who assumed charge of Labrador on its transfer to that colony, had the wisdom to see this, and in a proclamation issued in 1765, strictly forbade further plundering and killing of the Eskimo, laying the hostile attitude of the natives to the "imprudent, treacherous, or cruel conduct of some people who have resorted to the coast." Palliser went further and visited the Eskimo himself, and concluded a peace with some four or five hundred of them at Pitts harbour,¹ which, thanks to his wise and firm attitude, became lasting. In the achievement of this happy purpose, Sir Hugh was greatly assisted by the influence of Sir George Cartwright, among the southern Eskimo, and that of the Moravian Brethren among those north of Hamilton inlet.

CARTWRIGHT AND THE SOUTHERN ESKIMO.

Sir George Cartwright was a particular friend and associate of Governor Palliser. After seeing some naval service on the Newfoundland coast, he conceived the idea of settling in Labrador. He entered into partnership with Lieut. Lucas, who had acquired a knowledge of Eskimo, with the intention of carrying on a peaceable trade with the Eskimo and engaging in cod and salmon fishing. He set up an establishment at Cape Charles in 1770. On his arrival in Labrador, he began his journal of "Transactions and Events During the Residence of Nearly Sixteen Years on the Labrador," which was issued in 1792 in three large quarto volumes. In his journal he sets down with the utmost frankness and candour the daily transactions of the post and his opinion of the people with whom he came in contact. This work deserves to be classed with the narratives of those explorers of new lands, like Franklin and Richardson, who were not only explorers, but scientific observers as well, of the

¹ Chateau bay.

manners and customs of the people with whom they came in contact. To Cartwright must be given the additional praise of saying that he seemed to be one of those few white men who understood how to approach natives and win their confidence.

Immediately on the arrival of the partners, Lucas went north and returned with a family of Eskimo, who nearly ate the post out of supplies during the winter. Fortunately they were not over-dainty in their choice of provisions, any more than the modern Eskimo. Cartwright speaks of giving them, when the supplies were low, "a skin bag filled with seal's phrippers (flip-pers), pieces of flesh, and rands of seal fat; it was a completé mixture of oil and corruption with an intolerable stench, and no people on earth, I think, except themselves, would have eaten the contents."

The following July, a considerable number of Eskimo appeared in the harbour. Cartwright, in order to inspire confidence in them, went boldly over to the island where they were encamped, sent his people away, and began trading with them alone. The Eskimo responded nobly to such treatment, and he never had any serious trouble with them, although his immediate predecessor (Darby) had been forced to abandon the post on account of their aggressiveness. Cartwright himself attributed his success in dealing with the Eskimo to his always treating them fairly and firmly. He never allowed them to cheat or rob him, and on the other hand was careful to see that they were always satisfied. A finishing touch was his habit of entering into their sports and games with as much zest as they showed themselves. Here his strong physique stood him in good stead.

In a quaint rhyming letter to his brother Charles, Cartwright describes his relations with the Eskimo:

"The Eskimo from ice and snow now free,
In shallops and whale boats go to sea;
In peace they rove along the pleasant shore,
In plenty live nor do they wish for more.
Thrice happy race; strong drink nor gold they know;
What in their hearts they think, their faces show.
Of manners gentle, in their dealing just,

Their plighted promise safely you may trust.
 Mind you deceive them not, for well they know
 The friend sincere from the designing foe.
 They once were deemed a people fierce and rude,
 Their savage hands in human blood imbued;
 But by my care (for I must claim the merit)
 The world now owes that virtue they inherit.
 Not a more honest or more generous race
 Can bless a sovereign or a nation grace.
 With these I frequent pass the social day,
 No broils, no feuds, but all is sport and play.
 My will's their law, and justice is my will.
 Thus friends we always were and friends are still."

With an idea of impressing the Eskimo with the importance of the English, whom they held in contempt with all other "kablunait," Cartwright took a few of his oldest Eskimo friends to London. They were greatly astonished at the sights they saw, but soon grew homesick. One said, "Oh, I am tired! Here are too many houses, too much smoke, too many people. Labrador is very good; seals are plentiful there. I wish I was back again." The inevitable happened. They all contracted smallpox, and only one woman, Caubvick, lived to see her old home.

On Cartwright's return to Labrador, they were met by a large crowd of Eskimo who had gathered to greet their friends. When only Caubvick appeared, their grief was unrestrained. "Many of them snatched up stones and beat themselves on the face and head until they became shocking spectacles." "In short," says Cartwright, "the violent frantic expressions of grief were such that I could not help participating with them so far as to shed tears myself most plentifully." But it is quite characteristic of the Eskimo that "they no sooner observed my emotion than, mistaking it for apprehensions which I was under for fear of their resentment, they instantly seemed to forget their own feelings to relieve those of mine. They pressed around me, and said and did all in their power to convince me that they did not entertain any suspicions of my conduct toward their departed friends."

Caubvick, on her recovery, had refused to have her hair cut, —a common Eskimo superstition—which had become matted with the disease. Naturally, she flew into a passion whenever Cartwright proposed it. The following summer he records that one of his men came on an Eskimo camp in Ivuktoke bay (Hamilton inlet) where a whole family had died of smallpox, and, from a medal found on the spot, he recognized the family as Caubvick's.

Undeterred by this sad lesson, Cartwright took a small Eskimo boy of twelve years with him on his next trip to England, intending to educate him that he might be useful in communicating with his people. To ward off the danger of smallpox, he had him inoculated. But the poor lad succumbed to the treatment in three days, which may have been as fatal to him as the disease itself to a European. Cartwright was greatly grieved by his failures, and probably brought these inflictions on his native neighbours through a mistaken generosity and ignorance of the fatal effects of new climates and diseases on the Eskimo rather than through any intentional selfishness or unkindness on his part.

In 1775, Cartwright moved farther north to Sandwich bay, where he continued to prosper amid an abundance of fish and game. One curious fact of natural history that he mentions is seeing polar bear diving after salmon. The site that he chose is now occupied by a Hudson Bay post which bears his name, and a monument to him and his brother John stands in the little cemetery near by. Here Cartwright carried on a fishery and trade with the Eskimo, until business troubles took him to England, where he died. A few of the old Eskimo of this district (see footnote, page 15) still survive; the rest of the native population mixed with the "planters" or early servants of the trading companies, many of whose present descendants show an admixture of Eskimo blood. They retain many of the old hunting superstitions¹ of the former Eskimo, and, with fishing in summer and trapping in winter, lead practically the same

¹ One of these survivals is the custom of cutting off the tip of the heart and liver of a seal when it is killed, and throwing it back into the water. The only explanation given is that it is "for luck," which probably means that it is the old Eskimo idea of a return of a portion of the vital part of the seal to the sea, which will ensure its rebirth in its kind and consequent return to the hunter.

life. Certain articles of Eskimo clothing, such as the "dicky,"¹ or hooded frock, the waterproof skin boot, and the cartridge bag, are still in use among them.

For the only record of the ancient names of the old divisions of southern Eskimo as gathered by Lieut. Curtis, see page 18, "Distribution of Population."

THE WORK OF THE MORAVIAN MISSIONS.

No account of the history of the Labrador Eskimo would be complete without due mention of the remarkable work of the Moravian missionaries among them. To these devoted followers of the lowly Nazarene the Eskimo of the northern Labrador coast owe not only their salvation but their present existence. So closely have the Moravians been identified with them for the past hundred and fifty years, that in speaking of the Labrador Eskimo we are accustomed to apply this name to the mission Eskimo.

The Moravian Missions have been severely criticized for the trading establishments which they run side by side with their missions. But for this they can plead extenuating circumstances, as will be shown, and the administration of spiritual and secular matters is kept entirely separate. The principal thing in their work which appeals to an ethnologist is the fact that, as a missionary body, they have encouraged the Eskimo to continue to live as natives—that is, to eat native food and wear native clothing—which wise position has been instrumental in keeping the Eskimo alive in this district, while they have utterly perished in the south. The general attitude that the Moravians have taken towards the Eskimo, of a not-too-familiar kindness, and of founding their authority on it instead of on force, is also interesting to a worker among native tribes, particularly as regards the success with which it has been attended.

Their successful work among the Greenland Eskimo encouraged the Moravians to turn their attention to the Labrador Eskimo. As early as 1750, Erhardt, one of their missionaries,

¹ A corruption of the Eskimo *a' tige*.

wrote to the Bishop: "My dear Johannes: thou knowest that I am an old Greenland traveller. I have also an amazing affection for these countries, Indians, and other barbarians, and it would be a source of the greatest joy if the Saviour would discover to me that He had chosen me and would make me fit for this service." A vessel was fitted out in 1752, and Erhardt chosen as interpreter and supercargo. Four other missionaries accompanied him. On July 31 they arrived on the Labrador coast, in what is now known as Fords bight, latitude $55^{\circ} 10'$. Here they landed and began the erection of a station. The Eskimo appeared friendly, being particularly pleased to meet a white man who could speak their own language, and a brisk barter trade was carried on. On September 5, the vessel, which was named the Hope, went north for further trade. Ten days later it returned with the sad news that Erhardt and a party which included the captain and five of the crew as well, had been murdered on the 13th on going ashore to trade with a strange tribe of Eskimo. Consequently the other missionaries decided to abandon the station.

The seed of the gospel had been sown in blood. It remained for a Labrador apostle to be raised up similar to the great missionary of Greenland, Egede. He was forthcoming in the person of Jens Haven. Jens Haven was a poor German carpenter, who knew nothing of Eskimo and little English. Yet, when he had once decided to take up this work, he set himself to accomplish it with a determination which overcame all difficulties. In 1758 he went to Greenland and learned the Eskimo language. In 1762, he declared his intention to the Moravian church, and, after much discussion, they permitted him to make the attempt, but could offer no aid. Haven made his way to London, where he met Palliser, the newly-elected Governor of Newfoundland, who gave him not only his hearty sympathy, but the necessary assistance.

Haven was assisted in getting to the Labrador shore on his first trip by the famous Captain Cook. He was greatly disappointed in not seeing the Eskimo at Chateau bay, as they had left the district. But at Carpunt, a few days later, one returned,

and Haven in his Journal¹ thus described their momentous meeting:

"I called out to him in Greenlandish that he should come to me, that I had words to say to him, and that I was his good friend. He was astonished at my speech, and answered in broken French; but I begged him to speak his own language, which I understood, and to bring his countrymen, as I wished to speak to them also; on which he went to them, and cried with a loud voice, 'Our friend has come.'

"I had hardly put on my Greenland clothes, when five of them arrived in their own boats. I went to meet them, and said, 'I have long desired to see you!' They replied, 'Here is an innuit.' I answered, 'I am your countryman and friend!' They rejoined, 'Thou art indeed our countryman.' "

This successful beginning resulted in Governor Palliser sending Haven to England with a recommendation to the Board of Trade for assistance. Aid was readily granted, and the next year Haven, with three other Moravian missionaries, including Christian Drachardt, were returned to continue the work. The Eskimo were again met and gave further evidence of their pleasure at meeting white men who were their friends, and could speak their language. This work made possible the peace which Palliser was enabled to make with the Eskimo at Chateau the following year.

Seven years delay ensued before the work of settlement was taken up, principally due to the Moravians' demand for 100,000 acres of land for each settlement, which appeared excessive to Palliser. The reason given by the Moravians for this request was not the value of the land, which was practically worthless, but the establishment of a reservation which would keep the Eskimo away from the contaminating influences of dissolute whites.

In 1770, Haven, Drachardt, and Jensen were placed in charge of an expedition, which made a settlement at Nain. The grant and purpose of the station were explained to the Eskimo, who appeared well pleased that the Brethren had come to dwell permanently among them. An old acquaintance, Segulliak, and a noted Eskimo woman who had been taken to

¹Given to Sir Hugh Palliser and preserved at the Record Office, St. John, Nfld.

England, Mikak, helped to pave the way. A document was drawn up which the head men of the Eskimo signed,¹ and a gift was made to each family. The party then returned to England. The next year a house and stores were brought out and the Moravians settled down to their work with earnestness.

The task of converting heathen, hostile Eskimo into peace-minded Christians presented manifest difficulties. The habits and mental attitude of the Eskimo were so entirely different from what was desired that nothing short of a revolution in their customs and thought had to be effected. Some of their naïve answers to the questions of the missionaries emphasize this. One man, when asked if he believed in the Saviour, declared that he believed very much, but what he wanted at present was a knife. He later took unto himself some additional wives, and on being remonstrated with about it, said that "he needed them to man his boat," which was a good enough Eskimo custom. The idea of blood-revenge cropped out when the missionaries spoke of the death of Christ, for the Eskimo thought they were "upbraiding them for former murders."

But native ideas and superstitions proved to be more easily overcome than the attraction of the southern white traders, who held out the luring bait of tobacco, gew-gaws, and rum. Many, even the famous Mikak, succumbed to such evils. It was a desire to keep the Eskimo at home, away from the degenerating influences of this contact, which finally led the Moravians to establish their trade stores in connexion with their missions. The regulations governing native trade are strict, and the price paid for native products is low. On the other hand, the Eskimo receive good, honest trade goods at a reasonable price. The profits of the stores are turned back into the Mission work. The missionaries receive the princely salary of £23 a year, which "supplies all their needs" and shows plainly enough that they are not seeking to lay up treasures on earth.

¹ This must have been the first document signed by the Eskimo in history.

LABRADOR: PHYSICAL CHARACTERISTICS AND DISTRIBUTION OF POPULATION.

CHARACTER OF THE COUNTRY.

The Labrador peninsula is divided, roughly speaking, into three main districts: (1) the Atlantic coast, commonly known as the Labrador coast; (2) the Ungava district, comprising Ungava bay and the land drained by the rivers emptying into it; and (3) the east coast of Hudson bay with its several large tributary streams, which forms the west coast of the peninsula. By long-standing custom, initiated by the Newfoundland fishermen, the use of the term "Labrador" has come to be restricted to the Atlantic coast, so I shall continue to use it in that sense in this paper, referring to the second section as Ungava, and the third as the east coast of Hudson bay. In dealing with the Labrador Eskimo, we are concerned only with the coast (they are seldom found farther than 30 miles from the shore-line, except during summer hunting trips into the interior), so it appears better to adopt current divisions, even though they may be a little confusing, than to substitute new terms which would be meaningless until generally adopted.

The Atlantic coast of the Labrador peninsula extends from the Strait of Belle Isle at the mouth of the Gulf of St. Lawrence, to Cape Chidley, at the western entrance of Hudson strait, a distance of some 700 miles. The entire shore is rough and rocky, rising from a height of 1,000 feet in southern Labrador to lofty cliffs and ranges from 3,000 to 5,000 feet high in the northern section¹. Deep inlets and narrow fiords, fringed by groups of little islands, extend almost continuously up the coast, offering ideal hunting and fishing grounds to the Eskimo. We find them gathered mainly about the trading posts and mission stations situated at the head of the larger inlets and bays.

The Eskimo formerly inhabited the entire Atlantic seaboard of Labrador, but at present are found only north of Hamilton

¹ Near Cape Chidley, in the extreme northern portion of the peninsula, are the Tornga'it, or "Spirit Mountains," a wild and impressive group, believed by the Eskimo to be the abode of To'rngak, or Tornga'rsoak, "the great To'rngak," the chief spirit consulted by their shamans (see map).

inlet¹ at the Moravian stations of Makkovik, Hopedale, Nain, Okkak, Hebron, and Killinek (see map). Until quite recently (1904, when Killinek was established), a small but hardy band of "heathen" Eskimo lived in the neighbourhood of the Hudson's Bay Company post at Nachvak.² The Moravians had intended to establish a station here, but had been forestalled by the Hudson's Bay Company. Later they built missions on each side of Nachvak, at Ramah and Killinek, and the Nachvak post was practically squeezed out of existence.³ The main body of Nachvak Eskimo emigrated to Cape Chidley, although a few persisted in their heathen independence and are said to be still living near Eclipse harbour. Generally speaking, the Labrador Eskimo of the northern Atlantic coast are settled at the Moravian stations and directly under their control. This has been fortunate for them, as, under the watchful care of the good Brethren, they have escaped the total destruction which has overtaken their kindred of southern Labrador.

The coast of Ungava bay is quite similar to that of the Atlantic, being bold and fringed with islands, but differs in having few inlets or good harbours. On the east side of the bay, Eskimo are found at the Hudson's Bay Company posts at the mouths of the Whale and George rivers. There is a considerable settlement at Fort Chimo, at the foot of the bay, near the mouth of the Koksoak, where both the Hudson's Bay Company and Révillon Frères have large stations. On the west side of Ungava bay the French company has a post at Wakeham bay, one of the few good harbours in this region. Here and at Hopes Advance are long established Eskimo villages. Scattered families are

¹ The author discovered two survivors of the old southern bands of Labrador Eskimo, living in Sandwich bay. They were both women and married to white men, but still spoke good Eskimo and remembered native stories and customs. One had considerable reputation as a conjurer. The former husband of this woman, a famous hunter and doctor named Toma'suk, was the last male descendant of those large marauding parties which the French and English explorers met in the Strait of Belle Isle and estimated at the astonishing figure of 30,000.

² There were also a few Eskimo at the Hudson's Bay Company sub-post at Aillik. On the abandonment of the post they formed the nucleus of the Moravian settlement at Makkovik.

³ The early good-will manifest between the Hudson's Bay Company and the Moravians was later changed into an intense trade rivalry. However, the relations between the officials is said to have always been most pleasant.

found from Hopes Advance to the Hudson's Bay Company post at Cape Wolstenholme.

The west coast of the Labrador peninsula or the east coast of Hudson bay presents a complete contrast to the Ungava and Atlantic seaboard. The bold precipitous coasts give way to low-lying shores of limestone. Deep inlets, abounding in waterfowl, are replaced by shoal and barren waters, where numerous groups of infinitesimal islands, nicknamed the "Sleepers," render navigation difficult. Good harbours are few and far between. The only inlets on this coast are Richmond gulf and Mosquito bay. Here a few Eskimo are found scattered along the desolate shore. The main body of the population is between Cape Smith and Cape Wolstenholme. In summer the Eskimo fish in the rivers, or visit the large islands off the coast, where game, being only hunted at irregular periods, abounds.¹

Remains of old villages and hunting camps, found on Mansel, Nottingham, Coats, and Southampton islands, form convincing evidence of a former population of considerable size; but the Eskimo are extinct now, and the islands rarely visited, except for hunting purposes. The Belcher islands, at the foot of the bay, are still inhabited by a wild tribe who visit the Hudson's Bay Company post at Great Whale river annually. They are said to retain the bird-skin clothing and stone implements of the early Labrador Eskimo.²

ANCIENT DISTRIBUTION OF ESKIMO.

When first discovered by the French, the Eskimo inhabited the north shore of the Gulf of St. Lawrence as far west as Mingan. They were driven from this locality at the beginning of the seventeenth century by the Montagnais Indians, who had been

¹ In the summer of 1914, when the author landed on Coats island, near an old Eskimo camp, the game was so tame that it refused to move until shot at. Two polar bears were sleeping on opposite hills within a quarter of a mile of the village, and a herd of caribou was feeding peacefully nearby.

The Hudson's Bay Company put a party of Eskimo on Nottingham island last autumn and a whaling captain placed another party on Southampton island to take advantage of this unusual game supply.

² C. H. and A. T. Leith, *A summer and winter in Hudson bay*, Madison, 1912.

supplied with firearms by the French. They retreated north-eastward to the Strait of Belle Isle, where they maintained themselves until about 1760 in a fortified camp on an island near the western end. Here they were again attacked and completely routed by overpowering numbers of French and Indians. Tradition places this last battle at Battle harbour, and gives the number of Eskimo slain as a thousand souls, which is probably an exaggeration.

The Eskimo were at a distinct disadvantage in the fighting on land, as the Indians were in larger numbers and possessed superior weapons. But it is said that once the Eskimo could draw them away from the coast, the condition was reversed. The story still lingers in the vicinity that it was the practice of the Eskimo to lure bands of the Indians to the islands adjacent to the coast, by a single kayaker acting as a decoy, where the main body would descend on them when the Indians were off their guard, take possession of their canoes, and massacre the whole outfit. A certain island on the Labrador coast is said to take its name of Massacre island from such an occasion.

After their defeat on the south coast, the Eskimo retreated northward and established themselves at Hamilton inlet, then called Ivuktoke or Eskimo bay. A few stragglers remained in Sandwich bay, the next inlet south of Hamilton inlet. Some authorities are of the opinion that the Labrador Eskimo never settled permanently farther south than Hamilton inlet, and that the large bands encountered by early French and English explorers were summer voyagers from the north. It is true that after this date the Eskimo descended into the strait from their strongholds in the north, but it would appear that the presence of fortified settlements, camps, and burying grounds south of Hamilton inlet, as well as archæological material extending as far south as the state of New York, were evidence of at least a scattered population. The Eskimo rarely inhabit a border country in heavy numbers, but prefer a screen of hunting territory between themselves and their inveterate enemies, the Indians, over which small bands wander with caution. This is true of northern Alaska, the Mackenzie and Coppermine districts, Hudson bay, and Labrador as well. So we may judge from the

former numerous appearances of Eskimo in this district, and a few still surviving representatives, as well as the very apparent mixture of Eskimo blood in many of the resident whites of southern Labrador, that the Eskimo in small roving bands, formerly inhabited the coast south of Hamilton inlet and part way down the Gulf of St. Lawrence.

There is also a tradition in this region that the Eskimo were accustomed to visit the northern coast of Newfoundland yearly,¹ where they used to trade with the Beothuks. It is improbable that they would make the trip to Newfoundland from the country north of Hamilton inlet in their skin boats under the ice and weather conditions which prevail on the Atlantic coast of Labrador; but in favourable weather it would have been quite easy to have crossed the Strait of Belle Isle from the southern camps.

Lieutenant Curtis, who made a careful census of the Eskimo on the Atlantic coast of Labrador in 1773, fortunately gave the old tribal names, one of which was recognized by one of my informants as that applied to Belle Isle. These tribal names are as follows: "from the Straits of Belle Isle going north the first tribes were known as:

The Ogbuctike [Belle Isle].....	270 persons
" Nanyoki [Nain ?].....	100 "
" Kunedloke [Okkak ?].....	360 "
" Nepawktoot [between Okkak and Hebron]...	70 "
" Cannuklookthuok [Hebron].....	345 "
" Chuckbuck [Saglek bay ?].....	140 "
" Chuckleluit [Lamson bay].....	40 "
" Noolaktucktoke [Ramah].....	30 "
" Nuchvak [Nachvak].....	60 "
From Nuchvak north into Ungava bay.....	210 "

1,625 persons

This list is the only one which gives us any idea of the old tribal divisions on the Labrador coast. After the establishment of the Moravian missions, the Eskimo were gathered around these stations and the old tribal divisions broken up.

¹ One of the early edicts of Gov. Palliser forbade the Eskimo crossing to the Newfoundland side of the Strait of Belle Isle, which they were accustomed to visit for a certain wood for their harpoon shafts.

STATISTICS OF POPULATION.

After the first tragic attempt of the Moravians at converting the Eskimo, which ended in the massacre of their missionaries, a successful station was established at Nain in 1771. In 1776 another mission was started at Okkak, 130 miles north of Nain, and in 1782, the mission at Hopedale, about the same distance south of Nain, and near the site of the old tragedy.

At the end of the eighteenth century, the Eskimo living at the Moravian Mission settlements were as follows (probably only a small part of the entire population of the coast, as the Moravians estimated the total population of the coast at 3,000¹ when they began operations in 1763).

Nain.....	63 persons	30	professing Christianity
Hopedale.....	51 "	33	" "
Okkak.....	48 "	22	" "

Fifty years after the settlement, the number had increased to:

Nain.....	168 persons
Hopedale.....	149 "
Okkak.....	394 "

The gradual increase and ingathering of the Eskimo in the vicinity of the Moravian stations was doubtless in a large measure due to the wisdom of the Brethren in selecting good hunting sites for their establishments.

In 1830 a settlement was begun at Hebron, north of Okkak, which in six years had attracted a population of 148.

In 1840 the resident population of all stations was as follows:

Nain.....	298 persons
Hopedale.....	205 "
Okkak.....	352 "
Hebron.....	179 "
	<hr/>
	1,034 "

The Eskimo at this time were reported to have mostly deserted the coast north of Hebron and gone to Ungava, so this

¹ The statistics which follow are taken from the Mission reports.

represents the approximate Eskimo population of the northern Labrador coast in 1830.

In 1842 a malignant influenza resulted in the death of many Eskimo at the mission stations. Added to this infliction, seals were scarce, and there was danger of starvation. But the hardy converts survived, and by 1850 had increased to 1,297, as follows:

Nain.....	314 persons
Hopedale.....	229 “
Okkak.....	408 “
Hebron.....	346 “

Famine and disease again visited the settlements in 1855; the seal hunt failed and at Hebron 59 people died. But, as usual, dearth was followed by an abundant season in which former troubles were forgotten.

In 1857, at the invitation of Mr. Smith (the late Lord Strathcona), one of the Brethren journeyed to North West river, at the head of Hamilton inlet, to discuss the advisability of establishing a station among the Eskimo of that district. When it was found that there were only ten Eskimo families still surviving in that section, the Mission decided that it would not pay to take up work among them. (Descendants of these families are found at the present day at a little native settlement near Rigolet called Karawalla, and number about 35 souls.)

In 1857 the dogs at the Mission stations were attacked by a mysterious disease of the Arctic peculiar to canines, and many of them perished. Wild game was also infected, and caribou, foxes, wolves, and other animals died in large numbers. Consequently, due to the diminishing of food, the next census (1860) of the Eskimo shows a slight decrease:

Nain.....	277 persons
Hopedale.....	241 “
Okkak.....	314 “
Hebron.....	206 “

In 1865 a station was established at Zoar, about halfway between Nain and Hopedale, and in 1871 another northern station at Ramah, north of Hebron.

In 1876 the Eskimo were visited by another scourge, whooping-cough. Over 100 died out of a total population of 1,200. In 1880 the population of the stations, old and new, stood as follows:

Nain.....	282 persons
Hopedale	315 "
Okkak.....	329 "
Hebron.....	202 "
Ramah.....	44 "
Zoar.....	130 "

The lack of material increase at the old stations, shown in this table, was doubtless due to the withdrawal of certain Eskimo to the new intermediate stations, as well as the usual shifting of the Eskimo population. The figures for the next decade (1890) are about the same, with a decrease at Nain and Zoar, and a slight increase at the other stations:

Nain.....	263 persons
Hopedale.....	331 "
Okkak.....	350 "
Ramah.....	59 "
Zoar.....	89 "

In 1890 Zoar and Ramah were abandoned, and the old stations covered the original field. New stations were started at the extreme south and north of the Eskimo district at Makkovik (1896) and Killinek, Cape Chidley (1904), which took in any stragglers on the border of Moravian territory, and gave the Brethern the complete control of the Eskimo on the Atlantic coast of Labrador.¹

The Moravians early adopted the policy of retaining in their service the brightest of their converts as missionary helpers, and as teachers in the schools which they maintain for the benefit of the Eskimo children. According to the last available report (September, 1913) there are forty-six such native assistants,

¹ Previous to the establishment of the Moravian station at Cape Chidley, missionary work had been done there by the Reverend Stewart of the Church of England. Moravian missionaries had also penetrated into Ungava bay. An agreement was reached whereby the right of the Moravians to the Atlantic seaboard was acknowledged and that of the Church of England to Ungava.

twenty-one male and twenty-five female, at the various stations. The baptized membership of the entire district, which includes practically all the Eskimo, was as follows, at the close of 1912:

Total membership 1,216; including those under discipline 1,250.

For the Ungava district and the east coast of Hudson bay, we have no such definite figures. The best obtainable are those published in the Geological Survey Annual Report, 1895, vol. VIII, page 42L, which were supplied by Mr. Gray, for ten years a clerk at Fort Chimo. He reckons the Eskimo by families, as follows:

From Cape Chidley to Hopes Advance.....	51 families
About Hopes Advance.....	30 "
From Stupart bay to Cape Wolstenholme.....	80 "
From Cape Wolstenholme to Great Whale river.....	80 "
	<hr/>
	241 families

Taking five persons to a family (a high average for the Eskimo), the total population from Cape Chidley to Great Whale river would be 1,205 persons, and the total:

Cape Chidley to Great Whale river.....	1,205 persons
Mission Eskimo.....	1,250 "
Karawalla (Hamilton inlet) Eskimo.....	35 "
Scattered survivors south of Hamilton inlet	5 "
	<hr/>
	2,495 "

or, in round numbers, a total of 2,500 Eskimo for the entire Labrador peninsula.

These figures look rather small after reading of the "hundreds" of Eskimo met by early explorers and the 30,000 estimated at the beginning of the eighteenth century, but are probably a good criterion of past as well as present conditions, and the early estimate of the Moravians of 3,000 for the Eskimo of the Labrador coast can not be far wrong.

TRIBAL DIVISIONS AND PLACE-NAMES.

It is extremely unlikely that the Eskimo ever had tribal names in the strict sense in which they are used by the Indians, but they have certain place-names by which they designate the

territory or locality from which a stranger comes. This is shown in the use of suffixes appended to the same, as *-miut*, the people of such and such a place. The Alaskan Eskimo, according to Nelson, have designations for regular tribal divisions, but the only reference which the Labrador Eskimo make in speaking of their neighbours appears to be that they stand in a certain direction in relation to them. This distinction, used by the Fort Chimo Eskimo of Ungava bay, has been applied by Turner to the entire peninsula, and I have adopted his general divisions, as they appear to hold good throughout the northern area, with the reservation mentioned above.

They are as follows:

The Su·hi·nimiut "those who dwell at or in the sun," *i.e.*, the dwellers to the east, the Eskimo on the Atlantic coast and on the Ungava side as far south as Leaf river.

The Ta·ha·γmiut "those who dwell in the shade," *i.e.*, the dwellers to the west, the Eskimo from Leaf river to Cape Wolstenholme. This division includes the "Northerners" of Turner, the Eskimo from Hopes Advance.

The Iti·vimiut, "the dwellers on the other side," *i.e.*, the Eskimo on the other side of the coast, the east coast of Hudson bay.

To this category might be added another division.

The Ki·yikta·γmiut, or "island people," the Eskimo inhabiting the islands off the east coast of Hudson bay, now extinct, except on the Belcher islands.

The following lesser divisions or place-names for the Eskimo from Cape Chidley west were obtained from one informant:

Killi·nuḡmiut, "land's end people," Cape Chidley.

Kaḡiḡalukcu·amiut, "long, narrow bay people," George river.

Kokso·akmiut, "big river people," Koksoak (Fort Chimo).

Uḡa·va·miut, "farthest northerners," Hopes Advance.

Nuvu·ḡmiut, "people at the point," Cape Wolstenholme.

Iti·vimiut, "people across the point of land," east coast of Hudson bay.

From another informant the place-names of the Eskimo from Cape Chidley south were obtained, completing the list:

Killinunmiut, "land's end people," Cape Chidley.

Konilucumiut, Okkak.

Nunenuumiut, Nain.

Avitumiut, Hopedale.

Aivitumiut, "whaling-place people," Rigolet.

Netcetumiut, "sealing-place people," Cartwright (Sandwich bay).

Putlavumiut, Battle harbour.

RACIAL BOUNDARIES.

The coastal habitation of the Labrador Eskimo is broken only at Davis inlet, on the Atlantic coast, where the Eastern Naskapi come out yearly to the Hudson's Bay Company post to trade. The factor here informed me that the trade was almost entirely Indian. Parallel cases might be cited in Alaska, where the Copper River Indians (Atnah Dene) have broken through the Eskimo boundary at Cooks inlet, and the break between the Eskimo on the east and west sides of Hudson bay, where the Cree occupy the territory at the bottom of the bay.

The vast wilderness forming the "interior country" of the Labrador peninsula is inhabited by the Naskapi and Montagnais Indians. The Naskapi are found north and the Montagnais south of the height of land. Low, in his admirable report of the Labrador interior in the Geological Survey Annual Report, 1895, pages 44-45L, gives the following definite boundaries for the Indians and Eskimo:

"The Montagnais inhabit the country extending south of a line drawn westward from Hamilton inlet, to the headwaters of the St. Maurice river. The Nauscaupes inhabit the interior country north of this line, or from the bottom of James bay eastward to Hamilton inlet. The northern limit of their territory [the Naskapi's] is marked by the Koksoak river, from its mouth to the Stillwater branch, and by this stream westward to its head in the neighbourhood of Clearwater lake, and thence westward to Richmond gulf on Hudson bay (see map). This line divides the Indian territory from that

of the Eskimo, and the boundary is well observed, the latter keeping far to the north of it, when hunting deer inland, and the Indian rarely crossing it from the southward."

HUNTING TERRITORIES.

The Eskimo do not have any strict divisions of hunting territory, such as characterize their near Indian neighbours, the Micmacs and Montagnais. Most of the hunting is done on the sea, which is free to every one. The same condition applies to the vast interior, where the Eskimo hunt for deer in the autumn and spring.

The idea of restricting the pursuit of game is repugnant to the Eskimo, who hold that food belongs to everyone. This does not preclude them from having intricate laws for the division of game, when hunting in parties.

Under ordinary conditions, a family may occupy a fishing station in summer year after year undisputed, but it does not give them any special right to it. Anyone else is free to come and enjoy its benefits, and, according to Eskimo ethics, they would move away before they would start a dispute about it. Quite often a deserving but poor young hunter is invited by a more fortunate family to share their camping ground, and is thus enabled to get a start in life.

A factor of a Hudson's Bay Company post in Eskimo country told me about a Micmac Indian who moved into his district, and attempted to establish the hunting divisions to which he was accustomed. The idea was so repugnant to the Eskimo that they drove him out.

CLIMATE.

The climate of Labrador is rigorous, particularly in the northern section, owing to the immense fields of ice brought down from the north by the cold Labrador current. Not only do the inhabitants have their own bay and river ice to contend with, but the ice coming out of Ungava bay and Hudson strait; and particularly the Arctic pack sweeping down yearly from the northern archipelago through Fox channel. The latter appears

early in the season, sometimes in September, and stays until July, or, in extreme seasons, until August. The result of this superabundance of cold is to blight any appearance of life on the barren coast-line, and its stretch of grey rocks covered with moss and lichens is impressive but extremely depressing. In the sheltered inlets, as at Davis inlet, Hamilton inlet, and Sandwich bay, there is a growth of small timber; game and berries abound, and life is more endurable. The "liveyers," or permanent white settlers on the Labrador coast, who fish on the coast in summer, make their winter homes here. Potatoes and garden truck are raised in sheltered spots with some difficulty.

The bays in the northern portion, Saglek, Nachvak, etc., freeze over in the middle or end of December. Navigation closes here the first of November, and the extensive transient population of Newfoundland fishermen, estimated at 15,000, is off the northern coast by this time. In this section flurries of snow are not unusual at any time of the year. In the vicinity of Hudson strait and Ungava bay, the higher hills retain snow until the last of August, and are covered again by the middle of September. This condition is probably due to the immense amount of moisture in the atmosphere and the presence of icebergs at all times of the year, causing variations in temperature.

Ice forms in the various bays to a depth of from 20 to 40 feet. The lowest recorded temperature is 55 degrees below zero, although the actual range is probably greater. The temperature rarely rises above 80 degrees, even during the brief three months summer. In the northern section, this season is shortened to two months, counting by the disappearance of the snow and ice, and winter is hardly over before it begins again.

ICE.

The dependence of hunting on ice conditions is well known in the north, particularly in the Eskimo world. The ice brings the winter store of seal and bear, and the break-up in the spring is followed by the walrus and whale. The absence of ice on their coastal settlements, or fixed ice remaining without a break, would mean starvation to the Eskimo. Consequently they

locate their villages where there is "free" ice, *i.e.*, where the ice is kept moving by ocean currents during the winter, and there are open spots and blow-holes for seal and walrus. There is only a month or so in mid-winter when the ice is stationary. In the spring, when it breaks up and is carried north, there appears to be an acceleration of the current, and in the autumn its coming is usually preceded by a high tide. Cases are recorded in the extreme north where the ice has remained fixed for two seasons, but these are rare.

The generic word for ice is *ci'ku* (Baffin island, North Alaska *siku*; Yukon *tciku*)¹. When the ice begins to form in the inlets and bays, it is known as "young ice," *ci'kwaq*. When it is strong enough to travel on, it is called *ci'kwu'liaq*. The winter "pack" ice, broken and shifting, is termed *tu'vaq*. The heavier glacial ice, which comes down from the Arctic, is known as *ku'vat*. The "shore" ice, or ice which adheres to the land, and is often seen in spring after the ocean is clear of pack ice, is called *qai'naq*. The "sea edge," where the ice meets the open water, which is a favourite hunting ground at certain seasons, is named *se'n'n'a'*, literally "edge."

The provenience of the ice which sweeps down the Labrador coast can usually be determined by its appearance. The ice which comes out of Ungava bay is found in long flat "pans"; the Arctic ice which comes down through Fox channel and Hudson strait is heavy and glacial. It appears that here, as in Alaska, while ice forms in the bays, the coast is blocked, rather than frozen over, by the northern ice-drift. Even in summer there is a constant procession of stately icebergs (*pixalu'yaq*) down the coast.

SNOW.

Snow enters nearly as much into the Eskimo economy as ice, and also has many names according to its condition and place.

The general word for snow, lying on the ground, is *a'pat* (*a'pu'n* in Alaska). Falling snow is known as *qo'n'n'ik* (as in *gonikpaq*, it falls or is snowing). Snow blocks for building snow-

¹ Dr. Boas informs me that the Eskimo *s* is never pure, which may account for the apparent variation in dialect.

houses are made from "living" snow (*caβu·ila'ktaq*), i.e., snow which will adhere when the blocks are placed together, such as is found in a newly-made drift which has just begun to harden. The blocks themselves are termed *carilu'ktaq*, from *caruya* "cutting out." The key piece which fits in the roof is the *qu'dlik*.

THE ESKIMO YEAR.

The Labrador Eskimo, like their congeners in other sections, divide the year into seasons corresponding to the appearance of game or other natural conditions. These divisions do not correspond exactly with our monthly divisions, but are near enough for purposes of comparison. There is no attempt to equalize the lunar with the sidereal year, and the divisions, as their names indicate, are governed by the conditions of climate and the appearance of game.

On the east (Atlantic) Labrador coast, the following months are named:

si'ka·lu't, "ice-forming month," December.

neləkai'tu'k, "coldest month for frost," January.

kə'blu't, "ground cracked by frost," February.

netcə'lu't, "the month of the young Jar seal (*ne'tceq*)," March.

teye'l'u·lu't, "the month of the young Bearded seal (*teye'l·ut*)," April.

no'yalu't, "month of fawning" (*noyoq*, "fawn"), May.

kuci'yi'alu't, "the month of the young Ranger seal (*kuci'yiuk-ciuk*), June.

According to my informant, the summer months were bunched into one season. He said there were many kinds of game then, and no necessity for distinguishing the season of any particular one.

From Ungava the following divisions, which distinguish the summer months, were obtained.

The months were said to be the same as given above until the month of June. (The young of the Ranger or Freshwater seal, *kuci'yiur'ciuk*, from which the month of June takes its name on the east coast, is not found in Ungava.) Beginning, then, with June, we have.

mu'n'ilut, "egg-month" (from *mu'n'ik* "egg"), June.

kituyi'alut, "mosquito-month" (from *kituyi'oq* "mosquito"), July.

pu'na'lut, "berry-month" (from *pu'naq* "berry," *puna* Lab.), August.

gonoli'lut, "fading-month" (from *gonoli't* "fade"), i.e., the month when the leaves and mosses fade in colour, September.

sikua'lut, "the month when ice forms around the shore" (from *sikua'q* "thin ice, young ice").

nunali'alut, "inland month," i.e., the month that they go into the interior for deer (from *nunali'aq* "the interior country").

NAMES OF STARS.

The Labrador Eskimo do not note the appearance of the stars for any yearly calculations of time, but use them as a guide in travelling, and recognize several of the larger constellations by name. The North Star is known as *ni'ki'tew'ituk*, "the star that moves not"; the Big Dipper (Ursa Major) appears to them as a reindeer, and is called the Reindeer Star, *tu'ktu'yu'k*; the Little Dipper (Ursa Minor) is named from its shape, the Short Ribs, *sage't'cet*; the Morning Star is *qaucut*, from *qau'*, forehead, i.e., the front or forerunner of day; the Evening Star is *u'na'cut*, from *u'nu'ak*, night, i.e., the forerunner of night. Orion is known as *ka'muti'qdjuag*, the sledge (?).

FOOD.

Under the hard conditions of his environment provision for food becomes one of the most important questions affecting the Eskimo. But nature, which has been so niggardly in assigning him to a cheerless climate, appears to have partly made up for it in supplying a fairly abundant supply of game, both on sea and land, and, as a relish, a quantity of wild herbs and berries. The abundant floral life which springs out of the earth in Arctic regions as soon as the snow is gone is really amazing, and lends, for a brief period, a cheerful aspect to the otherwise dreary landscape.

The chief food of the Eskimo in Labrador, as elsewhere, is the common seal (*ne'tceq*), *Pagomys foetidus*. It is found near

the shore at all seasons of the year; in winter at the blow holes in the smooth ice and in summer in the bays and fiords. The Big, or Bearded seal (*u'djuk*), *Pagomys barbatus*, and the Ranger or Freshwater seal (*kas'i'yiak*) are found farther out on the ice-edge (*se'na*) where the shore or bay ice meets the ever-shifting winter pack. As they are much larger than the common seal, and one constitutes a big feed for one family, the Eskimo usually divide them with their fellow-villagers.

VARIETIES OF LABRADOR SEAL AND OTHER SEA MAMMALS.

The Eskimo of Labrador distinguish the following varieties of seal:

Kas'i'yiak (*Callecephalus vitulinus*, Linn.), commonly called the Ranger or Freshwater seal. This variety is much sought after by the Eskimo on account of its beautiful, spotted skin. The hide is dressed with the hair on, and used chiefly for ornamental purposes, as in fancy bags and gloves, or trimmings to boot-leg tops, and in the garments of the women. The Ranger is the only seal known to inhabit fresh water. It is found at the mouths of rivers, along the coasts, in the inlets and bays, and is also said to inhabit the interior lakes of Labrador and Baffin island.

The young are born in the month of June, *kuci'gi'alut*, which takes its name from the young Ranger, *kuci'giukciuk*.

Ne'tceq (*Pagomys foetidus* Fab.), commonly called the Jar seal. This is the most common seal on the coast. Its meat is a staple article of food, and its hide forms the ordinary material for clothing. The skin is also used for bags (*po'ksrut*) and the tent (*tu'pik*). The dressed skin with the hair removed is used for boot legs, and when the larger and heavier skins of the Harp or Bearded seal cannot be obtained, it is used for the kayak cover.

The young are born in the month of March, *ne'tcelwt*, to which they give its name. The mother gives birth to them in an excavation which she has scraped out of a snow bank conveniently near an air hole in the ice. The Eskimo, at this season of the year, keep a sharp lookout for these little snow hummocks, in which they are assisted by the keen scent

of their dogs. When the hiding place is found, the top is broken in, and the seal and her young despatched.

When the young Jar seal are born, they are covered with a soft, beautiful, white fur,¹ which remains unchanged until they are three months old.

U'djuk (*Phoca barbata*), commonly known as the Bearded or Big seal. This very useful variety of seal is common all along the Labrador coast, especially at Cape Chidley. It ranks in size next to the walrus. Its tough hide is much prized for boot-soles, heavy traces, boat lines, and dog harnesses; and is also used for umiak coverings when walrus skins are scarce. The flesh is coarser than that of the smaller varieties, but less fishy.

The young are brought forth in April, *teye'k-wi'it*, the month of the young Bearded seal, *teye'k-wi*.

Hiyolik (*Phoca groenlandica*), commonly called the Harp or Saddleback seal. This is a deep water seal, not common in summer along the Labrador coast. In early spring it is found in immense numbers on the ice packs off the coast, where it is taken in large lots by the Newfoundland sealers. The skins are manufactured into boots and a variety of leather goods. The natives use the hides occasionally for boot soles (when Big seal hides are unobtainable), and also for tenting and kayak covers.

The young are born in May on the floating pack.

*Netci'vuk*² (*Cysterphera cristata*), commonly known as the Hood or Bladder-nose seal. This is the next largest variety to the Bearded seal. It is not found on the west coast of Labrador, and is a native of the Greenland coast. The seals arrive on the ice off the east Labrador coast in the vicinity of Nain about the second week in May and are poor from their journey. They then follow the coast north to Cape Chidley and strike back to Greenland. Very few are found in Hudson strait, and none in Hudson bay.

They produce their young about two weeks later than the Harp seal (last of May), and are usually found farther out on the ice than the Harp. Neither of these two varieties stays

¹ In this condition they are known to the Newfoundland sealers as "whitecoats."

² Literally, a big, overgrown Jar seal, *ne'tceq*.

in the Labrador waters the year round, like the Jar and Bearded seal and Ranger. The name Bladder-nose is derived from a protuberance on the nose of the male, which becomes inflated when it is angry or excited.

The walrus (*Phoca rosmorus*, Linn), (*ai'φik*) is seldom seen along the Atlantic coast¹ although it formerly ranged as far south as the St. Lawrence. Off the northeast coast of Labrador and southern Baffin island, and the western end of Hudson strait, the walrus is still plentiful.

The white whale (*killilu'γuk*) forms an important part of the food supply in Ungava bay and on the east coast of Hudson bay. It is taken at the Hudson's Bay Company posts at Fort Chimo and Great Whale river, and the hides and oil exported as a regular industry. Nets are placed across the entrance of the large rivers at high tide, and the animals trapped when the tide goes out. Both Eskimo and Indians are employed in this work.

LAND MAMMALS.

As a complement to the seal, the "reindeer" or barren-ground caribou forms the other great food staple of the Eskimo. The caribou are taken on the Atlantic coast of Labrador and at the mouth of the Koksoak river in Ungava bay, when they come out in the spring migration to escape the pest of mosquitoes in the interior. Large numbers of the migrating herds are still killed at Fort Chimo, Ungava, and at Nachvak, Saglek, and Davis inlets, Nain, and a few at the head of Hamilton inlet and Sandwich bay on the Labrador coast. The interior is said to contain three immense herds,² two of which are hunted mainly by the Eskimo. One spends the summer between Nachvak and Nain; and the other crosses the Koksoak near Fort Chimo to the west side of Ungava bay.³

¹ The author encountered a large herd of walrus in heavy ice off Davis inlet during this trip. As the season was a particularly late one and the ice unusually abundant, they may have drifted south with the pack. There used to be a large herd which was hunted at Nachvak yearly.

² See *Report on Labrador*, A. P. Low, Geological Survey, Annual Report, 1895, vol. VIII, p. 319.

³ For a very interesting account of the annual hunt at Fort Chimo, see Turner's account in *Ethnology of the Ungava district*, 11th Rep. Bureau of Am. Ethnology.

In northern Labrador, the Eskimo used to construct caches for such meat as was not immediately consumed. These were found wherever an overhanging cliff or large boulder could be utilized for a back and roof. The sides were built up of large stones, with a space left within sufficient for a man to move around in. Entrance was through the top. The meat was dried in the spring, and frozen in the autumn, and is said to have kept well,¹ preserving its proper flavour. The Eskimo ate the frozen meat raw, but soaked and boiled the dried meat.

Turner states that he has seen the Eskimo "strip and devour the back, fat, and flesh from the body of the deer while the fibres were yet quivering." I have seen them swarm over a freshly killed whale with their knives in their hands, for a precious chunk of black-skin and blubber. But I do not think that the Eskimo habitually eat meat raw, unless it is some delicate portion, which is then usually eaten in a frozen state. Under ordinary conditions the meat is boiled before it is eaten. The blood (*aug*) of the seal or deer makes a strong and nourishing soup, of which all the Eskimo, especially the children, are very fond.²

MINOR FOODS.

In spring, countless eggs (*mu'n'ik*) are gathered from the waterfowls breeding along the rocky islands and inlets of the coast. The surplus is laid aside until they have a very "gamey" flavour, when they figure in the winter feasts as a special delicacy. Small birds, particularly the little sea-pigeon (*pitchulux*) and "Tinker" duck are secured in summer with the bird dart or net and added to the winter store.

¹ The Moravians early discovered a way of pickling the deer meat, and keeping it indefinitely. Those who have sampled it say it is excellent.

² Dr. Kane, in his *Arctic explorations*, p. 15, strongly recommends raw meat, as it is eaten by the Eskimo. He says that as a powerful and condensed heat-making food it has no equal. The Greenland Eskimo that he met used to feed up on raw meat for several days before undertaking a long journey. He got so that he liked it himself, and his system demanded it.

Dr. Kane also lays stress on the anti-scorbutic value of raw meat. No one ever heard of an Eskimo having the scurvy, although they have little or no vegetable food.

The Eskimo taste for fat and blubber also has a direct relation to their bodily needs, and is often acquired by Arctic travellers. The late Professor Frank Russel in his *Explorations in the far north* declares that while in the Mackenzie country he would not have exchanged a little square of fat for the finest plum pudding that was ever made.

Green herbs and saxifrage are gathered by the women when they first appear¹ and used as greens with the bowl of meat. In times of starvation even moss is utilized. Only certain kinds are used, such as the varieties of caribou moss (*nexa'yasuk*) which contain enough nourishment to sustain life.

The women also hunt for fleshy roots and tubers which they dig up with pointed sticks. There is a little tuber, commonly called the "Eskimo potato," which I believe is a variety of the red lily, much sought after by the Alaskan Eskimo women. These are strung on sinew lines and hung up in the sun to dry. They are about as large as walnuts and have about the same taste as new potatoes.

Fish are very abundant along the Labrador coast, and are taken by the Eskimo in large quantities. Since the advent of the Moravians, improved methods of curing have been introduced, which have resulted in the "Mission" fish bringing a higher price in the market than that of the white fishermen.² Cod, salmon, whitefish, capelin, and sea trout are plentiful on the Atlantic coast. In Ungava bay some salmon are taken.³

BERRIES.

The abundance of various kinds of berries compensates for the absence of large fruit. Nearly twenty varieties of edible berries are distinguished and named by the natives.

¹ In Alaska, when the disappearing snow has laid bare the first green grasses and herbs on the hillslopes, the Eskimo women go out and each gathers a handful of the new shoots, which are brought in and ceremonially burnt over a small fire outside the iglu. They say that this ensures the growth for the summer.

² The native method of curing fish differs slightly from that of the whites. The backbone and ribs are completely removed by two cuts of the ulu instead of the method employed by the fishermen, consisting of one cut, which removes half the bone. The Eskimo then hang the fish up on notched sticks to dry. The back is dried first to give stiffness and retain the shape in the spread-out sides, which the presence of the rib bone gives in the civilized method. The advantage of the native method is that it gives a boneless fish. After the back is well stiffened the front is dried. Fish cured this way will keep indefinitely.

The present method, introduced by the Moravians, is similar to those used in the old country, in Scandinavia and Germany. More attention is paid to the cure and to cleanliness, which perhaps also accounts for the higher price.

³ The Ungava salmon are classed scientifically as the Arctic salmon; by the fishermen they are believed to be simply a part of the Labrador school. They arrive two months after the main Labrador school and are said to be larger and finer fish.

Of the bush berries there are:

Blueberry (*kiyu'tani'yuk*), *Vaccinium Pennsylvanium*
 Indian pear (*aqpiu'yuk*), *Amelanchier Canadensis*.
 Dewberry (*po'yuk*), *Rubus arcticus*.
 Dogberry (*kimi'nau'yuk*), *Ribes Cynosbati*.
 Squashberry (*co'naxa'tik*), *Viburnum pauciflorum*.
 Wild cherry, *Prunus pennsylvanica*.

The creeper and plant varieties are legion:

Shrub blueberry (Duckberry), *Vaccinium uliginosum*.
 Ground blueberry (*siy'atuk*), *Vaccinium caespitosum*.
 Cracker berry or froth-berry (*qa'qtalik*).
 Baked-apple (*a'kpik*), *Rubus Chaemomomus*.
 Marsh-berry (*tuyuyu'paluk*).
 Maidenhair-berry (*mama'qtu'lik*).
 Wild strawberry (*a'riti'yatuk*) *Fragaria virginiana*.
 Cranberry (*kimiminok*), *Vaccinium vitis-Idaea*.
 Crowberry, *Empetrum nigrum*.
 Foxberry (*poyno'yuk*).
 Partridgeberry (*kiminu'k*).
 Blackberry (*paugnatwi'nuk*).

A favourite dish of the Labrador Eskimo is the *eu'valik*, a combination of salmon spawn and blueberries and seal fat. The cranberry and blueberry are staple foods of the natives. The crowberry, which is not so well flavoured, is eaten when blueberries are scarce. The natives also distinguish several varieties of blueberries and blackberries as to colour and shape, and name a white blueberry and blackberry besides those given above, also a pear-shaped blueberry. These distinctions may be due only to seasonal changes, but go to show what sharp observers of natural phenomena the Eskimo are. The salmon-berry, common in Alaska, appears to be identified here with the partridge-berry.

Chief among the berries is the baked-apple (*a'kpik*), also called the cloudberry. Its four-petalled white blossoms are seen covering the hillsides and swamps almost as soon as the snow is gone. By the last of August the berry is formed. It is often eaten earlier, while green, by the native children, just as white children love to devour green apples. The cranberry is found principally about Hamilton river, but grows as far

north as the Koksoak. It is an important article of food as it has good preservative qualities. It also might be called medicinal in that its acid juices counteract to a large extent the exclusive meat diet of the Eskimo. It is gathered just before the ground is covered with snow, as it is improved by frost, and again in the spring, just after the disappearance of the snow, when it is said to be most perfect.

The varieties of blueberry are widespread. The shrub variety is found in northern Labrador on the rivers and barrens and is a firmer fruit and more acid to the taste than its southern relative, the bush variety, found throughout southern Labrador as far north as Nain. An intermediate variety, the ground blueberry, is found along the Koksoak. The dewberry (*Rubus articus*) is found in large quantities on the islands off the east coast of Hudson bay, also in northern Labrador along the rivers. A smaller species, the eyeberry, *Rubus triflorus*, is found on Hamilton river.

The wild-strawberry (*Fragaria virginiana*), which has a reddish blossom distinguishing it from the white blossom of the baked-apple, is abundant in Hamilton inlet and on the east coast of Hudson bay. The Indian pear is found in two varieties in the interior and on Hamilton inlet and Sandwich bay. The crowberry (*Empetrum nigrum*) is common throughout the rocky coast and inlets. Altogether, Labrador is perhaps better supplied with berries than any other section of sub-arctic country which the Eskimo inhabit.

MEDICINAL PLANTS.

During my voyage around the Labrador peninsula I took pains to make a collection of plants, and particularly to inquire of the natives if any were put to a medicinal use. I was agreeably surprised to find that quite a few were used for this purpose, and among them I recognized some varieties also employed by the natives of Alaska. Whether the use of such plants was originally derived from the Indians or whites, I cannot say, but it is true that the Eskimo recognize the use of several common plants for poultices and teas, the efficacy of which I can testify from personal experience.

The following are the plants so used:

House leek (*t'alu'inuk*). The tea from its steeped leaves is said to be a perfect cure for scurvy. The bruised leaves are good for sore hands.

Crystal tea (*Ledum latifolium*). An infusion of the leaves is excellent for reducing the temperature and cooling the blood in fevers. Also used for spring disorders and scrofula.

Indian tea (*Ledum palustre*). Makes a good poultice for chills.

Tansy. Makes an effective tea for colds.

Kelp (*qi'xuaq*). Two varieties, one said to be injurious, and the other an antidote for skin diseases.

Dandelion (*wi'su'ktuk*, "yellow flower"). Greens used to counteract meat diet.

Foxberry (*poyno'yuk*, Lab.; *pognaxo'tik*, Ungava), Cobbler-blossom. Down used on wounds and sores (?). Leaves furnish a dye for mats.

There are also several edible plants which I was unable to identify. The sea-weed, *iqlu'yuk*, is sometimes used as a food or medicine, and the species of reindeer-moss known as *nunaxu'tuk*.

The Mission Eskimo, according to Dr. Hutton,¹ have several native medicines besides those already mentioned. They stew the twigs of rosemary, and make a sort of tea, which produces a perspiration that is thought to be a panacea for any trouble. The brain of the codfish, cut up in little red cubes, is eaten as a general cure-all. The liver (*tiyo*) of the seal, eaten raw, is "very good for sick people." This is a general Eskimo remedy.²

¹ Hutton, *Among the Eskimos of Labrador*, Philadelphia, 1912.

² A Siberian Eskimo once brought me the liver and kidneys of a polar bear. He explained that they were "good medicine" and very valuable for disorders of the stomach and liver.

CLOTHING.

DICKYS.¹

The accompanying illustrations (Plates I and XXVIII) show the winter costume of a woman from northern Labrador, which is quite similar to that of the Baffin Island Eskimo across Hudson strait. The deerskin dicky is known as the *a'xolik*; it is double in the winter costume, consisting of the *qo'lituk*, or outside dicky, with the hair turned out, and the *a'tige* or inside dicky with the hair turned in. It is made with the conventional long tail behind and short flap in front, which characterizes the dress of the Baffin-islanders. It is trimmed on the edge of the flaps with white strips of reindeer, and barred on the arms with the same material in triple strips with a cross bar. The back of the immense hood is trimmed in the same fashion. The hood is not so pointed as that of the central Eskimo.

The deerskin dicky is also found with a rounded bottom edge trimmed with strips of skin. I was informed that this was worn by the unmarried women. The men wear a plain dicky with a straight bottom, and a smaller hood. The type appears to be the same on the east coast of Labrador and in Ungava (Plate II A). In Baffin island and on the east coast of Hudson bay the front of the men's dicky is slit for about 5 inches. It appears in the illustration of a sealskin costume from Cape Wolsstenholme (Plate II B). The trousers in this section are also fuller and banded horizontally with alternate light and dark bars of seal-skin (Plate III B). Here the costumes begin to approach the characteristics of those of the Eskimo on the west coast of Hudson bay. We find also on the east coast of Hudson bay the long skin combination legging and boot (Plate III A a), which is not found in Ungava and eastern Labrador. The cut and trimming of the children's dicky for boys, where the pattern of the dicky reaches its simplest form, are practically the same

¹ As explained in the introduction to this paper the word dicky, in common use among the white trappers and settlers of Labrador, is a corruption of the Eskimo word *a'tige*. The use is paralleled in Baffin island by the corruption of the Eskimo designation of the outer frock, *qo'lituk*. In Alaska we find the whites using the Russianized Kamtschatkan word, *parka*, for the Eskimo *a'tige*.

on both sides of Hudson strait, and are similar to the men's costume, but without the slit in (Plate II A) the front of the dicky.

The modern dicky for both men and women is made in this utilitarian form. Duffle is the ordinary material (for illustration of modern duffle costume see Plate I A). Over the fur or duffle dicky a cotton slip (*ci'l-apaq*) is drawn. The slips used by the women have handsomely embroidered hoods (Plate I, B and C) and are trimmed with fur about the face.

Sealskin dickys are not very often worn by the women. They are used by the men when stalking seals in the spring, together with sealskin trousers. It is said that the sealskin slips over the ice and snow easier than deerskin, and also makes the seal think that one of his own kin is approaching. In connexion with this spring hunting costume, a hareskin cap is worn (Plate IV c). In modern times a white cotton slip (*ci'l-apaq*), turned inside out to hide the braid trimmings, is worn over the sealskin dicky. In Ungava a pad of polar bearskin, with a hole through which the thumb is thrust, is used to protect the elbow when crawling up on the seal.

Ornamentation.

On the inside of the flap of the woman's duffle dicky of the east coast of Hudson bay and Ungava there is a little line of pewter ornaments which jingle as she walks. These are made of old spoons obtained from the Hudson's Bay Company, and termed *pi'xo'tit*. The spoons are melted and the fluid metal poured into a mould made of two slabs of steatite. There are several moulds in a row, so that several ornaments may be made at one operation. The old-time dickys of the men had a fringe of ivory ornaments around the bottom; these were made from walrus teeth. They were rounded in form, with little handles by means of which they were attached to the coat. The shaman had an additional string of ivory ornaments around his face.

A beaded or embroidered band is worn on the woman's duffle dicky (Plate V d). Fringes of beads (Plate V a) are also worn across the breast. Beaded ear ornaments of a similar

pattern are worn as a complement of the fringes (Plate V c). This form of bead ornamentation is pushed to an extreme in the elaborately decorated frocks of the Eskimo of the west coast of Hudson bay.

A composite button with a reindeer skin centre and a fringe of beads was formerly used on the dickys of the southern Labrador Eskimo in the vicinity of Hamilton inlet and Sandwich bay (Plate V b).

TROUSERS.

The trousers of the Labrador Eskimo are made of sealskin, dogskin, or moleskin, according to locality and use. On the east coast of Labrador cloth trousers have largely superseded the old sealskin type (*cila'qagoq*). For the women short trousers made of moleskin, just coming to the top of the boots and prettily embroidered at the bottom, are still in use (Plate I A). With them are worn the white-topped boots and embroidered *ci'l'apaq*, as shown in the illustration. This makes a very attractive costume, but is mostly confined to dress occasions, sealskin trousers being used for ordinary wear (Plate I B). The sealskin trousers for the men come in two lengths, a knee and an ankle length. Illustrations of patterns of each are found in the ensuing pages. The use of the long sealskin legging with combination boot or shoe, on the east coast of Hudson bay, has been mentioned. The Labrador Eskimo do not use leggings like the Alaskan Eskimo.

In Ungava bay, from Fort Chimo to Cape Wolstenholme, dogskin, which wears longer than sealskin or reindeer, is highly prized by the men as material for trousers. Like the polar bearskin trousers of other Eskimo tribes, the long dog-hair does not so soon become greasy from the blubber eaten. Dogskin is also used in this section for dickys for small boys.

A kayaker's suit, consisting of a gutskin coat and trousers, was obtained from Cape Wolstenholme. The coat is made like the usual type, of seal gut sewn together in longitudinal strips, but is peculiar in having a dressed sealskin flap in front,

through which the drawskin runs (Plate VI a). The gutskin trousers (Plate VI b) are not used by the western Eskimo.

SOCKS.

Reindeer socks, with the hair turned in, are worn in winter inside the boots. They are ankle-high and similar to those used by the Alaskan Eskimo.

BOOTS.

Except that the woman's boot has a slight fullness at the top and more ornamentation, there does not appear to be any particular difference between the boots of men and women in Labrador, such as obtains in other sections (Plate III A). One pair of women's boots secured from the east coast of Labrador, was tanned entirely white. In ancient days these were reserved for dress occasions at feasts and festivals, and nowadays are worn to communion services. Both men's and women's boots are the knee length. The hip-boot and the ankle-boot, used in Alaska, are not found in Labrador. Dressed sealskin of various kinds, for summer boots, and with the hair on for winter boots, is the common material. A complete description is given in the division on the making of clothing. Reindeer boots are found in northern Labrador, similar in type to those of the Central Eskimo. The Labrador boots are quite plain, and nowhere did I see either the ornate fur-appliqué tops found in Alaska or the attractive leather-appliqué work seen on Greenland specimens.

SHOES.

The Labrador Eskimo make an ankle-high dressed sealskin shoe, slit down the front. It is the same size but different otherwise from the Alaskan *ku'muk*. I have hesitated to include it in an account of Eskimo culture, because of its obvious pattern after the white man's shoe, but find it illustrated in Turner's account of the Ungava Eskimo. It appears to be an adaptation of native material to a white man's cut (Plate VII e). Another example of border influence is the moccasins which the Labrador Eskimo half-breeds make. They are a clumsy imitation of the Indian moccasin, with a higher back and cloth top (Plate VII f).

DRESSING AND MAKING UP OF SKINS.

Dressing Deerskins.

The Labrador Eskimo also dress and smoke caribou skins after the Indian method. The following description, obtained from a half-breed woman, illustrates the method in use in Labrador and Ungava.

For a scraper they use the lower leg-bone of the deer, culling the bone like a spoke-shave blade (a typical Indian implement); sometimes only the end is used (referring to the vertical scraper). The skin is laid on a round stick which is stood against a tree or anything solid. The outside of the deerskin is scraped first (with the grain in deerskin, against the grain in sealskin), because in deerskin the "film" (inner membrane) is left on. After the hair is cleaned off, the skin is washed and hung in the air long enough to dry. Then a paste is made of a portion of the brains of the deer, marrow from the bones, and dry flour, and smeared all over the skin on the outside. This is allowed to dry until it is a little stiffened. Then the skin is pulled from hand to hand, by two or three persons, until it is quite dry. If not soft enough, another paste is applied, and it is pulled again. Sometimes five or six pastes are used for heavy skins. If a white skin is desired, it is hung up during extremely cold weather outside and "frost-dried." A coloured skin is smoked.

Smoking Deerskin.

In smoking caribou skin, the skin is sewn overedge lengthways, and a small opening left at the neck. (Nowadays a drill or canvas neck is attached to the skin to keep it from being injured by the heat of the fire.) Wherever there is a slack place in the skin, a string is attached and it is hung from overhead. Sticks are placed crossways of the skin-bag formed by the sewn-up skin, in order to keep it open and allow the smoke to circulate. A thin skin can be smoked in three hours; a good "smoke" takes about five hours. Rotten wood placed in a pot or other receptacle makes the best fire for smoking.

The skin should be rolled up tight after smoking and put away for two hours. It is then unrolled and hung up to dry by the fire. Great care must be taken that no parts of the skin touch during smoking, else a whitish spot is left which spoils its general appearance.

Where the present Eskimo are able to obtain Indian dressed deerskins from the Hudson's Bay Company posts, they do little such work themselves; where they are not so located, we find them imitating Indian methods, as described above.

DRESSING AND MAKING OF SEALSKIN CLOTHING.

Boots (ka'mik).

In making sealskin boots, the Labrador Eskimo use six instruments: (1), the *mu'bcæβik*, a stick flat on one side and round on the other, on which the skin is laid; (2), the *u'lu*, or woman's knife, which is used to scrape off the fat and membrane; (3), the *acəmau'tuk*, a flat board, on which the oval forms of the boot are cut out; (4) the *ti'cəkut*, or scraper, used on the leg portions to make them white by scraping off the dark outer skin; (5) the *kəlutuk*, or boot creaser, of ivory or iron, which is used to smooth down the gathers in the toe of the boot; and (6), the *a'xkawdlut*, or boot stretcher, a form on which the newly made boot is placed. The last instrument is also used in reshaping wet boots or old boots which have run over on the edge.

After selecting a sealskin, it is laid on the *mu'bcæβik* and cleaned of fat and "film" (inside skin) with the *u'lu*. The skin is then turned over, and the hair scraped off on the other side, always pushing the knife against the grain. It is then hung up to dry, or, if white boots are desired, is rolled up damp and left for a few days, and then lashed in a frame and left out in cold weather to "frost-dry." The extreme cold turns the usually yellowish skin a beautiful white.

When the skin is sufficiently dried, it is taken down, laid on the *acəmau'tik*, and the oval forms of the soles are cut out (see Figure 1, No. 4). The bottoms are soaked and the outside edge is pared off. The leg portions and the tongue or instep are next cut out. Sometimes the leg and instep are cut in one piece.

This method is more common in Ungava than on the Labrador coast. If white boot tops are desired, the leg portions are further scraped with the *ti'cəkut* until the dark outer membrane is removed. The tongue or instep is cut out and treated the same as the legs. It is stitched on to the notch cut in the boot leg (see Figure 1, No. 3). The combined leg and instep skin is now folded and the straight seam sewed, a single stitch for winter boots, but a double seam for waterproof boots (see Figure 1, No. 2). It now remains to sew the uppers to the soles of the boot. The leg and instep piece is soaked on the under part to make it pliable and easier to sew. The sole piece is cut large to allow for the gathering at the heel and toe. An allowance of some 4 inches is made in the length and 5 to 6 inches in the "round." In gathering the sole to the upper, the seam is started at the side where the sole and tongue of the boot come together. The sole is gathered in by taking three stitches in the place of one, one stitch in the bottom part, then one in the tongue, and then one in the bottom again; about an inch of "whip" stitching. Proceeding with the "gathers," take two stitches in the bottom, one up through and the second down through, and a third in the tongue. This stitch, the *a'l'ox* stitch, holds until the round of the boot is made to within an inch of the tongue again; then the "whip" stitch is used for about 3 inches—around the heel, then the triple stitch again, allowing a longer stitch than at the front of the boot (see pattern of tongue and sole, Figure 1, Nos. 3 and 4).

The top portion (see Figure 1, No. 1) is a straight strip about 1 inch wide folded. The two ends are sewn together, then turned down over the boot, raw edge up, and sewn with an "overedge" stitch. In the space thus formed the drawstring is placed.

The Labrador boot lacks the ankle straps of the Alaskan, but is reinforced at the back in the heel by several lines of stitching. This answers the same purpose of bracing up the sides and of keeping the form of the boot.

After the sewing is completed, the boot is shaped with the *a'xkawdlut*. This is a straight stick about 3 feet long with a little rounded top levelled at each edge. It is put up the leg

of the boot, and the foot is stretched and shaped. The boot is then hung up to dry.

Figure 1. Pattern of waterproof skin boot.

1. Top. 2. Leg. 3. Instep. 4. Sole.

- a. Single whip stitch. b. Gather "a-lox" stitch. c. Sidgle sole seam.
 d. Outside instep seam (opposite inside seam). e. Straight leg seam.
 f. Double leg seam. g. Top overedge seam. h. Top end overedge seam.

To smooth down the "gathers" in the sole seam, the *kə'lutuk* or boot creaser is used. The arm is placed in the boot leg and the hand brought against the gathers inside, which are smoothed down by outward pressure of the *kə'lutuk*.

When making boots in a hurry on the trail, a double stitch, like overedging, is used instead of the triple stitch, or a false bottom is put on with a "whip" stitch.

In making the long hip boots, the seam is behind in the leg of the boot instead of in front, to keep out the wet at the knee. Winter boots are made by the same process, except that the Harp seal skins are used for the sole. The Ranger seal is a common material in southern Labrador, and is much prized on account of its beautiful appearance, but it is said to be less warm than the common seal. For the soles of the boots, the hides of the Bearded seal (*w'djuk*) are preferred, on account of their thickness and wearing qualities. Harp seal skins are used when the Bearded seal cannot be obtained.

The sinew used in sewing is from the back tendon of the deer. It forms a regular article of trade with the Hudson's Bay Company. The Eskimo of southern Labrador call it *ivilu*. In default of sinew, they use the "wisén"¹ of the seal. This is called *ivgiak*. It is not so strong as the sinew.

Vamps.

An inside slipper, made of sealskin, reindeer, or duffle, is used inside the boot. The slipper is cut out in one piece (see Figure 2, No. 1); the sides and fronts are folded together and sewed (a), then the back strip and two portions left of the sides are brought together and stitched, forming the heel (c and b). Lastly, the bottom of the heel is sewed to the upper heel formed by the last operation.

The "herringbone" stitch is used throughout. The edge of the top is left plain or overedged with worsted or fur. Occa-

¹ According to Dr. Hutton, a former Moravian missionary at Okkak, this substitute for sinew thread is cut from the tissue of the neck of the seal. After the tissue has been cut out, it is laid on the floor and split into thin strips, which are chewed and stretched into thread. This thread is said to be even stronger than catgut, or cobbler's thread, which it somewhat resembles in appearance.

sionally we find slippers of fawnskin with the short curly hair lining the inside, as in Alaska.

Figure 2. 1. Pattern of sealskin slipper for boot.
 a. Herringbone side seam. b. Herringbone heel seam.
 c. Herringbone bottom of heel seam.
 2. Men's tobacco bag.
 a. Continuous edge seam with beaded sinew.

Shoes.

An ankle-high shoe of tanned sealskin is sometimes worn by the women and children in summer (Plate VII e). They differ from the ankle-boot or kumuk of the Alaskan Eskimo in having a slit in front and in being evidently modelled after the shoe of the white man. The shoe is composed of two pieces, a sole and an upper which opens in front. It has no tongue. The upper is held together by a drawstring or lacing. The sole is gathered to the upper all around with the *avlox* stitch.

A winter shoe, with narrow bands of sealskin across the sole, is used by some of the northern tribes (Plate VII b). The transverse pieces are to prevent slipping on the ice. A specimen

in the Museum from the Central Eskimo exhibits the same device, but in this case the bands are of sinew.

Waterproof Stitching.

There are two ways of making a waterproof seam. In one, the seam is an overedge stitch and the second seam is brought over and stitched down. In the other, which is much the better for keeping out the water, the first seam is made underneath; then the overhead second seam is made. In every case the stitch must be doubled in the second seam to prevent leaking; in the second method mentioned the stitch is doubled in both seams.

Mittens.

Figure 3. Pattern of sealskin mitten.

1. Palm and thumb. 2. Body and thumb.

- a. Single thumb seam. b. Double thumb seam. c. Plain side seam.
d. Overhand gather seam. e. Inside double seam.

In making mittens, the palm and inside of the thumb are cut out first in one piece, and the back of the mitten and the outside of the thumb in another piece (see Figure 3). The sewing is done on the inside, so that the seams may not show when the mitten is finished and turned.

In sewing, the thumb of the palm and the back piece are brought together and sewn with a single stitch from the inside (a and b). The outside edge is then drawn over in a double seam. The sides are sewn together from the wrist around to the thumb with a plain stitch. Lastly, the outer edge of the back is brought over and drawn in slightly with an overhand stitch.

In another pattern, used in deerskin mittens, the thumb is cut out separately and stitched into the aperture left in the mitten with a "herringbone" stitch. In this pattern (see

Figure 4. Pattern of deerskin mitten.

1. Body. 2. and 3. Thumb pieces.

a. Herringbone top and side seam. b. Herringbone thumb seam.

c. Herringbone bottom of thumb seam.

Figure 4) the back and palm are one piece. This style of mitten is not as well liked for general use, as it does not conform so well to the shape of the hand as the two-piece pattern with separate palm.

The wrists of the small mittens are edged with fur. In the large mittens (see Plate X) an extra wrist piece forming a gauntlet is added. For ordinary wear, the common seal is used (Plate X a). The Ranger seal is used for fancy long winter mittens, but they are said to be cold (Plate X b). The cuffs of the long mittens are tastefully trimmed with mink, muskrat, Arctic hare, or any other fur which may please the fancy of the maker. There appeared to be no indications that in Labrador certain materials were reserved for the men. The seams are sometimes piped with red flannel.

The mittens used for dog driving have a waterproof palm made of dressed sealskin (Plate X d). This is to ensure a firmer grip on the whip as well as to keep the hand dry. Mittens of deerskin, handsomely decorated with floral designs in silk, are made by the Eskimo half-breeds on the one-piece pattern mentioned above. They represent an adoption of Indian material and design. Caribou skin tanned is sometimes used for facing mittens instead of water-proof dressed sealskin, but is a poor substitute. Moleskin mittens, with floral designs in coloured yarn, are found in the southern district (see Plate VIII B, c, and d). The handsome reindeer gloves common in Alaska are not seen in Labrador.

Waterproof Mittens (a'qa'q).

The waterproof mitten (Plate VIII B a) is used at sea to keep the spray off the hands of the kayaker, also in the spring during damp sloppy weather. It is made on the same plan as the fur mitten, but the seams which are single and inside in the fur mitten, in the waterproof mitten are all double and on the outside as in the waterproof boot. The second seam, however, is only drawn over slightly.

The pattern is in three pieces (see Figure 5), the front and half of the thumb, the palm and the opposite half of the thumb, and the back of the mitten.

The sewing is started at the edge of the palm as in the ordinary mitten (Figure 5 a); then double-seamed (Figure 5 b); then, starting from the wrist, sewn to mark (Figure 5 c); then

the outside seam (Figure 5 d) as in the leg of the boot. The top seam is gathered in and triple-stitched. The mitten is then turned and the inside of the top seam sewn to straighten the

Figure 5. Pattern of waterproof mitten.

1. Palm. 2. Thumb and front. 3. Back.

- a. Single overedge thumb seam. b. Double overedge thumb seam.
- c. Single overedge side seam. d. Double overedge side seam.
- e. Gather "a-l-o-x" top seam.

gathers (Figure 5 e). If a cuff is desired, a folded strip is sewn on in the same way as the top strip of a boot, *i.e.*, the ends of the strip are sewn together, and the strip overedged to the wrist.

Cap (ne'suk).

The cap is composed of five pieces similar to the one in the pattern (see Figure 6), also two earpieces, and a small peak.

The crown is made by sewing the five pieces together, and then double-seaming (Figure 6 a and b). The lining is then sewn within the hem, leaving enough space at the bottom of the crown to stitch on the earflaps. The earflaps are stitched on and turned down so that they are fur side out when lying against the crown and lining side out when in use (Figure 6, No. 2). In other words, they are sewn on inside out so that they will

Figure 6. Cap pattern.

1. Crown pieces. 2. Flaps. 3. Peak.

- a. Seams for 5 pieces forming crown.
- b. Opposite seams for 5 pieces forming crown.
- c. Earflap seam (inside). d. Peak seam.

present the same furry appearance as the rest of the cap when not in use, and offer the protection of fur next to the skin when drawn down over the ears. They are edged with fur. The peak is stitched back to the crown (Figure 6 d) in modern caps. It appears to have outgrown its use, and is now purely ornamental. In the old-time caps, an old woman informed me, there was an inner peak, which offered a shade to the eyes.

The cap is sewn from the inside, and then turned. Various materials are used. Foxlegs, martin, mink, muskrat, sealskin,

loonskin, and even a mixture of several skins occur in different specimens (Plate IV).

Trousers (ne'dlukox).

Eskimo trousers are of two types, the short, somewhat baggy knee-trouser, and the long, tight-fitting trouser, which reaches to the ankle. The construction is practically the same allowing for the different shape. The accompanying illustration of a pattern (see Figure 7) is for the knee-length trouser. It is very simple,

Figure 7. Trousers pattern.

- a. Back seam. b. Front seam. c. Leg seam.
d. Hole for drawstring.

consisting of a leg seam (Figure 7 c) and a back and front seam (Figure 7 a and b). The latter is continuous when the two sewn leg portions are brought together. The Eskimo trousers have no flap or other opening in front. A drawskin passing through a hole in the waistband holds them in place. Sometimes a piece of cloth is stitched around the top, but it is usually left plain. The bottom of the leg, however, is often ornamented with a strip of white skin, which shows at the knee above the boot (Plate III B).

Cartridge Bag (apo'kluk).

The sewing of the cartridge bag (see Figure 8) begins at the bottom of the side insert (Figure 8 a) and continues up one side; then the same operation is repeated for the other side. This squares the sides and the bottom. The loops are then sewn to the top corners of the bag (Figure 8 b), a sealskin thong is passed through

Figure 8. Pattern of cartridge bag.
1. Eyelet. 2. Side insert. 3. Body.
a. Side seam. b. Eyelet seam.

the loops, and the bag slung over the shoulder. Sealskin and caribou were formerly used for shot-bags, but duffle is mostly used now. Some of the modern bags are highly embroidered, reflecting designs borrowed from the neighbouring Indian tribes (Plate VIII A). For older types of bags see Plate IX.

Men's Tobacco-bag.

The men's tobacco-bag is cut out in one piece (see Figure 2, No. 2) and sewn around the edge with beads which are sewn on

with the same stitch. The bags are decorated in floral designs with ordinary trade beads. Ancient bags, of which I was able to obtain a few specimens (Plate V b), were decorated with a native bead, and made with a sealskin centre and bead border (*a'ylaw'tit*).

Woman's Tobacco-bag, Old-style.

This style, illustrated in the pattern (Figure 9) was formerly used by the Eskimo women. The bags were made of sealskin,

Figure 9. Pattern of old style woman's tobacco pouch.

a. Continuous seam. b. Opening $\frac{7}{8}$ for hand.

and worn inside the clothing, being tied around the waist. The opening in front is to admit the hand. One continuous stitch sewed up the bag all around (Figure 9 a).

Dicky (artige).

In making the Labrador hooded frock, commonly called the dicky, different materials—deerskin, sealskin, or duffle—are used. The pattern illustrated in Figure 10 is for the men's dicky, which is cut off square around the bottom, and does not present the swallow-tailed appearance of the women's garment. Women are also found wearing a square-cut dicky, both in Labrador and Baffin island. I was told by an Eskimo woman that the square dickys were worn by the unmarried women, and the long-tails by the married women. Still we find young girls wearing the same long-tailed dickys as their mothers. This reference may be to adults.

In cutting the material for the dicky, it is folded once, and the pattern is laid on the material with the middle lengthways. This enables the front portion of the dicky to be cut. Then the material is folded again and the back portion and hood cut in one piece. Then the two sleeves are cut out. This completes the cutting.

In sewing, the side seams are formed by placing the back and front portions together (Figure 10 a) and the seam is sewn as far as the arm-pit, then double seamed (Figure 10 b); the shoulder seam is then sewn (Figure 10 c) and double-seamed (Figure 10 d). The top seam to the other half (Figure 10 e) completes the body portion. The sleeve-seam is next sewn and double-seamed (Figure 10 f and g), then the sleeve is turned and sewn in the sleeve hole in the body of the garment (Figure 10 h), and also double-seamed (Figure 10 i).

Some dickys have a pocket sewn on the side (Figure 10 j). The sewing of the flap of the pocket from the back (Figure 10 k) and the hemming of the bottom of the dicky (Figure 10 l) complete the operation.

The dicky is sewn from the inside and then turned; this avoids the seams showing. The Labrador and Ungava duffle dicky is trimmed on the bottom with two parallel lines of red or blue binding, which perhaps represent the fur lines of trimming in the original skin garment. The face of the hood is trimmed with fur. There is no such extensive application of a fur

Figure 10. A-tige pattern.

1. Sleeve. 2. Body. 3. Back and hood. 4. Pocket.
 a. Straight side seam. b. Double side seam. c. Straight shoulder seam.
 d. Double shoulder seam. e. Top seam. f. Straight sleeve seam.
 g. Double sleeve seam. h. Under arm seam. i. Upper arm seam.
 j. Pocket seam. k. Flap seam (inside). l. Hem.

appliqué border of square and diamond-shaped designs as obtains among the Alaskan Eskimo.

HOUSES.

SNOW-HOUSES (*igluvi'gu'q*).

The art of building snow-houses is still practised by the Labrador Eskimo north of Hopedale. In southern Labrador, the custom has so nearly died out that the missionaries hold snow-building contests to keep alive the ancient art.

The Eskimo of the east Labrador coast, particularly those around the Moravian stations, live for the most part in wooden huts. These little cabins form their permanent homes, but when out on hunting trips they have recourse to the indispensable snow-house shelter. White men, travelling in this section on long trips, take along native guides for building snow-houses. When they camp at night a small snow-house is quickly built, which is a most efficient shelter from the storms that otherwise might overwhelm them.

The spot having been selected for a camp, the Eskimo tests an adjacent snowbank with his boots to see if it has the requisite firmness, or he thrusts his long snow-knife (*pun'a'*) (Plate XXII B a) into it. For building purposes, the Eskimo prefer the "living" snow (*caßui'la'ktaq*), *i.e.*, snow which will adhere when the blocks are placed together. Such snow is found in a newly-made drift which has begun to harden.

Across the surface of the snow-drift, the Eskimo cuts an oblong trench, the length of which equals the diameter of the house. It will average 5 feet in length, 2 or 3 feet in width, and 20 inches in depth. From the face of the trench, he cuts blocks (*carilu'wqtaq*) about 6 inches thick, 30 inches long, and 20 inches deep. The blocks are cut in semi-circular shape, with the inner edge slightly concave, so that when set up they lean inward.

The first line of blocks form the first tier of the snow-house, and material for the rest of the house is found within the ever lessening circle, so that the builder works within his ascending house, cutting out his material as he builds. One man only is

required for the operation in Labrador, but where two Eskimos work, one is engaged in stamping the snow around the tiers, and in filling in the cracks between the blocks with soft snow. Sometimes one man cuts the blocks and the other builds, as in Baffin island, but one man is able to construct a house alone.

When the first round of blocks has been laid, a cut is made diagonally in the tier, and the next round started in a spiral which winds in a decreasing curve to the top. The weight of the ascending blocks wedges those behind tightly together, so that the house really becomes more solid as each block is placed.

The Eskimo always build "as the sun goes," *i.e.*, from east to west, smacking each block tightly into place with a vigorous thrust of the arm. When the top is reached, the irregular opening left is closed with the keystone block (*qu'dlik*), which is cut out to fit it exactly. The *qu'dlik* is lifted through and let in from the top, and, the outer edges being wider than the inner, it fits snugly in its place and its weight wedges it farther in (Plate XI A).

If any length of time is spent in the snow-house, an outer wall is built about a foot from the house wall and snow packed in between. A smaller "lean-to," adjoining the house at the door, is built for the dogs. The present Labrador Eskimo snow-house is usually built without the entrance tunnel. Although the snow-houses appear only as an adjunct to hunting on the east coast of Labrador, in Ungava and on the east coast of Hudson bay the snow-house in winter and the deerskin tent (*tu'pik*) in summer are the regulation dwellings. The Cape Chidley Eskimo formerly built snow-houses as the regular winter shelter. They were larger and more carefully made than the hasty little shelters constructed on the trail. The average height would accommodate a man standing, and the width would be from 12 to 14 feet. Old missionary accounts speak of snow-houses 16 feet high and 70 feet across, which the heathen Eskimo built to celebrate their winter festivals in. These ceremonial houses probably corresponded to the qaggi or singing-house of the Baffin-islanders (see Boas, *The Central Eskimo*, page 600).

The northern Labrador snow-houses had the characteristic interior arrangement, with side platforms, on which the lamp was

placed and the mitten drier and kettle swung, and beds made of reindeer skins laid over willow twigs. A slab of clear fresh-water ice was used as a window. The door was closed at night with a slab of frozen snow. The tunnel through which the house was entered ran uphill to the door. This ensured a constant supply of fresh air. It is said by Rasmussen that the Polar (or Smith Sound) Eskimo did not understand this ingenious variation, but used to build their tunnels on a level, until they learned better from immigrants from Cape York.¹

Some Eskimo, who wished to live in a grander style, would join two or three snow-houses together by tunnels. One house then served as a living room; another, which was spread with polar bear skins, as the bedroom; and a third, as a storehouse. When the snow-house is first built, it is dazzlingly clean and beautiful. But it does not long remain so, owing to the accumulation of soot, rotten meat, and greasy clothing. It soon becomes so filthy that even the Eskimos are forced to move out. Towards spring the roofs melt and fall in. The Eskimos then patch them with skins or else take to their tents, although it may be a month before the ice breaks up and the winter is over. The Cape Chidley Eskimo are a very hardy people. The missionaries told me that they kept no fires in their homes, and complained of the heat when they visited their brethren to the south, who had stoves in their houses. Dr. Hutton,² in his vivid account of five years work among the Labrador Eskimo, mentions a characteristic incident of an old woman from Cape Chidley who went to Okkak to live. She complained bitterly of the heat in the houses. "It is breaking my life," she would say, "it is breaking my life."

The natural covering of fat, obtained from his oily diet of meat and blubber, kept the old time Eskimo sufficiently warm.

STONE IGLUS.

There still remain at Hebron, Okkak, and Killinek old stone iglus roofed with turf, some of which are inhabited. These are gloomy little huts, built partly underground, with a long entrance

¹ Knud Rasmussen, *The people of the polar north*, p. 321.

² Hutton, *Among the Eskimos of Labrador*, Philadelphia, 1912.

tunnel which furnishes ventilation, and an outside porch which is used for a storehouse. The iglus are 10 to 12 feet across, and the stone walls 3 or 4 feet high. The roof slopes to a peak or bowl-shape, and is upheld by rough branches and stumps of driftwood obtained from the sea. The floor is a mass of trampled mud. A sealskin-gut window lets in the light. The houses are narrow and low and indescribably dirty.

These iglus reminded me strongly of the old stone houses of the Alaskan Eskimo in the Bering Strait district. The Central Eskimo make use of old stone houses of similar construction.¹ From Steensby's description of the old stone huts of the Polar Eskimo, I should judge that they were made on the same general plan. It is well known that the Greenlanders make huts of stone and turf, and the Mackenzie River iglu is not materially different from the Alaskan. There appears to be one general plan of construction in all these old stone iglus. There is a partly underground room with stone walls. The roof is supported by stones or whale-ribs, or wooden timbers, according to which material is available, and covered with sod or dirt. Entrance is through a long tunnel of wood or stone, with or without a storehouse at the end or side. The inner arrangement, with stone or wooden platforms and window of seal gut, is not different from that of the snow-house, except in material. I am inclined to think from its prevalence in all parts of the Eskimo territory, that the old stone iglu is the typical Eskimo house rather than the snow-house, and that the latter is only a seasonal type which has developed into the typical house of those tribes, like the Copper and Central Eskimo, who build in winter on the sea-ice.

WHALEBONE HOUSES.

The old Eskimo tribes on the northeastern coast of Labrador formerly constructed houses of the bones of the whale, according to one of my informants. The sides were built of stones, and whale ribs, meeting in the middle overhead and overlaid with the shoulder-blades of the whale, formed the roof. Two large whale jaw-bones marked the entrance way, which was a long tunnel

¹ See Boas, *op. cit.*, pp. 548, 549.

connecting with the house. As described, these houses are alike in every detail with the "jaw-bone" houses of Bering Strait district (as described by Nelson and Bogoras). Whalerib houses are also found in Baffin island. The Eskimo say that they are similar to the Tunnit houses (see page 149) but may be distinguished from them by the comparatively narrow ground space occupied by the Tunnit house.

CAMPING HOUSES (*uyaluw'k*).

These are small circular rock walls (see Figure 11), about 8 by 4 feet, which are found set up at prominent lookouts and passes

Figure 11. Camp circles in Labrador.

1. Recent camp circle. Stones for holding down tent.
 a. Fireplace of rocks. b. Mats of moss for sleeping.
2. Oldstyle camp for the ancient double deer-skin tent.
3. Fire-place with protecting wall to shield from the wind.

where game was formerly abundant, and served both as a blind and temporary home for the hunter. They are said to have been covered with sealskins. Only the rock walls now remain, and

Figure 12. Detail of masonry of ungaluk in Suglasuk bay.

have been taken by some authors for Norse ruins and lookouts. The masonry is characteristically Eskimo, as the following sketch (Figure 12) shows; the detail of which was taken from an

old stone shelter on Ka'givia'k island, Sugla'su'k bay. These ruins look very much like the stone blinds employed by the Eskimo of Bering strait, behind which they crouch with their long-handled bird-nets and sweep in the sea pigeons flying over. The same practice is found among the Polar Eskimo.

THE SUMMER TENT (*tu'pik*).

In summer the Labrador Eskimo leave their snow-houses or huts, according to their location, and go camping to favourite hunting or fishing grounds.

The *tu'pik*, or skin tent, is the universal shelter for summer. In early days, when deer were plentiful, the tent cover was made of deerskin. Plate XI B shows an old summer camp with a group of deerskin tents at Cape Chidley. Later, when deer became scarce, sealskins were used, as shown in the much-bepatched tents in Low's photograph of Wakeham bay.¹

The structure of the old deerskin tent in Labrador was as follows:

Two poles were erected to support the rear portion of the tent cover, and a single pole fitted into a pocket in the cover at the front. The front pole was brought back tight with a seal-skin cord, which was tied to the rear poles and formed the ridge pole. The front flap was left open in the daytime in fine weather and closed at night. Stones were placed all around the edges of the cover to hold it down and keep out the wind. A more modern way of pitching a tent was with a tripod (*qa'nuk*) of sticks. Stones were piled around the edges to keep the cover taut. Both types of tents are to be seen in the Cape Chidley illustration.

Another form of the old deerskin tent, which is still used in Hudson strait and the east coast of Hudson bay, is illustrated in Plate XII. In this case the frame consists of three or four poles at one end and five at the other, upholding a wooden ridgepole. These tents are said to be very stable, and are sometimes even occupied in the winter.

The modern canvas tent frame is formed of two uprights with a cross bar. Very few of the old skin tents are now to be seen on the Labrador east coast.

¹ A. P. Low, *Cruise of the Neptune*, p. 158.

TRANSPORTATION.

THE DOG-SLED (*ko'matik*) AND DOG DRIVING.

The Labrador dog-sled looks very clumsy and heavy to one accustomed to the light framework of the Alaskan sled, but the Labrador Eskimo say that this heavy construction is necessary to withstand the rugged country along the coast over which the trail leads. The sides are solid pieces and very strong. Old settlers told me of sleds that would bear a ton weight, or twenty-four dressed caribou. A thousand pounds is a good load.

The Labrador sled has no handles behind, like the Baffin Island and Greenland sled, and is guided by the foot. It also lacks a break, and is held back by a thong attached to one of the rear cross-pieces. It is the simplest form found among the Eskimo, and really consists of only three parts; the two sides, the cross-pieces, and the shoes. The long, heavy, true native sled is not met with until one gets north of Nain. South of that point we get a civilized pattern, somewhat shorter and less wide. On the east coast of Hudson bay, 18 inches is the regulation width. It is an advantage to have a generally adopted width in following a trail already broken. The Hudson's Bay Company sled in use at the Labrador posts is modelled after the native pattern, and is very substantial for travelling. The usual price of a komatik is a dollar a foot.

The two sides (*we'uynik*, dual) are from 2 to 3 inches thick, 4 to 8 inches deep, and 10 to 24 feet long, according to locality. The cross-pieces (*ni'pu'*) are about 1 inch thick and from 3 to 6 inches wide. The length varies according to the width of the sled, but is usually about 24 inches. The cross-pieces are placed on the komatik sides at a distance apart of from 4 to 6 inches, and extend two-thirds the length of the sled. They are notched at the ends, which project over the runners at the sides, so that the load may be lashed on.

The cross-pieces are attached to the runners by rawhide lashings (*nu'pulút*) which run through holes bored in the sides (Plate XIII B).

The shoes (*pe'yoḥ*) are now of iron, but the Eskimo prefer shoes of whalebone or ivory, which slip over the snow with less resistance. In the old type of sled, small lengths of whalebone, deer antler, or walrus ivory were used (Plate XIV B b). This material came in lengths about 5 inches long. It was fitted to the sled with bone or wooden pegs. Some specimens of this old komatik shoeing were found among old graves and village sites.

During midwinter, from December to April, when the weather is coldest, the runners receive an extra coating of muck. This is made from reindeer moss mixed in a paste, and plastered over the ordinary runner. It is applied warm to about the thickness of an inch and moulded into a bevel shape like an iron rail. It is then smoothed down, and covered with a thin coat of ice. It slips over the frost-filled snow with little friction. The ice coating has to be renewed daily.

The bridle (*pe'ta'q*), by which the dogs are fastened to the sled, is a long heavy trace tied to the bow of the runners, passing through a hole in the front of the runners and over a notch made to receive it. The traces of the dogs are fastened to the bridle by an ivory button. The other end of the trace fastens in the harness (*anu'k*).

The bridle is found in two forms in Labrador, *i.e.*, the double bridle and single bridle. The double bridle is used on the east Labrador coast and down the Ungava coast to Fort Chimo; the single bridle is used by the "northerners," the Eskimo of Hopes Advance and other sections north of Fort Chimo. The advantage of the double bridle is that the traces of the dogs may be untangled without the driver stopping his team or getting off his sled.

The line of the double bridle is looped through the hole under the first crossbar and tied in the middle, exactly equidistant from either side, so as to ensure an even haul (see Figure 13). The two ends, one long and one short, run out from the loop. To the short end is fastened an ivory button; the long end is run through the loops at the end of the traces and brought back and fastened to the button on the short end. This gives free play to the traces, and allows them to be hauled in and untangled while still fastened to the line with the team travelling.

Figure 13. Double bridle and dog toggles from Labrador. Length 10 feet.
Collected by E. W. Hawkes. Division of Anthropology, Museum No. IV B. 331.

In the single bridle, the bridle line runs out a short distance from the sled and the traces are fastened directly to it. The dogs crossing over cause the lines to become entangled. As the traces are fastened at a distance of 10 or 12 feet from the sled and there is only one line, they can not be hauled in without stopping the team, which occurs frequently, much to the disgust of a driver accustomed to the double bridle.

The trace by which the dogs are fastened to the bridle is made of Bearded seal (*u'djuk*) hide. It is from 15 to 30 feet long, according to locality. In northern Labrador and Baffin island, traces may be 6 fathoms long. Each dog has a separate trace, and when travelling, the traces are regulated so that the team spreads out fanwise, with the leader slightly ahead and the rest of the team following one another (Plate XIII A). When a dog appears to be shirking, the driver shortens his trace. The harness (*anu'k*) is formed of a double loop of seal-skin, passing under the forelegs and over the shoulders and being joined in the middle of the back, where the trace is attached.

The whip (*ipiyau'tuk*, from *ipiyuk* "flipping," i.e., "something to flip with") is made, in northern Labrador, of eight strands of Bearded seal (*u'djuk*) hide, which narrows down to four strands, then two, and the lash at the end. The whip is from 20 to 30 feet long, and it requires constant practice and considerable ability to handle it. It is very seldom used for punishment by a good driver, but once used is never forgotten. Dogs that have been fighting wildly will slink away whimpering at the hissing cut of the whip. Some drivers attain such dexterity that they can snap off the heads of ptarmigan along the trail (see Figure 14).

Figure 14. Dog-whip from east coast of Hudson bay. Length 16 feet.
Collected by A. P. Low. Division of Anthropology, Museum No. IV B. 108.

The average dog team is composed of from six to eight dogs. The leader is usually a female. A mother with her grown pups makes an unrivalled team.

The words of command used in northern Labrador are:

<i>huit</i> , go ahead,	<i>a'a'</i> , stop,
<i>auq</i> , to the right,	<i>r-r-r^a</i> (trilled <i>r</i>), to the left.

The whites and half-breeds use a corruption of the Eskimo words.

The Labrador "husky" dog is not different in appearance from the Alaskan "malemute." The regulation marking of the latter, black with a white tipped tail, is not common in Labrador. The pure white strain, seen in Labrador and Ungava, on the other hand, is rather rare in Alaska. The greyish "wolf" colour is present everywhere. Outside of colour, the Labrador dogs do not appear to represent any variation from their congeners spread over the 5,000 miles of the Eskimo coast-line. They are a little hungrier and fiercer than the Alaskan dogs, probably from not being so regularly fed. In summer they are placed on an island, where, except for chance visits, they have to obtain their own food. The islands abound in mice, and capelin and other fish are thrown up by the tide.

THE UMIK.

The use of the umiak (Plate XV c) or "woman's boat," has been entirely abandoned on the east coast of Labrador. It was in use among the heathen tribe at Nachvak, until the Hudson's Bay Company post at that point was abandoned, and they were consolidated with the Mission Eskimo. It is still in use in Wakeham bay, an isolated post on the west coast of Ungava bay. A picture of Low's¹ gives a good idea of the comparative size of the umiak and the kayak. The immense load of people and supplies that these large, roomy, flat-bottomed boats will carry is almost unbelievable. They will hardly tip over, owing to their flat bottom, and are very seaworthy. In sailing they do not compare favourably with a whale boat, owing to their rather clumsy shape, but the Eskimo make voyages of 100 to 200 miles in them quite easily.

¹ See Low, *The Cruise of the Neptune*, p. 64.

The appellation "woman's boat" is not so appropriate in either Labrador or Alaska as it is in Greenland. In the former sections, we find the boat nearly always in charge of the men, who steer and handle the big oars; the women are only passengers. The boat is also used by the men in hunting large game, as whale and walrus.

The stem and stern of the Labrador umiak are wider than the Alaskan, and the sides straighter in proportion to its length, giving it an unwieldy appearance. It lacks the "lines" of the Alaskan type. The kayak, on the other hand, is less broad than the Alaskan type and tapers gracefully.

The Labrador umiak is usually about 25 feet long, although it is found in smaller models down to 10 feet. The stem and stern are nearly straight and the gunwales project, giving it an appearance of being really longer than it is. The keel is a straight piece of wood, about 4 inches wide, hewn from a single stick. The stem and stern posts are made from a curved stick which, when worked down with the adze, gives the desired crook. They are firmly lashed to the keel with sealskin thongs. A series of cross-pieces make up the flat bottom and give the desired "spread." These cross-pieces are notched at the middle to fit on to the keel and at the ends to hold the bottom rail. The ribs of the sides rise alternately between the cross-pieces from the bottom rail to the gunwale, and are reinforced by the two side rails. The top rail or gunwale fits into notches in the tops of the ribs. A broad board at the stem and stern fits over the posts and under the gunwales, constituting the brace for the width of the boat, and forming a seat for the steersman. In the Labrador boats it is hard to tell which is stem and which stern, and the ends look as though they might be used indifferently. Three or four thwarts fit into the top rail, and reinforce the end-pieces. They may serve as seats, but the men usually stand up to handle the long oars. The rudder is hung over the stern, and handled as in a whaleboat. In Alaska, where the umiak is generally propelled with paddles, the steersman uses an extra long and heavy paddle. We find oars employed in this section too, but not of the long and heavy Labrador type. The oars used in Labrador are very much like the long sweeps found on the Hudson

Bay cargo boats, and may have been suggested by them. They equal two-thirds of the length of the umiak. They are placed on opposite sides of the boat in pairs, or one three-fourths of the way to the stem, and the other three-fourths of the way to the stern on the opposite side to keep the proper proportion. The rowlocks are formed of two thongs of sealskin, into which the oar fits, giving a leverage in each direction. The thongs can be tightened by wooden pegs, which are thrust between the rail and the skin cover when not in use. The Chesterfield Inlet boats, like the Alaskan, are equipped with a mast set into the keel and a square sail, which is drawn up by a pulley in the top of the mast. This may be an adaptation of white methods, although records show that it is met with quite early. The Labrador Eskimo boats do not use the sail, under ordinary conditions. When it is used, the helmsman keeps his direction with the sail, as well as the rudder, by means of two lines attached to the ends of the bottom of the sail, which he holds in his hands. The sail can be used only in a fair wind, as the umiak with its flat bottom cannot beat to windward.

The covering of the umiak is made of big seal (*u'djuk*) skins. The skins are put on green, and stretched to their utmost capacity by the consequent drying. In sewing the skins together, the women employ the double waterproof seam used in the boot. Holes are slashed in the margin of the covering and it is lashed down to the gunwales by a heavy line which is run under the second rail and pulled taut with all the possible strength of the operator. This tightening is continued whenever the boat cover becomes moistened through and stretches.

Great care must be exerted in launching the umiak from the rocky shores, as the skin cover is easily cut. A dozen men will pick it up at the rails and half-carry, half-drag it down to the water. The umiak is not heavy considering its size. I was unable to find out whether the peculiar custom of landing the umiak broadside with a stem and stern line, which obtains in Bering strait, is followed in Labrador. In winter the umiaks are put up on standards and the skin covering stored away from the dogs and other animals. In spring the cover is oiled to keep it from cracking when it is put on the frame again.

THE KAYAK.

The shape of the kayak stem and stern, particularly the stem, varies much more than that of the umiak, from one section of the Eskimo world to another. The Labrador and southern Baffin Island kayak is very long and heavy, with a broad level stern and long peaked stem (Plate XIV A b). Some of the older models have the stern slightly turned up. The Mackenzie River Eskimo kayak turns up in a half-moon shape at stem and stern (Plate XV a). This feature is said to have been also characteristic of the old type of East Greenland kayak.¹ The Alaskan kayak turns up at the stem, but slopes down a little at the stern (Plate XIV A a). The top rail projects at the stem and stern, forming a grip by which the hunter is hauled ashore when he lands. In certain sections, this is merely a hole sewn in the skin cover where the upper and lower rails meet in the stem. A model, in the Museum, of a three-hole Aleutian bidarka exhibits the same variation. The Alaskan kayak is wider and shorter than the Labrador type, and exhibits considerable variation in different sections of the coast. The entrance hole is round, and not raised in front as among the eastern types. The accompanying photographs (Plates XIV and XV), of models in the Museum, illustrate the most important variations.

The frame of the kayak is made of driftwood, and the cover of Big seal (*u'djuk*) hide, or when this is not available, of the skins of the Harp seal (*hi'yolik*).² The instruments used in construction are the adze (*u'limot*), the drill, and the crooked knife.

The two long sticks forming the upper rims or rail (*apu'ma'k*) of the kayak are the first made. They are chipped and smoothed out with the adze and knife, and holes are bored in them with the drill where the ribs fit in and lashings are necessary. Then the other side-pieces (*qiya'teutuk*) and the ribs (*tulima'yúk*, from *tulima'q*, rib) are shaped and fitted in, the ribs being let into the side-pieces about 1½ inches and secured with wooden pins.

¹ Thalbitzer, *The Ammassalik Eskimo*, Copenhagen, 1914.

² Hudson bay, Ki'rolík. Northern Labrador, Ni'rolík.

The ribs are placed quite close together, from 2 to 6 inches apart. The two rim pieces (rails) are then placed under heavy stones to retain their shape. The so-called keel or centre-piece (*tu'nigak*) is fitted in along with the side-pieces. Strictly speaking, the kayak has no keel, and any one of the six or seven side-pieces is as important as the other. Cross-pieces (*a'yá't*) hold the rails apart on top, and an extra lengthwise strip runs from the entrance hole (*pa·k*) to the stern (*itirbi'n*) and another to the stem (*ma'si'n*). The upper section is usually built before the bottom. It is placed upside down with heavy stones holding the upper rails in place, which gives the shape to the kayak. The ribs and side-pieces are then added. Space is left at the top centre of the frame for the entrance hole.

The skin covering (*ame'qsuk*) is then sewn and placed on the kayak wet, and it draws tight on drying and shrinking. The sewing has to be completed at one sitting before the skins dry, so several women help. Double water-proof stitching, similar to that used in the umiak cover, makes the boat watertight. In Labrador, the kayaker has an entire suit (coat and trousers) of gutskin (Plate VI). A drawstring (*o'ñi'gut*) is used to draw the waterproof coat around the rim of the hole (*pa·k*), as in other parts, and the upward slant of the frame of the kayak in front of the hole tends to divert the water. Why gutskin trousers are needed as well as a frock is not evident. It may be that on account of the protection of the upturned front of the hole, the drawstring is not much used, and a complete waterproof suit is worn instead.

The Labrador paddle (*paw'tik*), is double-bladed, like the Greenland type. It is quite long—10 to 12 feet. It is made of hardwood, when it is obtainable, otherwise of spruce, and tipped with ivory or bone, which is fastened to the wood with pegs of the same material. The paddle is used alternately on either side of the kayak, thus having a distinct advantage over the single-bladed Alaskan paddle, as far as economy of motion is concerned.

Great speed is maintained by the Eskimo in their frail kayaks. It is said that a single Eskimo in a kayak will propel it as fast as two white men will a canoe. The Eskimo ventures out in a sea that an Indian would not dare attempt in his canoe,

and appears none the worse for it. The Labrador Eskimo handle their long, heavy kayaks easily, but do not attain the expertness recorded of the Greenlanders, although their kayaks are of the same type as in southwest Greenland. Neither do they attempt the long coastal voyages which the Greenlanders take in summer in their kayaks. For long trips the umiak, and more recently the whaleboat, are used.

Two thongs are sewn into the kayak in front to hold the harpoon rack and harpoon on one side, and the bird spear on the other; and behind the hole, two small loops are sewn to hold the seal hook and killing lance. The position of these weapons on the kayak is regulated by their use, the chief weapon to be used being at the right hand front of the hunter. Ordinarily, the harpoon occupies this position, and the bird-spear and throwing-stick are placed on the left front, the seal-hook on the right back, and the lance on the left back. The line of the harpoon lies in the rack in front of the hunter; the harpoon is held in the right hand and the coil in the left when the harpoon is thrown from the kayak. If the harpoon line has a float attached, it rests on the boat just back of the hunter and is thrown into the water after the harpoon is launched. In northern Labrador, a circular hoop-like float, called the *nau'la·taq* (Labrador) or *nau'la·taṅ* (Baffin island), is attached to the float, and being dragged at right angles through the water, soon lessens the pace of the fleeing game. This attachment is found in Baffin island, from whence it is perhaps derived.¹

On the left hand side of the hole (*pa·k*) of the kayak is a seal thong loop, to which game is attached and towed home, after it has been brought alongside with the seal hook.

HUNTING AND FISHING.

HUNTING WEAPONS.

The Equipment of the Kayaker.

Nearly all the hunting on water now is done by the Labrador Eskimo in the kayak, which is fully equipped with the various

¹ See Boas, *The Central Eskimo*, p. 500.

weapons employed in taking sea game. The umiak was formerly used in whaling, but has passed out of existence except in isolated spots in Ungava and on the east coast of Hudson bay.

Sealing Harpoon (see Figure 15).

First and foremost in the kayaker's equipment is the sealing harpoon (*nau'leg*) which rests, ready for use, on the right hand front of the hunter, with its complement, the coil of line (*a'tlaunaq*), lying in the rack directly in front of the hunter, and the float (*a'vataq*) directly behind. The sealing harpoon has a heavy wooden shaft (*igimu'k*, Labrador) 6 to 8 feet long, which terminates in an ivory head (*qa'ti'rn*) about 2 inches long, into which the foreshaft, made of a walrus tusk, fits. The foreshaft is kept in its place in the socket of the ivory head by two parallel lines of sealhide on either side, which prevent it from inclining to one side. The ingenious fastening of the thongs is illustrated in the accompanying drawing, taken from Boas' work on the Central Eskimo (see Figure 16). In the side of the wooden shaft, just where the harpoon properly balances for throwing, is inserted an ivory or wooden plug to prevent the hand from slipping. The harpoon head (*tu-ka'q*) fits on to the pointed end of the foreshaft by means of a thimble-shaped hole gouged out at the end, and is kept taut on the foreshaft by a line running through two holes back of its iron point (*qau'leg*) and fastened by an ivory eye (*telu'γβik*) or a simple loop in the line to an ivory pin on the foreshaft, situated on the front side of the shaft next to the handhold. It should be noted that the fastening of the line is on the opposite side from the curve of the tusk, forming the foreshaft, which gives an added tension to the line and keeps it from going slack. "There is a reason for everything," as an old Eskimo said who was explaining the harpoon to me, and his remark seems justified when we consider the ingenious adaptation of each fixture of the harpoon.

When the game is struck, the head breaks off from the foreshaft, and the stricken animal is played directly from it. The foreshaft unjoints at the head of the shaft and both float safely away, to be picked up later by the hunter. (In a

Figure 15. Harpoon with line and shaft. Length $5\frac{3}{4}$ feet.
Collected by E. W. Hawkes. Division of Anthropology, Museum No. IV B, 473.

Figure 16.

Manner of attaching the two principal
parts of the harpoon.

From Boas, *The Central Eskimo*,
Fig. 420, p. 489.

country where material is so scarce, some such contrivance is a necessity.) In the meantime, line is payed out as needed, and the kayaker attempts to get near enough to the wounded animal to dispatch it with the killing lance. If it dives deeply when struck or puts up a formidable struggle, which may upset the kayak, the float and drag are thrown overboard, and the animal is allowed to wear itself out before receiving the final blow.

Lance (see Figure 17).

The lance (*anyo'βiyuk*, "the killer") is about the same size and construction as the kayak harpoon, with the exception that it has a fixed head. The head is usually of iron or ivory with a heavy iron point. In old weapons slate and flint were used. Having no line, the button at the side for fastening the same on the harpoon, is absent. Another variety has a longer, more slender shaft, and a long point set into the shaft and firmly lashed. This variety looks like a more modern contrivance. The point is over a foot long, and is said to be used for deer, which are killed when crossing the river mouths and inlets.

Seal Hook (see Figure 18).

When the game has been dispatched with the lance, it is drawn along and secured with the sealing hook (*ne'tceq*). The sealing hook is a long wooden shaft (12 to 15 feet) with an iron hook in the end. The handle is notched to secure a firmer hold in handling the quarry. The sealing hook, it will be remembered, rests on the back of the kayak, together with the lance.

Bird-spear (see Figure 19a).

There still remains the bird-spear, at the left hand of the hunter in front. The modern bird-dart consists merely of a light wooden shaft and the triple-pronged point of iron or ivory, 6 to 10 inches long. The old-style bird-dart (*nu'ik*) had three ivory prongs which were notched or barbed. Figure 19b shows the extra trident at the middle of the spear (at the point of gravity) seen also in specimens from Baffin island and Alaska.

Figure 17. Killing lance, from Cape Wolstenholme, Labrador. Length $5\frac{3}{4}$ feet. Collected by E. W. Hawkes. Division of Anthropology, Museum No. IV B. 489.

Figure 18. Seal-hook, from Cape Wolstenholme, Labrador. Length 7 feet. Collected by E. W. Hawkes. Division of Anthropology, Museum No. IV B. 488.

Figure 19a. Bird-spear, from Cape Wolstenholme, Labrador. Length 6 feet. Collected by E. W. Hawkes. Division of Anthropology, Museum No. IV B. 491.

Figure 19b. Bird-dart with two sets of bone points, from Great Whale river, Labrador. Length 6 feet. Collected by A. P. Low. Division of Anthropology, Museum No. IV B. 73.

The bird-spear is launched with the throw-stick (*núgouq*) (see Figures 20 and 21) a wooden implement about 12 to 14

Figure 20. Throwing-stick from Cape Wolstenholme, Labrador. Length 18 inches. Collected by E. W. Hawkes. Division of Anthropology, Museum No. IV B. 492.

Figure 21. Spear thrower, from Great Whale river, Labrador. Length 17 inches. Collected by A. P. Low. Division of Anthropology, Museum No. IV B. 69.

inches long, with a groove on one side into which the end of the spear shaft fits. In some old specimens there is an ivory button at the end of the shaft which fits into a socket in the groove. In modern spears this is represented by a short bit of iron or a nail. This gives a secure hold to the spear shaft and perhaps an additional impetus to the throw.

The spear shaft is supported by three fingers of the hand, which fit into grooves at the side of the throw-stick, while the first finger slips through a hole behind them. The thumb fits into a groove on the opposite side and turns down on the spear. In delivering the bird-spear, the forearm is drawn back until nearly perpendicular, with the thumb supporting the spear shaft, and the three fingers giving it the necessary direction. After delivery, the throw-stick is thrust under the sealskin thong by the hole, and the paddle, which is held in the left hand, put in motion. The aim of the kayakers with the bird-spear is very good, and they throw a hundred feet with remarkable accuracy.

The bird-spear is used mostly in the spring when the young ducks, still unable to fly, are fluttering and swimming around the rookeries of the rocky coast in great numbers. During this season the hunters make large catches in a short time.

The Bow and Arrow.

The bow and arrow have been entirely superseded in Labrador by the rifle as a hunting weapon. The specimens obtained for the Museum were used by a party of Eskimo who were cast away on Mansel island for a number of years and forced to the manufacture and use of primitive weapons.

The bow (Plate XVI f) is what Murdoch calls the "Arctic type," *i.e.*, with a straight shaft and ends curved inward. It is made of fir, reinforced with a single twisted sinew strand at the back. A bow collected by A. P. Low in Labrador (Plate XVI g) has a sinew backing of ten twisted strands, which are looped over the "nosk" at the ends, and gathered in at the middle and the ends by transverse strands. In both bows the bowstring, which is several times heavier than the backing, is attached to a sealskin thong at the ends. The bows are from 32 to 36 inches in length, being fully a foot shorter than similar types among the Alaskan Eskimo. They are $1\frac{1}{2}$ inches wide, thicker and slightly rounded at the handle, and flattened and considerably thinned at the ends.

There are no data at hand to show whether the Labrador Eskimo ever used the antler bow of three pieces bound with sinew found in Baffin island, or the long "Tartar" type, found among the Copper and Alaskan Eskimo. It might be noted that the sinew reinforcement of the Labrador bow is lengthways and not lateral as in some western types. The Labrador Eskimo probably never experienced much difficulty in securing wood for their bows, so were not obliged to adopt splicing of antler and bone.

The arrows are sound pieces of wood, flattened and notched at the end. The wood at the end is not split to admit the feathers, as in the Alaskan arrow, but they are attached with sinew to each flattened side (see Figure 22). The other end

Figure 22. Arrow, showing method of attaching point and shank, from Great Whale river. Length 19 inches.
Collected by A. P. Low. Division of Anthropology, Museum No. IV B. 99.

Figure 23. Arrow, showing method of attaching point and shank, from northern coast of Labrador. Length $37\frac{1}{2}$ inches.
Collected by E. W. Hawkes. Division of Anthropology, Museum No. IV B. 532g.

Figure 24. Arrow, from Great Whale river. Length 7 inches.
Collected by A. P. Low. Division of Anthropology, Museum No. IV B. 105.

is cut off obliquely and the bone or ivory foreshaft fastened to it with sinew. The iron arrowpoint is set into the bone foreshaft and riveted in some specimens (see Figures 23 and 24). In others the foreshaft and point are hammered out of one piece of iron. Another variety has a blunt ivory or iron point, probably used for stunning birds and small game.

The Labrador bow and arrow is not so formidable a weapon as types in other sections, and probably was used more for hunting than as an offensive weapon. The bow and arrows with which they fought the Montagnais and other tribes may have been of a larger and stronger type. The shape of the present wooden bow is similar to the three-piece antler bow of Baffin island (see Boas, Figure 440) and the Labrador Eskimo may have used this material, as well as wood, although, as mentioned above, there is no definite information at hand on this point. I did collect from old village sites some formidable bone and stone points which would seem to require greater motive power than given by the present bow. One of these much resembles the deer arrow mentioned by Murdoch as in use among the Point Barrow Eskimo, which is not fastened to the shaft but comes loose from its socket and remains in the wound after the shaft is shaken out. It eventually results in the death of the animal. It appears to be a carrying over of the harpoon idea into smaller weapons. Plate XVI h shows a Labrador bow with the ends bent outward. This is a much more powerful bow than the type described above, and similar to the large bows used by the Western Eskimo for hunting large game and for fighting.

The Bow-case (Plate XVII a).

The bow and arrows are carried in a case consisting of two parts which are joined together in the middle; one part for the bow and one for the arrows. The two parts are made of one piece of deerskin sewn at the edges with an overhand stitch. The bow projects slightly from the end of its cover to admit of quick handling. The case is tied together with a thong at the end, and slung over the back. The bow cases are roughly made of

dressed deerskin and do not exhibit the care the Eskimo are accustomed to exert on their outfits. Perhaps this is because the case is not always used, the bow and arrows often being carried in the hand.

HUNTING LARGE GAME.

The Eskimo of the east Labrador coast used to hunt whales from the larger bays and inlets, such as Nachvak and Hopedale. The Eskimo name for Hopedale (*Aivilik* "whaling place,")

Figure 25. Ivory harpoon head with iron point, from Joksut, Labrador. Length $6\frac{1}{4}$ inches. Collected by E. W. Hawkes. Division of Anthropology, Museum No. IX A. 47.

suggests its former use. Whaling was carried on until recent years at Nachvak. The humpback was the principal quarry.

For striking the whale, a harpoon of a heavier type than the kayak harpoon was used. The shaft was longer and heavier and the point much larger. Figure 25 represents an old whaling harpoon point from Cape Chidley. To the harpoon line several large floats were attached at intervals in bunches of three or more, to impede and mark the flight of the whale. When the whale had become exhausted and the umiak was able to get near enough to it, it was killed with a long-handled lance (*anyo'biyuk*)¹ with broad blade of bone or flint. The divings and struggles of the wounded whale sometimes upset the boat and resulted in a catastrophe to the crew, as noted in the tale concerning some Tunnit (see page 149).

At the present time, the larger species of whale have almost entirely disappeared from the coast, and the Eskimo turn their attention to the never-failing supply of beluga, or white whales,

¹ Literally, "the killer."

which is a regular industry in Ungava, as described in the section on food. The white whales are shot, speared, or taken in nets at low tide. They form a regular Arctic article of export for the Hudson's Bay Company posts in northern Labrador. They yield a large amount of fat and meat, and their hides are valuable. The flesh is whitish in colour and is a welcome change after a prolonged diet of seal meat. Plate XXXV B shows a party of Eskimo women at one of the northern Moravian stations, cutting up white whales.

The polar bear is hunted with dogs. When a bear is sighted, the dogs are loosed and form a ring around him, bringing him to bay. They snarl and snap at him from all directions, taking care to keep just out of the reach of the sweep of his great paws. While he is engaged with the dogs, the hunter comes up and shoots him. Unless he is hit in a vital spot, it takes several shots to dispatch a polar bear. The peculiar shape of the head and shallow brainpan makes a shot in the head not always fatal. One polar bear shot during this trip received two bullets in the ear without succumbing, and did not give up the battle until a heavy bullet shattered the entire top of his head. Others got away with enough lead in their body, it would seem, to sink them. The polar bear, when attacked on land, always makes for the nearest water, consequently when natives run across them in summer, they try to get between them and the water. I was told by an old hunter that the old males hibernate in summer in the caves in the rocky country of northern Labrador. One hunter would drive them out by stamping and shouting on top of the cave from the rear, while the other stood on guard with his rifle at the entrance. Female bears with their young were taken in the same way in the snow-houses which they scoop out for themselves and their young in the spring. In old times the harpoon, of course, took the place of the rifle. It was thrust into the ribs of the bear, while he was making a sweep at one of the dogs surrounding him. Heavy arrows were also used. Old Eskimo say that some of their hunters could use the sinew-backed bow with such force that it would drive an arrow through a bear.

Deer were taken when they came out to the inlets or mouths of rivers on their annual migration. They were usually pursued while in the water, and killed with a deer spear, a long slender shafted lance with an iron blade and foreshaft. Turner says that the weapon used by the Labrador Eskimo and the Naskapi is the same (see Figure 137 in *Ethnology of the Ungava district*).

Figure 26. Bone lance head with iron point, from Eskimo point, west coast of Hudson bay. Length 7 inches.

Collected by E. W. Hawkes. Division of Anthropology, Museum No. IX C. 7.

Figure 26 represents a kayak spear of the older type, an iron blade riveted to a bone foreshaft, which an informant told me was used formerly for deer.

Walrus hunting was carried on much the same as whaling. When the ice first broke up, and began running, great herds of walrus appeared, sleeping on the floating pans and playing in the water. Nachvak bay, Charles island, and Cape Driggs were great resorts for walrus. Several places in northern Labrador and Hudson strait take their names from the presence formerly of great herds of walrus in those localities, as Walrus point, Walrus island, etc. The walrus seem to prefer a point or bay with a shelving beach on which they can drag themselves up without much difficulty. They were hunted by crews in the umiak, or, according to the older style, a party of men would encircle them in kayaks and drive the herd towards the shore. A full grown walrus is almost too much for a single man to handle in the kayak. Formerly they were harpooned and lanced with weapons somewhat larger and heavier than those used for seal. When rifles were introduced, the old weapons were discarded, although the harpoon was often necessary to save the game.

The Alaskan Eskimo have a taboo that walrus must always be hauled up on the ice to be cut up, and this must never be done

in the boat. As the whale (bowhead) is too heavy to be thus disposed of, it is cut up in the water, but its eye (the one appearing out of the water) is slit, so that it may not see the operation. Probably there is the idea involved here that it is distasteful to the inua (genius) of the animal to have its body disposed of out of its native element or amid strange surroundings. There is a trace of the same idea in Labrador, where they slit the eyes of the seal.

There appears to be a specialization in Labrador of the general food taboo in that walrus and seal meat must not be mixed any more than deer meat and seal meat. Whale meat is also kept strictly separate from deer meat, and the instruments used in cutting up the whale must be bound with seal thongs rather than sinew. Torngarsoak, the chief deity of the Labrador Eskimo, is offended if any instrument suggesting the deer is employed on the whale.

HUNTING SMALL GAME.

The taking of small game, as wolves, foxes, hares, ptarmigan, and waterfowl, is done with the aid of a variety of ingenious traps and nooses.

The old natives say that wolves were formerly quite numerous in the Labrador interior. They followed the great bands of migrating reindeer, on which they fed. In winter they approached the coast and rifled traps and tore down meat caches, and even attacked the dogs in the villages. Dogs were useless as a defence against the marauders, for, although a team of Eskimo dogs will hold a huge polar bear at bay, they will not attack a wolf.

Traps.

When the wolves become too bold and annoying, the Labrador Eskimo employ a little device, also used by the Point Barrow Eskimo, which effectually thins their numbers. A sharp, slender strip of whalebone is tied up in folds with a small sinew and placed inside a chunk of blubber. It is thrown out at night, when the wolves prowl around the villages, and quickly

freezes. The wolf comes along, scents this tempting morsel, and bolts it without stopping to ask any questions. As soon as the natural heat and acids of the stomach dissolve the blubber and string, the whalebone string is released and springs out, cutting the walls of the wolf's stomach severely. Speedy death results; the wolf will be found only a short distance away.

Foxes were taken in stone traps, built up in the form of a four-sided enclosure, with a little hole in the roof. Bait was placed inside, and the fox, having jumped in, could not get out. In another kind there was a trap door which fell and made him prisoner. Another trap was built on the principle of the dead-fall, and when the fox touched the bait, a heavy slab of stone was released and crushed the fox. Ruins of these old stone traps are to be seen all over the northern Labrador coast.

For the taking of those other scavengers, the gulls, the Cape Wolstenholme Eskimo used to make a hook of two pieces of deer antler. This was attached to a long line. One piece was tied back to the other with a light strip of sinew, so that, when released, it would spring out at right angles again. The hook was baited with blubber, and, being covered with the fat, eagerly swallowed by the voracious gulls. On the hook entering their stomach, the fat melted and the barb was released, holding them fast. They were then easily hauled in by the hunter.

Snares.

For the taking of waterfowl, the Labrador Eskimo, like those of other sections, use the whalebone snare. As indicated in Plate XVII b, this consists of a series of nooses suspended from a strip of whalebone. They are set with wooden pegs along the shore of lakes and inlets where waterfowl abound, as in the picture, or placed on rocks near the rookeries and held down by a stone at each end. The swarming birds step through the loops, which draw fast. The fluttering of one prisoner attracts more, and in an evening a native will get fifty to a hundred of the smaller birds. The favourite time for setting these traps is in the early evening, when the birds that have remained in their clefts in the rocks during the day come out to feed on the myriad small flies and gnats which they find on the surface of the water.

A larger snare or noose is used for ptarmigan and hares. Single looped traps are set in the holes of squirrels. The children catch the small rodents, with which the tundra teems, with miniature snares, or shoot them and the small birds with toy bows and arrows. Birds are pursued in the kayak during the moulting season. When they dive, their direction can be traced by the bubbles left on the surface of the water. An Eskimo, by tiring them out, can catch them with his hand; this is considered a sport rather than serious hunting. Another feat is to run down a young fawn in the spring when the snow is heavy and to capture it alive.

The sling (Plate XVII c) furnishes a great deal of amusement for the half-grown boys who will follow waterfowl along the shore with it for hours, but although they attain considerable dexterity, it seems to yield more pleasure than profit. I have no information that the bird bola is found among the Labrador Eskimo.

FISHING.

The most important fish of the many kinds that visit the Labrador coast, from a native standpoint, are the salmon and trout, and on these two they mainly depend. Great quantities of cod are now taken, thanks to missionary teaching, but did not constitute so important a place as salmon in the original native economy. When the ice first breaks up, the salmon spawn. While the "run" is on, they are taken in large numbers with the fish spear (*kuqivúq*). The fish spear has a long, slender shaft from 12 to 15 feet long, which widens towards the end to accommodate a triple prong. This is formed of a straight point in the middle and two side barbs (Figure 27). The side pieces slope outward, and their elasticity is further increased by binding to the shaft with sinew. In the older specimens they are of bone or ivory with antler or iron barbs; in modern specimens, of wood with iron barbs turning downward to meet the point which projects from the middle of the shaft. The turning in of the barbs admits of the fish being pierced by the centre point, when the barbs spring out and securely hold it. When salmon are not plentiful, a small ivory or stone miniature fish is used as a lure.

Figure 27. Trout spear, from Cape Wolstenholme, Labrador. Length of head 12 inches. Collected by E. W. Hawkes. Division of Anthropology, Museum No. IV B. 486.

The northern Labrador natives also understood the making of dams across streams emptying into the sea, in which the salmon are shut off at low tide. It is not definitely known whether before their contact with the whites the Labrador Eskimo used fish nets or not. A discussion of this point occurs in the historical introduction.

For trout (*er'kaluk*, northern Labrador; *exa'lupik*, southern Labrador) the Eskimo fish with an iron hook set into a piece of wood and bound fast with sinew. In old specimens the material for the hook is of ivory or fish-bones. The line is of twisted sinew or whalebone fibre, and is wound up on a short notched pole, when the fish is caught and hauled in. Tomcod are caught through the ice in winter. Trout are split and dried in the same manner as salmon. The native method of curing was dealt with in the section on food (page 34).

HOUSEHOLD TOOLS AND UTENSILS.

LAMPS AND KETTLES.

One of the items of Eskimo material culture is the use of the stone lamp (*qu'dlik*), a feature which marks them off sharply from the Indian tribes of North America. The *u'lu'*, or "woman's knife," has been copied by the Cree, Montagnais, and other northern Indian tribes, and the "crooked knife" perhaps borrowed from them in turn; the Athabaskan has copied the Eskimo fur *a'tige* in his clothing; the stone kettle, as Wissler suggests, may possibly be a copy of the square bark kettles of the Indian, although this does not seem very probable; the Eskimo waterproof skin boot and deerskin sock

are articles of trade with neighbouring tribes; but in no case does another contiguous tribe appear to have adopted the lamp, which remains intrinsically Eskimo.

The Eskimo lamp, in various parts of the Eskimo world, is made of different materials according to which are accessible. Thus, in the east, soapstone is the main material, pottery has been used in Alaska, and sandstone in Siberia. Labrador specimens are made of steatite, a variety of soapstone.

The old lamps are of a simple saucer shape (Plate XVIII A a and B a). More modern specimens (Plate XVIII B b) have the sides regularly and sharply accentuated, forming a definite rim around the bowl. This lamp, from northern Labrador, approaches the Central Eskimo lamp, an almost perfect specimen of which proportionally (Plate XVIII B d), is one from Chesterfield inlet. The Labrador lamps will hold from a pint to two or three quarts of oil. One old specimen from a grave in northern Labrador (Plate XVIII A b) has the ridge characteristic of the Alaskan lamp. This regulates the feed of oil to the wick on the straight edge, and is perhaps a later development of Eskimo invention. This lamp is considerably larger and deeper than the other Labrador specimens, measuring 12 by 18 inches, with the ridge 1 inch thick. On Coats island, Hudson bay, a lamp was obtained from an old grave (woman's) which was simply a stone hollowed out by the water, that had evidently been picked up on the beach.

This was found in company with one of the old kettles made of limestone slabs tied together with sinew (also found on Southampton island) and two firestones of pyrites. The use of naturally hollowed stones suggest that it may have led to the making of artificial shapes which resulted in the present Eskimo lamp. The lamp, as we find it among the Eskimo, appears to be their own invention.

The case of the stone kettle is not so unique, although it would suggest itself as the natural complement of the lamp. It is suspended over the lamp, and used for boiling meat. At the present time, the old stone kettle has been entirely superseded by modern articles offered by the Hudson's Bay Company, and specimens are very rare and hard to obtain. Three speci-

mens were obtained from northern Labrador and Ungava; one ordinary-sized kettle is seen in Plate XIX a, one very small specimen (Plate XX c), and one very large kettle (Plate XIX b), the measurements of which are given below. The small specimen, which came from an old grave, has two holes bored in the bottom. All lamps and kettles placed on graves were treated in like manner, to liberate the *inua* of the utensil and allow its use by the shade of the owner in the other world. All the kettles have

Figure 28. End of limestone kettle, length at top, 135 mm.; at bottom, 123 mm.; height, 108 mm.; thickness, 5 mm. From Coats island.

Collected by E. W. Hawkes. Division of Anthropology, Museum No. IX B. 33

holes bored at the four top corners, in which the thongs were placed by which they were suspended. Old hunters have told me that caribou meat boiled in a soapstone kettle was much tenderer than that boiled in an ordinary kettle, the heat being more evenly sustained. They also said that it took nearly an hour to get the kettle boiling over the lamp, but that, once hot, it kept its temperature for a long time. Turner says that the Ungava method was to put heated stones in the kettle.¹ In that case the custom must have been derived from the Indians.

The Labrador Eskimo make miniature models of their lamps and kettles (Plates XVIII B c; XX d), which they preserve

¹ Turner, *Ethnology of the Ungava district*, 11th Annual Report of Bureau of American Ethnology, p. 231.

carefully. They say that as long as the models do not break or crack the originals will not.

From Coats island I collected a limestone kettle, similar to those formerly used on Southampton island. It has been fastened together with sinew. Holes had been bored in the thin slabs from both sides. The bottom slab was let into a groove in the end slabs and cemented with a mixture of hair and blood. Figure 28 shows an end piece, the measurements of which were as follows:

Limestone Kettle.

—	Length at top	Length at bottom	Height	Thickness
Side.....	145 mm.	125 mm.	100 mm.	5 mm.
End.....	135 mm.	123 mm.	108 mm.	5 mm.

The measurements¹ of the Labrador stone kettles are as follows:

Labrador Stone Kettles.

—	Top	Length at bottom	Top	Width at bottom	Height	Thick- ness
Small (Plate XX c)	117 mm.	125 mm.	70 mm.	80 mm.	42 mm.	5 mm.
Medium (Plate XIX a).....	320 mm.	330 mm.	245 mm.	250 mm.	150 mm.	20 mm.
Large (Plate XIX b).....	520 mm.	570 mm.	300 mm.	365 mm.	170 mm.	23 mm.

From the measurements it will be noted that the sides are curved, while the ends are straight. The slope of the sides is inward and the dimensions of the bottom greater than the top, except in the limestone kettles. There is a groove around the

¹ The measurements given above are for the exterior of the kettles. The ends of the kettles are generally thicker than the sides. In the large specimen (Plate XVIII A b) there is a distinct ridge at either end on the outside.

top of the medium-sized pot and a half-moon shaped indentation in the sides to admit of handling. The kettles will hold from a half-pint to three or four gallons.

Measurement of Labrador Eskimo Lamps.

—	Length at rim	Greatest width	Average height	Average thickness
Plate XVIII B a....	255 mm.	145 mm.	55 mm.	20 mm.
Plate XVIII A a....	340 mm.	290 mm.	85 mm.	40 mm.
Plate XVIII B b....	320 mm.	135 mm.	30 mm.	20 mm.
Plate XVIII B d....	360 mm.	165 mm.	50 mm.	15 mm.
Plate XVIII A b....	430 mm.	300 mm.	75 mm.	20 mm.

These figures can only be approximate, as the specimens are not exactly proportional and are irregular at the edges. Plate XVIII B b and Plate XVIII A b are cut off at the ends (Plate XVIII B b intentionally), so that 20 and 40 mm. should be added to their relative length. The average height was obtained by noting the average between the height at the rim and back. As the lamp sits in its natural position, the back is a half inch higher as a rule. The thickness was obtained by averaging the thickness at the face of the rim and back. The bottom is generally heavier. The figures will give an idea of the relative size of the stone lamp and kettle, and furnish comparisons for lamps from other sections.

In the snow huts we find a semi-circular frame (*ingetak*) with a coarse network of seal thongs, resting on a support above the lamp and kettle. This is used for drying mittens and wet clothing. The lamp often rests on a wooden support, hollowed out at the top. The kettle is suspended by sealskin thongs from the support on which the *ingetak* rests.

DISHES AND OTHER RECEPTACLES.

The shallow wooden dishes (*pagutux*) used by the Labrador Eskimo are made of larch wood, and conform, in modern speci-

mens (Plate XXI c), to civilized patterns. They are used for holding food and oil. The older shape is a shallow oval. Wooden spoons (*elipsit*) now in use (Plate XXI a and b), of the same material as the dishes, represent the ancient bailer. The Labrador Eskimo possess an unusual ability for carving in wood (see section on art), and reproduce in that material many of the household objects of musk-ox, horn, and whalebone found in Baffin island. Buckets and cups are made of strips of larch wood bent circular and bottomed, and held tight with wooden or ivory pegs. Some older specimens from the graves are of whalebone. They also make buckets and cups of tanned sealskin sewn with sinew. These are common throughout the Hudson Bay country. The specimens illustrated (Plate XX a and b) are from Chesterfield inlet, but do not differ from those found in Labrador. The cup or bailer in Labrador usually has a thong handle.

SCRAPERS.

The skin scraper, used on sealskins and deerskins, is found in Labrador in three definite types. Type I, a form developed

Figure 29. Bone scraper made from the jaw-bone of a narwhal, from Cape Chidley. Length 5 inches.
Collected by E. W. Hawkes. Division of Anthropology, Museum No. IV B. 477.

from the scapula of the reindeer (Plate XXII A e), which is itself often used in the summer camp, is represented by the modern

instrument with a wooden handle and tin or iron blade. This seems to be a typical Eskimo instrument. An interesting variant is seen in a specimen from Cape Childey (see Figure 29), made from the jaw of a narwhal, where the broader surface presented must have suggested itself to the Eskimo¹ as a more effective instrument.

Type II is found in the leg bone of the deer, where the knob produced by the ball of the joint forms a convenient handle (Plate XXII A b). This type is reproduced in stone in two specimens (Museum Nos. IV C 777 a and b) from Chesterfield inlet. It is seen in the stone-bladed scraper with a knob or projection at one side of the wooden handle,² and in the modern type ((Museum No. 398 a) with a metal blade. This also appears to be a characteristic Eskimo type developed from the bone original. It is perhaps not quite correct to consider the evolution of material in point of time, as we often find all three—bone, stone, and wood and tin scraper—in use at the same time, and the Eskimo have a way of adapting whatever material is at hand to their purpose; but the shape of the bones probably suggested their use and furnished a design which was reproduced in different materials.

Type III is also made of the legbone of the deer, but without the bony handle formed by the projecting joint. The top part is cut off as in the Indian scraper (Plate XXII A a). The two sides are cut down, and the blade rounded. In some of the old specimens the symmetry attained is almost perfect, as may be noted in the specimen illustrated. The modern specimens are rough and ready affairs, evidently hacked out in camp, without much thought except for utility. As a general rule the specimens collected from the old graves and villages were much finer in form and workmanship than the present material.

KNIVES.

For scraping the fat, etc., off large skins, as the bear, and for splitting the thick hide of the walrus, the *u'lu*, or "woman's

¹ Cf. Boas, *Eskimo of Baffin land and Hudson bay*, Fig. 40 a, Bulletin of the American Museum of Natural History, vol. XV, p. 33.

² *Ibid.*, Figures 41 f and h.

knife" is used. This convenient utensil is put to a variety of uses; for cutting out skin clothing, for cutting and chopping up meat, and for scraping the hair off skins and also the dark coloured outer skin if "white" boots are desired. The skin scrapers described are specialized utensils, but the ulu is an all-round handy tool in the hands of an Eskimo woman. It appears in our modern civilization in the saddler's knife.

The shape of the blade is semi-lunar, and may appear with or without a handle. It finds its prototype in a roughly triangular piece of slate or a thin slab of chipped stone with one side sharpened (Plate XXII B c). In the older specimens, particularly of the Central and Western Eskimo, the handle is set directly on to the blade. An evidently later type has an intervening piece, forming a T-shaped handle, which is riveted to the blade. The modern knife follows this shape (Plate XXII B b). Mason has given us a very careful study of the ulu.¹ His divisions, however, appear to me to be more theoretical than practical. It is very hard to distinguish between the adoption of white material to native ends and strictly native work among the Eskimo. One should hesitate in modern collections to say that a stone-bladed knife was older than an iron-bladed one, or that a bone-hafted implement was more truly native than a wooden-hafted one, unless one took into account the location from which the implement came and the supply of material. The stone scrapers figured from Chesterfield inlet are quite recent. The wonderful conservatism of the Eskimo in material culture appears to apply to *form* rather than to material, as witness his use of copper, iron, stone, or tin for knife blades in various localities, and bone, ivory, wood, or deer horn for handles. As in the house of snow, stone, whalerib, or driftwood in different sections of the Eskimo world, adaption of the material at hand to a persistent pattern appears the underlying motive.

The ulu is also found among the Indian tribes bordering on the Eskimo, as the Cree and Montagnais.

While no one has disputed the Eskimo origin of the ulu, or woman's knife, considerable discussion has arisen as to whether

¹ O. T. Mason, *The ulu or woman's knife of the Eskimo*, Rep. U. S. National Museum, 1890.

the "crooked knife" or man's knife of North America is an Eskimo or Indian invention, or whether it was not introduced at an early date by the whites. It is found in use among the Eskimo and the contiguous Indian tribes of Alaska and Canada, also on the northwest coast. It finds its prototype perhaps in the beaver-tooth knife of the Indians and survives in civilized culture in the farrier's knife. It is employed in the same way in all sections, *i.e.*, held at right angles to the body and drawn toward the user. The Northwest Coast Indians have a knife with a shorter blade and heavier handle, which is held in both hands. An able and detailed description is given in Mason's paper on the man's knife.¹

Among the Eskimo the man's knife is known as *sa'φik*, which Murdoch says in Alaska is synonymous with "iron." In Bering strait *tca'wik* means a "foreign knife", likewise, "iron." Thus the introduction of the man's knife coincides in the west with the introduction of iron among the Eskimo, and is directly connected with contact with the whites.

The man's knife is found among the Eskimo in two, possibly three, forms: (1), a crooked iron blade; (2), a slightly curved iron blade; and (3), a short curved or straight blade set at a slight angle. The knife in its first two forms (and the second may be only a variation of the first) is the instrument for whittling driftwood, or smoothing down sections already rough hewn with the adze; the third form is the graver's tool, and the slight angle at which it is set facilitates following with the eye the line as it is incised, and admits of greater pressure. The face of the handle, which may be of wood, deerhorn, or ivory, is cut away to admit the ball of the thumb against it, and in some western specimens grooves appear at the side of the handle for the encircling fingers. Examples of the graver's tool appear in Plate XXIII B c,d, and e and the form of the *sa'φik* is illustrated in Plate XXIII A d and e. The latter specimens illustrate the curved rather than the crooked blade type. Some old specimens in the Museum from the Alaskan Eskimo have blades of slate (Plate XXIII A c). There is also a beaver-tooth knife in the same collection (Plate XXIII A b).

¹ O. T. Mason, *The man's knife among the North American Indians*, Rep. U.S. National Museum, 1897.

The form of the slate blades appears to be an imitation of the shape of the iron blade, but may antedate it. The beaver-tooth knife may have come from the Yukon country and have been acquired in trade from the Athabaskans. Beaver-tooth knives and an antler handle evidently adapted to a blade of this type were found in the archæological material from the Iroquian Roebuck site in Ontario.

In sharpening knives, harpoon points, and arrow heads, whetstones (*si'dlit*) are used. No particular choice of material is made; any smooth, close-grained stone picked up on the beach answering the purpose (Plate XXIII A f). Some of the small whetstones, however, are carefully shaped (Plate XXIII A a). It is worth noting here that old specimens of Eskimo knives and lance heads often appear with ground edge, indicating that the grinding process of sharpening is ancient with them as well as the use of chipping.

THE DRILL.

The Eskimo bow drill (Plate XXIII B a and b) consists of three parts: (1), the bow (*niúqtaq*); (2), the shaft with its pointed drill (*qai'vun*); and (3), the mouthpiece (*qi'ymiax*). The bow-string is placed around the shaft, pressure exerted on the mouthpiece, and the drill revolved by moving the bow. This handy little instrument is used for boring holes for the umiak and kayak frames, making holes in ivory and bone toggles and shoeing, and for starting a fire. In Labrador firestones of iron pyrites were more often used (Plate XXII A c and d). The modern drill has a wooden shaft and mouthpiece, but the old-style drill had both these parts of bone. For the sharp point of the drill, a prong of deerhorn or a flake of quartz was used.

The drill, together with the whetstone and flaker, were the tools used in making the old ivory, stone, and bone implements and weapons of the Eskimo. Flint implements were chipped off until the desired form was obtained,¹ but in slate and ivory material holes were bored with the drill and the piece fractured along the line thus made. This method gave a rough shape, which was

¹ In this operation a bone tool was used and small pieces squeezed off.

smoothed down with the whetstone. The file and sandpaper have replaced the whetstone in the modern process. Large implements and harpoon and lance points were sometimes chipped out of ivory tusks and whalebone with the adze or a heavy knife. The Eskimo seem to prefer even at the present time the old boring and splitting process to the use of modern saws, introduced by traders. This may be due to the materials that they work in, which are of such a nature as to lend themselves favourably to the old process.

No specimens were found in Labrador of the larger stone tools (hammers, adzes, etc.) common to Eskimo culture elsewhere, but no doubt the ancient Labrador Eskimo used them. The present culture has been modified perhaps more than any other Eskimo division by a long intercourse with the whites. When we consider the conditions at present, the southern branch almost entirely dissipated or absorbed by the white traders and settlers, and the northern branch surviving only under the careful nurture of the Moravians, it is not remarkable that we find only fragmentary evidences of the ancient culture. Our thanks are due to the Moravians for encouraging the Eskimo to continue using native food and clothing, but the complete reversal of a people's religious and social ideas cannot but have a disintegrating effect on their material culture. The Eskimo's penchant for imitation is a powerful cause here, as in Alaska, for the introduction of white methods of dress, housing, and furnishing. Consequently we find a hybrid culture on the east coast of Labrador—an Eskimo culture adapted to white ideas. We do not strike a typical Eskimo group until we get into Hudson strait and bay. Even here the influence of the trader and missionary is more or less felt, and is reflected in modern material for clothing and in civilized food.

PIPES.

Among the Labrador Eskimo, as in Hudson bay, we find the Indian type (Plate XXIV i) of pipe in use, together with modern specimens furnished by the traders. Tobacco appears to be as indispensable here as among the Western Eskimo, but its

introduction and use is evidently more recent. It was probably first obtained from the Hudson Bay and independent traders to the south and west, but may have come through Baffin island from Greenland. It was an article of trade with the early explorers and whalers. The Labrador Eskimo, together with the Eskimo of Hudson bay, use the Indian pipe and European tobacco, in distinction from the western group, composed of the Alaskan, Mackenzie, and Copper Eskimo, who use the eastern Asiatic pipe and Circassian leaf introduced through native Siberian traders at an early date.

Tobacco is used mostly for smoking in eastern Labrador. A man is rarely seen chewing. Snuff is used by the old women. The pouch-shaped tobacco bag, described under "Clothing," is used for snuff. With the old-style pouch went a small horn or ivory spoon which was held to the nostril and the snuff inhaled while the other nostril was closed with the thumb. The form of the men's tobacco bag is given in the same section. With the men's pouch is a small ivory pin for cleaning out the pipe. Modern bags are decorated with beads in various designs.

NEEDLE-CASES.

The needle-cases used by the Labrador Eskimo conform to the square-ended shape characteristic of the Eastern Eskimo. Some interesting variations are to be seen in the Museum in some old specimens from Labrador. In the oldest specimens one end is closed by an ivory decoration which forms a handle by which it can be tied to the belt (Plate XXIV a, c, and e). The interior is hollow, and filled with moss. Bone needles were placed in this soft bed and the other end closed with an ivory plug. In more modern specimens the needles are thrust in a sealskin thong running through the interior, which is pulled out, when needed, by an ivory button at the end of the thong.¹ In one of the specimens illustrated, this is carved into the form of a seal (Plate XXIV b). One needle case is rounded, approaching the cylindrical Alaskan shape (Plate XXIV d).

¹ The form of the catch on the other end of the thong is seen in Plate XXIV b, d, f.

The decorative motive, the whale's tail, seen on (Plate XXIV b, f) two specimens, is also found in Alaska, but in tattooing rather than in ivory carving.

ART.

A discussion of Eskimo art is usually confined to a description of their etchings on ivory or an illustration of the little figures carved from ivory. But Eskimo art is something larger than this. It concerns itself not only with designs on ivory, but characteristic motives in the decoration of clothing, in tattooing, in fur and leather-appliqué work, and in basketry. The Eskimo also reveal in the manufacture of tools and weapons an appreciation of form and outline which will compare favourably with that of any of their Indian neighbours.

WORK IN IVORY.

The Labrador Eskimo do not etch their ivory with crude realistic figures like the Alaskan Eskimo, nor do they use the geometrical designs (the concentric circle, the alternate spur, etc.) common from Greenland to Alaska, but confine themselves to a straight line or two accentuating the outline of the little ivory figures they delight in carving. These parallel lines are coloured in black or red. Dots are also used, but to imitate some feature of the model, not as a design. But in the form and finish of their ivory carving, the Labrador Eskimo excel the other eastern tribes and more nearly approach the ambitious work of the Alaskan Eskimo. Perhaps this is due, as in Alaska, to the introduction of better material for tools, as a result of early contact with the whites.

A favourite design of the Labrador Eskimo is the komatik and dog-team, which is carried out with great fidelity of detail, even to the seals and snow-knife forming the komatik load (Plate XXV d and e). Another favourite is the hunter, seated in his kayak (Plate XXV a), or surrounded by his equipment (Plate XXVI), his gun (d), knife (a), cartridge-bag (f), and an

extra pair of boots (e). These are all more or less modern types. The carving of animal forms is older. Of these, the seal (Plate XXVII A c), the whale (Plate XXVII A a), and the bear (Plate XXVII B d) are most common. The white whale (Plate XXVII A f) and walrus (Plate XXVII A b) are more rare. The fox (Plate XXVII B a) and the reindeer (Plate XXVII B c) are quite unusual. The stone fish, illustrated in Plate XXVII A d, is of steatite (also used for lamps and kettles) which is used as well as ivory for carving, on the east coast. Plate XXV b is a modern ivory miniature of an Eskimo woman in the long-tailed *ci'l'apaq*.

Some carvings from the Central Eskimo illustrate how the Eskimo have caught in ivory the sense of action, as plainly as greater sculptors in marble. Plate XXVII B f and g are wolves on the trail. Plate XXVII B b is a polar bear, with up-raised foot on his prey, warning off intruders. Plate XXVII B e represents a musk-ox at bay; and Plate XXVII A e a narwhal swimming.

WORK IN WOOD.

The Labrador Eskimo parallel nearly all their ivory work in wood carving. As the missionaries will tell you, walrus ivory is becoming scarce and the more plentiful material is used instead. Woodwork of this sort includes komatiks and dog-teams with their loads (Plate XIV B a), and even snow-houses, with the blocks and interior fittings carefully imitated.

WORK IN CLOTH AND FUR.

The reindeer frocks of the Labrador Eskimo women have handsome inserts of alternate light and dark fur on the edges of the flaps and in the sleeves (Plate XXVIII). The square and diamond-shaped fur appliqué work of the Alaskan Eskimo I found in only two specimens, a pair of mittens (Plate XXIX B a) and a tobacco bag (Plate XXIX B d). Beads are much used on fur for ornaments in floral designs, as in Plate XXIX B c. Another favourite bead design is the conventionalized figure in Plate XXIX B b. Modern embroidery on moccasins and

mittens is done in silk, and on duffle in coloured yarns, the designs being nearly always floral with brilliant colours, and similar to modern work among the Montagnais and other Indian tribes of the Labrador interior. The leather-appliqué work, so highly developed among the Greenland Eskimo, finds a faint

Figure 30. Tattooing on leg and forearm of woman, from southern Baffin island.

reflection here in a few specimens. Plate XXIX Aa shows the wavy line, used to decorate the flap of a tobacco pouch. Another specimen shows the diamond-shaped design, which is also seen in tattooing (see Figure 30, tattooing on forearm, Baffin island) and suggests a possible connexion between the two. Some women's duffle frocks from Cape Chidley had the simple cross design in leather as a decoration of the border. This design is said to indicate "flying birds," among East Greenlanders.

WORK IN BASKETRY.

Eskimo basketry is of the sewn coiled type, and is quite simple in construction. It consists of a "bunch of grass sewed in a continuous coil by a whip stitch over the bunch and under

a few stems in the coil just beneath, the stitch looping under the stitch of the lower coil" (O. T. Mason). We find the Eskimo making baskets wherever there is a good supply of basket grass (*ivik*), *Ammophila arenaria*, as at the mouth of the Yukon river, on the shores of Hudson bay, and on the east coast of Labrador. Most of the specimens are perfectly plain, and of the common "uncovered bandbox or ginger jar" shape (Mason), but certain specimens collected from Labrador offer simple designs, which have led me to consider them under art.

The shape of the basketry in Labrador has been much influenced by contact with the whites, but the material and workmanship are Eskimo, and we find, besides the conventional "jar" shape, baskets patterned after kettles (Plate XXX d), bowls (Plate XXX c), cups (Plate XXX b), and dishes with covers and with handles (Plate XXXI B a and b). These are simply attempts to reproduce civilized forms in native ware. Other forms have a few characteristic Eskimo designs, which appear also in leather appliqué and ivory work. I refer to the border decoration, which consists of openwork, arranged in an angular or curved design. This type of design is featured in Mason's account of aboriginal American basketry in a specimen from the "Central Eskimo" (this should be Labrador Eskimo, because the specimen is from Davis inlet) in Plate 126. The openwork is produced "by wrapping the foundation with straw for one-half an inch and then sewing, as in ordinary coiled work, the angles to the coil below" (*ibid.*, page 378). For a similar specimen from Hamilton inlet, Labrador, see Plate XXXI A b. The Labrador Eskimo use this method both in baskets, on the borders and bottoms, and in plaques. It offsets the plainness of the surface. A more complicated arrangement of the angular design is shown in basket (Plate XXXI A a) and plaque (Plate XXXI A c). A very uncommon border is the margin of wavy lines, converging and diverging (Plate XXXI A d). The same design appears in the leather appliqué of the East Greenlanders.¹

It is worthy of note that we find an abundance of basketry work among the easternmost representatives of the Eskimo as

¹ See Thalbitzer, *The Ammassalik Eskimo*, p. 635. Copenhagen, 1914.

well as in Alaska, with a few scattering specimens among the Central Eskimo to form a connecting link between. The broken appearance of the industry appears to be governed by local conditions and the presence of material. We find Alaskan baskets also with the angular openwork design, but I have seen none with a double curved line. Outside this variation in design, one could not tell, as far as appearance goes, the basketry of one section from the other. Of course, there is a large difference in individual workmanship, but some specimens obtained from Cape Chidley were as closely sewn and finely made as anything I have seen in Alaska. I incline to the opinion that the ability to make this simple coiled basketry is inherent among the Eskimo, and only needs contact with the proper material to bring it out. It may be an intrusive art, but more probably is characteristic of Eskimo culture at an earlier period when they dwelt farther inland. If it is a borrowed art, it has been so long adopted that its origin is forgotten. Its source would be hard to trace, as Eskimo basketry differs from that of any of the neighbouring Indian types. One would have to go as far south as the California area for comparisons. Its resemblance to the Hopi ware of the southwest is very marked. It has been suggested by Mason that the eastern basketry is an acculturation, derived from the whites, possibly the Norseman, as this style of coiled sewing is found in northern Europe. But, as we have seen, the eastern basketry is exactly the same as that in Alaska, which would point to a common racial origin. If the Norsemen made baskets in Greenland it is not reflected in the present Eskimo culture there. The Moravian missions have encouraged the making of basketry by the Eskimo as a native art, and furnished a market for it, as has Dr. Grenfell in his missionary work on the coast.¹ There is no other connexion

¹ Under date of October 28, 1915, Miss Jessie Luther, who has been connected for many years with the Industrial Department of the International Grenfell Association, writes me: "I think undoubtedly they are purely a native industry. I have been connected with the mission ten years, nearly half the time Dr. Grenfell has been on the coast, and from the first have seen specimens of that kind of basket. I was told they came from farther north and during the past seven years I have gone down the Labrador coast as far as possible every summer and have found them at various places. The best have come from the neighbourhood of Hope-dale, Nain, and perhaps Okkak. I have also found some good ones around Hamilton inlet. I have not tried to regulate this branch of native work, it is so good in itself." [E. Sapir.]

between it and any white influence in Labrador, except the secondary influence in form already described.

TATTOOING.

Thalbitzer, in his excellent notes on the Amdrup ethnological collection from East Greenland (page 424), has made the suggestion that tattoo patterns on the Eskimo are in the main the same as those carved on ivory and sewn on skin. I had independently arrived at a similar conclusion from a study of Eskimo designs in general, *i.e.*, that there is a fundamental unity between the conventional Eskimo designs on ivory, fur, and leather-appliqué work, and on the person, which vary slightly according to the material used and the shape of the surface. The dotted lines seen on the chins of Eskimo women (see Figure 31) and running from the mouth to the ear among old Alaskan men, are perhaps the simplest design on ivory. The Y-shaped design, common among the Central and Alaskan Eskimo in tattooing¹ and on ivory, is seen in Figure 31 b on a woman from the east coast of Hudson bay.

Perhaps a variation of this design is the whale's tail tattooed at the corner of the mouth of the men among the Alaskan and Asiatic Eskimo (see Figure 32 c), also seen on an old man from Ungava. It is also found as a conventional ornament on small articles in ivory among the Labrador and Greenland Eskimo (Plate XXIV b).

Figure 31 e approaches the crossed lines used as a filler of space in ivory work (see Plate XXVI a). The other designs are self-evident. The concentric circle is found in tattooing on the arms of women in Bering strait.² The diamond-shaped design, tattooed on the arm of a southern Baffin Island woman (see Figure 30) is similar to a design in leather-appliqué work among the Central and Alaskan Eskimo.

¹ See Boas, *The Eskimo of Baffin Land and Hudson's Bay*, Fig. 158, p. 108.

² See G. B. Gordon, *Notes on the western Eskimo*, Plate X, Trans. of the Univ. of Penn., Arch. Dept., vol. 2.

Figure 31. Women's tattoo designs. a. and b. East coast of Hudson bay.
 c. Baffin island. d. Repulse bay. e. Chesterfield inlet.
 f. Vicinity of Bering strait, Alaska (from G. B. Gordon's *Notes on the Western Eskimo*, Plate IX, fig. 1).

Figure 32. Men's and woman's tattoo designs.

- a. Man's design from Baffin island. b. Man's design from Ungava.
 c. Man's design from vicinity of Bering strait, Alaska (from G. B. Gordon's
Notes on the Western Eskimo, Plate IX, figure 3).
 d. Woman's design from Nachvak.

We have, then, several characteristic designs common to tattooing and work on ivory or skin: the dotted line, the Y-shaped design, the whale's tail, and the concentric circle. To this might be added the crossed lines, the diamond, also parallel lines either continuous or dotted (see Figures 31 and 32).

The trifurcated line, "the raven's foot" of Nelson, seen in Figure 32 d, was found on an old woman from Nachvak, staying at Cape Chidley. This design is also found in Bering strait among the Alaskan and Asiatic Eskimo.¹ It is tattooed on the cheeks, forehead, or breast. Nelson interprets it as a totem mark and Bogoras as a protective design from the "kelet" (spirits). A story which the old woman mentioned above told me in connexion with this mark throws some light on its possible origin. She said that whenever an Eskimo approached the abode of Torngarsoak, "the great Torngak," who lives in a cave in the high mountains near Cape Chidley, one hung upon one's breast a raven's claw for protection. This may have led to the adoption of the "raven's foot" mark as a constant protection against the Tornait.

SOCIAL ORGANIZATION AND SOCIAL CUSTOMS.

The social organization of the Eskimo may be said to be practically nil. The only ties are family life and certain taboos which have a religious sanction. Yet the force of public opinion is strongly felt and perhaps exerts a greater power than in more highly organized communities.

PUNISHMENT AND MURDER.

We might define an Eskimo village as a sort of communistic settlement. Every one is free to do as he pleases, so long as he does not infringe on the general welfare of the people. When any one oversteps traditional bounds or makes himself obnoxious to the people, he is admonished by some of the old men or women. "Somebody speaks," they say. This usually so humiliates the offender, that no further punishment is necessary. If he continues "bad-hearted," he is practically ostracized; he is not allowed to take any part in village affairs; he is forbidden to enter the iglus; no one will speak to him or have anything to do with him. This social death is the worst thing that can happen

¹ Cf. Nelson, *Eskimo About Bering strait*, 18th Annual Report B.A.E., p. 325, and Bogoras, *The Chukchee*, vol. VII, Jesup, *North Pacific Expedition*, p. 256.

to an Eskimo. If he becomes morose and commits a murder, the men of the village get together and wait an opportunity to kill him. No concealment is made of the act, and it is not open to the usual blood revenge, being considered justifiable.

In case of an ordinary murder, it is the duty of the next of kin to avenge it. Sometimes this act is delayed for many years, as in the case of a man leaving a small boy, who waits until he is old enough to avenge his parent. But the duty is never forgotten. In the meantime the murderer may be treated by the relatives of the deceased as if nothing had happened: a situation which is unthinkable to us, but which does not conflict at all with Eskimo ideas.

In the meantime the murderer is constantly on the watch for the avenger. He never knows when a knife will be thrust into him or when he may be shot or speared from behind. His eyes acquire a shifty look, which the Eskimo say is the mark of a murderer. Sometimes the avengers come to his own house, as in one case which came to my attention, and are treated as usual guests, until the day of reckoning comes.

Generally speaking, murder is looked upon with horror by the Eskimo, and the spot where such a deed has been committed is shunned. But they do not scruple at taking life, when they feel justified by hard conditions or customs. Aged people who have outlived their usefulness and whose life is a burden both to themselves and their relatives are put to death by stabbing or strangulation. This is customarily done at the request of the individual concerned, but not always so. Aged people who are a hindrance on the trail are abandoned. Deformed children who exhibit some monstrosity which arouses the supernatural fears of the Eskimo are strangled at birth. Those who die a violent death are compensated by being translated to the highest heaven, which is located in Aurora Borealis. Here they spend their time with other shades of like fate, playing foot-ball with a walrus head.

Under ordinary conditions the Eskimo live together in the greatest amity. In times of plenty they feast together, and in times of want the lucky hunters share their game with the less

fortunate. Murder is committed only when jealousies, caused by some love affair, awaken a man's passions, or brooding over a perhaps unintended slight produces a sort of melancholia. But after a man has once committed a murder, he becomes blood-thirsty, and is apt to look for another victim, unless he is put out of the way by the community. Most of these killings have a psychological background. During the dark days of midwinter when the polar winds are blowing, the Eskimo are unable to hunt. They sit inside and gorge themselves with meat, and take little exercise. The congested body reacts on the nervous system and the usually amiable, good-natured native becomes sullen and moody. His gloomy surroundings add to his mental depression. He recalls old slights and grudges, and, in this abnormal condition, these often assume exaggerated proportions. It is under such conditions that most of the murders among them occur.

The good nature and docility of the Eskimo have been emphasized, and justly; but this does not preclude their committing as barbarous acts as any other savages, particularly when they are subjected to conditions which are favourable to the same. Many of their murders are extremely cold-blooded and unprovoked. The victim is never given a fair chance, but slain when off his guard.

HEADMEN.

The Norsemen spoke of the "kings" of the Skraelings, and early writers (Hall and De Poincey) mentioned the peculiar dress of their "chiefs." They probably refer to the costume of the shaman with its special ornamentation.

The Eskimo have never had any "chiefs" in the Indian sense of the word. They have had leaders, great hunters or enterprising shamans, who have been accorded their position by general appreciation of their worth. But the office has never carried any particular authority with it.

In nearly every Eskimo village there is a headman, who entertains strangers and transacts the village business with them, but he has no authority outside his own family. The Alaskan

Eskimo are said by Nelson to have chosen leaders for their tribal fights. When a shaman is also headman of a village, he is quite a powerful personage, but may be deposed or killed if he plays the tyrant. The office is not hereditary, unless the son of the headman shows equal merit. The office often passes from one family to another and entails the rather burdensome duty of feasting the villagers occasionally to keep them in good humor.

BIRTH.

When an Eskimo mother's time draws near, an old woman who handles the birth cases in the village will be seen leaving her home and taking her way to the sick one's iglu. She has in her hand a small sealskin thong, knotted and looped at the end. When she arrives at the prospective mother's home, the latter is made to kneel down on the floor of the iglu. The old woman ties the cord tightly around her waist. She then takes her position back of the kneeling woman, locks her two hands in front of the latter, and exerts a powerful downward pressure.

During the operation a shaman may be assisting by singing and drumming to strengthen the mother, either at his home or in the house where the birth takes place. Some shamans even attempt to act as midwives, but their efforts usually end in disaster. Hence cases are usually left to the old women, who seem to have a good understanding of their work and are uniformly successful.

As soon as the babe is born, the old woman picks it up, blows in its mouth, and shakes it gently to make it cry, and as soon as a wail breaks forth, begins a song intended to make it a strong and powerful hunter, if a boy, or an industrious, fruitful woman, if a girl. The umbilical cord is cut, and the ends tied with sinew and carefully dusted with powdered charcoal, an operation which is repeated every day until it heals. The babe is then placed to the breast of the mother. If it refuses the breast a piece of seal fat is thrust into its mouth, with a stick across to prevent its choking the child. This furnishes nourishment and also acts as a necessary purgative.

The placenta is carefully wrapped up and buried on the beach. The Eskimo are very careful that no dogs get hold of it. Probably their care is due to the same idea that impels them to preserve their hair and nail parings, a feeling that it is a part of themselves, which may be used for purposes of witchcraft.

Eskimo mothers recover very quickly from the effects of childbirth. It is not unusual to see them out the same day, with the babe in their hood. Ordinarily the babe spends the first few days of its life sleeping in a warm reindeer sack. When it gets older, it is placed naked in the mother's hood, or, in very severe weather, partly clothed. When the babe can just begin to toddle around, a suit is made for him, which has the ends of the sleeves sewn up to keep his hands warm. The suit has a flap beneath and a bunch of moss for a diaper, which is renewed as needed. The babe spends its days happily tumbling on the floor of the iglu among the other children and the dogs, or is carried around outside in the hood of his older sister who is always very proud of her baby brother. The babe is the pet of the entire family and receives the attention of all visitors, old and young, with a gravity befitting the occasion. He early attains a knowledge of his power, and acquires a habit of speaking with authority which cannot be misunderstood. He is treated with great respect by his parents, and his smallest wishes gratified.

The custom among the Eskimo of treating a child with all the deference due an adult, and asking his will or opinion with mature respect, is perhaps due to their idea of the namesake (*at'itsi'ak*) by which the child receives the name of the last person who has died in the village.¹ It does not matter if the child is of different sex, as names are not limited to sex among the Eskimo, although certain names are more apt to be given to one sex than the other. Often, when the child is born it receives several names from those recently deceased, and the correct name is left to a future decision. Among the East Greenland Eskimo the right name is discovered by divination, the diviner repeating the names of dead relatives until a propitious sign occurs at a certain one.² Among the modern

¹ In Labrador a widower names his first child after his deceased wife.

² Cf. Holm, *The Angmagalik Eskimo*, p. 81.

Labrador Eskimo, I was told that this is left to the decision of a living relative, who gives the child his name. Among the Alaskan Eskimo the choice is left to the community. The community settle on a name, or give the child when it grows up a nickname according to some characteristic, which invariably sticks better than the other name. I have known Eskimo nicknames such as "Broken," "Walrus," "Big Toe," etc., which were passed on to white men, who took up their quarters in houses which had been occupied by these characters. When an Eskimo falls sick or becomes old, he often changes his name to deceive the spirits and prolong his life.

CHILDHOOD.

As the child grows up, it plays at the work of its elders. The girl helps her mother around the house, or plays with her dolls¹ and miniature house and utensils. Small children are provided by admiring relatives with small ivory carvings of animals and birds, with which they play by the hour, arranging them for various plays and hunts.

The boys early receive small harpoons and bows and arrows, and try their skill on small birds and floating pieces of wood. The sling is a favourite amusement in summer, when myriads of waterfowl visit the shores. When the "young ice" forms on the shore-line, the boys delight in making a miniature boat out of one of the cakes and paddle around with a little oar, or leap from cake to cake, following the leader, or perform an impromptu song and dance on a shifting "pan." Although Eskimo children do not learn to swim, I have never heard of one of them being drowned. Their hardiness is something wonderful, perhaps due to letting them run around the iglu naked when young. I have seen them in the early spring, only a few weeks after the ice has broken up, running up and down the beach, and splashing and wading in the icy water, perfectly naked, and evidently having the times of their lives.

¹ Eskimo girls play their dolls are babies as white children do. They undress them and put them to bed at night, and dress them up again in the morning. During the day they crary them around in their hoods.

Football is a favourite amusement with Eskimo of all ages. The football is a small round ball made of sealskin and stuffed with reindeer hair. In Labrador, as in Greenland, it is whipped over the ice with a thong loop attached to a wooden handle. It can be caught in the air and returned with terrific force with this instrument. It is said that the Eskimo did not like to play football with the Tunnit, because they were so strong that it was dangerous. Rink gives us several stories from Labrador and Greenland of the myth hero overcoming his opponents in football.

The girls and women play handball with a larger and softer ball. A game which both sexes play is a sort of basket ball, in which the ball is thrown by the players on one side to each other, while the others endeavour to snatch the ball in the air. The women also play a sort of football "solitaire," in which they see how long they can keep the football in the air between their toes and hands, without moving from the spot.

The children play tag, and exercise in running and the Eskimo "hop, skip, and jump." They engage in imitation of the pursuits of their elders, driving each other as dogs, stalking and shooting the one who is "it" as the deer or bear or seal, as the case may be, and generally enjoying themselves as children do in all parts of the world. In one thing the Eskimo child has the advantage over white children. He is never punished. On the other hand, I have never seen an Eskimo child disobey. The feeling between children and parents appears to be one of mutual respect and goodwill. The underlying psychology seems to be sound as far as a primitive race is concerned. It probably would not work as well with white children, who are accustomed to coercion and restraint.

MARRIAGE.

There is usually a great disparity in ages of the man and the girl of the first marriage, which may account for the low birth-rate among the Eskimo. When an Eskimo girl arrives at the age of twelve or fourteen, she begins to receive the attention of the unmarried hunters. About this time she ceases doing her

hair up in two braids which hang down in front on her shoulders, and loops her hair in side plaits under her ears and fastens it at the back of her head. She leaves off the sexless square-cut bottom *go-lituk* and appears in the gorgeous long-tailed, big-hooded affair affected by married women. Her chin is tattooed, and she appears shy and bashful, where she has been a noisy, romping child before. The Mission Eskimo women of Labrador, like those of Greenland, wear coloured ribbons as a distinguishing mark. The young girl has a pink ribbon, the married woman uses blue, and the widow, white. In Greenland an unmarried girl who has children wears a green ribbon, but no particular disgrace attaches to it.

The new couple usually take up their abode with the girl's parents until they are able to set up a home for themselves. Sometimes an extra good hunter will supply food to both sides of the house, but usually he assists his wife's family. Separation is frequent among young couples, due to trifling disputes or incompatibility, and other partners are sought until a harmonious arrangement is effected, which usually lasts for life. Divorce is a simple matter; the husband tells the wife to "go outside," or she "runs away," taking her pots and household utensils and children, and going back to her father. Among the Labrador Eskimo, if the wife has any large property, as a tent or boat left her by her father or brothers, it is held in trust for her by one of her male relatives during her marriage. When she returns home, she has the use of it again. Separated couples often are reconciled and marry again. I knew one Eskimo's wife, who used to "run away" every spring, but was always taken back. An exchange of wives is not binding, although sometimes the new arrangement suits better and is allowed to stand. Some Eskimo beat their wives when they refuse to obey, but any cruelty on their part receives the disapproval of the community, and sometimes the woman turns the tables on the man and beats him soundly.

MORALITY.

A good deal has been said and written about Eskimo immorality, but it seems hardly fair to call them immoral. They

are not immoral or moral, they are simply natural and governed by the conditions of their surroundings. The most necessary fact of married life with them is that they should have children. Future hunters are most desired, but girls who will prepare food and skins are not unwelcome, and the Eskimo are not very particular how they get them. A child, legitimate or illegitimate, is sure of a welcome, and of a home if he has none. This principle is not conventional, but it is honest, particularly to the child, and preferable to our ambiguous double standard.

I have never seen any immodest behaviour on the part of the young women. On the contrary, they are usually so bashful that they will not speak above a whisper in the presence of a stranger. The older women, who have passed the age of child-bearing, give themselves more licence and bandy jokes back and forth with the greatest freedom, as they may safely do. There is the utmost openness in discussing matters of sex, even before the children. This does not mean that the Eskimo are vicious, but that they view these matters as a necessary part of the natural scheme of life, without any hypocrisy.

The custom of exchanging wives is due to religious ideas,¹ and the peculiar domestic economy of the Eskimo. For instance, an Eskimo may want to go on a reindeer hunt into the interior for the summer while his neighbour wishes to put up salmon. His own wife is an expert salmon curer, while his neighbour's wife is more skilful in preparing deerskins. An exchange is made for the season.²

In Greenland and Labrador, where the husband has two wives, that number is necessary to care for the meat and skins which a good hunter provides. One of the knottiest problems which the Moravians had to solve was this question of polygamy. I understand that they wisely let it alone in the older generation, and sought to convert the new to more civilized ideas.

The Eskimo wife, if she has children, holds a position of respect and authority in the home. She has few cares, and is inured to hard labour. She would not understand our civilized

¹ Cf. Boas, *The Central Eskimo*, p. 605, 6th Report of the Bureau of American Ethnology.

² Cf. Murdoch, *The Point Barrow Eskimo*, p. 413, 9th Report of the Bureau of American Ethnology.

pity for her. Her husband consults her before undertaking any important journey or trade, is an affectionate father, and a good provider. Husband and wife respect the position filled by each in the community, and there develops on this foundation a real affection, which is touching in an old couple. The hard conditions of Eskimo life do not tend to produce romances, but many a promising young couple are seen who are very fond of each other. The Eskimo are not so open in their display of conjugal affection as white people, but after one becomes better acquainted with them, one would not deny them this virtue.

On the other hand, the Eskimo are very quick and ready in expressions of sympathy. They will sit down and cry for the misfortune of another as readily as for their own. Families in mourning are fed by the whole village. Those in misfortune never fail to receive a portion of the catch. The story of the poor orphan is the favourite theme of their stories, although, in actual life, the orphan and the widow have rather a hard time of it. But there is always someone to give them a little food or an old garment, so they manage to get along. The lot of the childless woman is the hardest. She cannot retain her husband's love, and if she is not divorced, has to bear the sight of another woman filling her place both in the family and the community. The aged are treated with great respect, and the word of the old men and women is final. The Eskimo say that they have lived a long time and understand things in general better. They also feel that in the aged is embodied the wisdom of their ancestors. This does not prevent them, however, from putting the old folks out of the way, when life has become a burden to them, but the act is usually done in accordance with the wishes of the persons concerned and is thought to be a proof of devotion. Pain and hardship are endured without complaint, and any good fortune is considered an excuse for feasting the entire village. An Eskimo never deserts his house-mates or friends, and his integrity can always be relied on. It is true that he tells little fibs in order to please, and enjoys deceiving as a joke, but when an Eskimo's word is seriously given, no hardship nor difficulty will hinder him from carrying out his part of the agreement. The Eskimo are slow to make up their

minds, weighing each possibility carefully, but, their minds once made up, they pursue their object with great determination. They are not ungrateful for kindnesses, but their habit of considering food and clothing as the right of everyone has led some explorers to call them ungrateful. Their ethical standard is largely a result of the conditions under which they live, in which each man must be able to rely on the word of his neighbour and give aid when needed, because he never knows when he may be in a like plight himself.

The Eskimo is more open in his manner and moods than the Indian and reflects the passing thought in his attitude. As Cartwright wrote: "What in their minds they think, their faces show." They are very good-natured as a rule, but when angry, let their passions rage like children. They have this advantage over the Indian, however, that they do not harbour a grudge overnight, unless it is a serious one affecting their good name, of which they are very sensitive, or a case of blood-revenge. They have an innate sense of humour, which turns the most trifling circumstance into a joke, and a person with a cheerful disposition will get along much better with them than one who is inclined to be sober. They say that they dislike a "sour-face." They are impatient of small delays, preferring the present good to future welfare, as is seen in their custom of feasting while there is plenty and starving when there is none. However, they show great fortitude in bearing unusual hardships, and it is remarkable how cheerful their outlook is on a life which at best is a cold and hard one.

DEATH.

The Eskimo have little fear of death itself, which the hunter braves many times a day on the shifting ice, nor do they express any particular emotion in putting an animal to death, or killing a man, for that matter. But they do have a superstitious fear of a corpse, owing to the malignant influence which it is supposed to exert, and are very much afraid of ghosts. They will never pass by one of their burying places at night. Their terror of the unknown is a very fruitful soil for the shaman

to work upon, and partly explains the power which he exerts over them.

When a shaman gives up his patient, everything is prepared for his burial. His grave clothes, consisting of the finest reindeer, are cut out and made by the women, and the corpse is hastily dressed, sometimes before the breath has left the body.

As soon as death is certain, the household sets up an unearthly wailing, the women tearing their hair and beating their breasts, and otherwise giving vent to excessive grief. The virtues of the deceased are magnified and his faults forgotten. The villagers crowd in and add their lamentations to the general woe. In the evening a "head-lifting" is held, whereby the cause of the sickness is discovered. When the head becomes heavy it signifies an affirmative answer. At night a watch is kept over the corpse, two men sitting up together for company, as one might be overcome by the ghost. The body is taken out the next day through the window or a hole in the side of the house and buried. It is never taken out by the doorway, as the ghost might find its way back. It is a great misfortune to have anyone die unexpectedly in the house, as it contaminates everything in it. When an inmate is near his end, you will see his housemates removing all the household furniture and weapons.

BURIAL.

Eskimo graves in Labrador are found either on a hillside near the village, if the death occurred in winter, or near a camping site on the seashore, if the death occurred in summer. Isolated graves are found on the tops of high hills. This place of burial is said to be reserved for distinguished headmen. The "old chief" at Cape Chidley was buried on top of a neighbouring mountain.

Most old graves present the appearance of a cluttered heap of stones, but in a newly-made grave, the method of building an enclosing wall can be distinguished (Plate XXXV A).

Having fixed upon a place of burial, stones are piled up in an oval or oblong wall 2 or 3 feet high, leaving just space enough for the body. The bottom of the space is lined with moss,

and the body, wrapped in heavy winter deerskins, is placed on this soft bed. Large flat stones and, at a later date, pieces of wood, form a covering over the enclosure. The grave box is then covered with rocks to keep the body from wild beasts and birds.

On top of the grave are laid the effects of the deceased, such as the lamp, kettle, and dishes of the woman, and the kayak, and weapons of the man. Some of the smaller utensils, as firestones (iron pyrites), toys, knives, needles, etc., are placed inside the graves.

All the effects of the deceased are broken to liberate the spirit residing there, so that it may be useful to the shade of the owner. The clothes are torn; the dishes split; and holes bored in the soapstone lamps and kettles.

In winter, when the stones are deep under snow, the bodies are simply laid out on the snow. The persons present at a burial must stop up the left nostril with reindeer moss to avert the contamination of the presence of the corpse.

GAMES.

GAMES OF CHANCE.

The game of cup and ball (*ayayauk*) is played in Labrador as among the Central Eskimo. A rabbit's skull or a cone-shaped piece of ivory is bored full of holes, and a peg of ivory, about 4 inches long, is attached to it by a thong. The game is to pierce the holes with the peg when the skull or ivory piece is swung on the end of the thong. In an old specimen in the Museum, the ivory piece is in the shape of a bear (Plate XXXII a). There is a definite order to the distribution of the holes in the ivory and the way in which they must be pierced. There is a triple line of holes on the abdomen and sides of the bear, but only a single line on the back and throat, and a single hole at the head and tail. During the first ten throws, the player may pierce any hole in the abdomen or sides. Beginning at the hole in front (in the head) he next must pierce the line from the head to the tail. If he misses more than once, he has to give

place to another player. After successfully taking the holes in order, he may continue piercing any hole until he misses one.

A game (*tingmiar'yax*) (Plate XXXII c) similar to dice is played with ivory images of birds. There are fifteen to eighteen figures used in the game. Small images of men and women are also used. The players sit around a dressed sealskin. The images are taken in the hand, shaken, and thrown up. In falling, those that stand upright belong to the player. The one who succeeds in getting the greatest number is declared the winner.

The Labrador Eskimo also play a game with small ivory pieces covered with dots in varying patterns (Plate XXXII b), which appears to be an adaptation of dominoes (*amazua'lat*). The following description of the game is taken from Turner:¹

"Two or more persons, according to the number of pieces in the set, sit down and pile the pieces before them. One of the players mixes the pieces together in plain view of the others. When this is done he calls to them to take the pieces. Each person endeavours to obtain a half or third of the number if there are two or three players. The one who mixed up the pieces lays down a piece and calls his opponent to match it with a piece having a similar design. If this cannot be done by any of the players, the first has to match it and the game continues until one of the persons has exhausted the pieces taken by him. The pieces are designed in pairs, having names such as Kamiu'tik (sled), Kaiak (canoe), Kale'sak (navel), A'mazut (many), Atau'sik (one), Ma'kok (two), Pingasut (three), Sita'mût (four), and Ta'limut (five). Each of the names above must be matched with a piece of similar kind, although the other end of the piece may be of a different design. A Kamutik may be matched with an Amazut if the latter has not a line or bar cut across it; if it has the bar it must be matched with an Amazut."

CAT'S CRADLE (*ayaya'poq*).

I found on inquiry that the game of cat's cradle was known among the Labrador Eskimo, and played by the adults during the dark days of winter for amusement. I was unable to get

¹ *Ethnology of the Ungava district*, pp. 257, 258.

any specimens in summer, but informants told me that the Labrador Eskimo made the characteristic forms—the deer, the dog, the sledge, etc., which are found among the western and central Eskimo. The game is a favourite with the women and used to amuse the children.

DOLLS.

Specimens of dolls, the chief playthings of the Eskimo girls, were obtained from Labrador, Baffin island, and Chesterfield inlet (Plate XXXIII). They have an extra ethnological value in reflecting in miniature the dress of the district from which they come. Little Eskimo girls “keep house” with them in little snow iglus in winter or in old tent circles in summer, much as their civilized sisters would do. I saw in an old summer camp in Hudson bay such a playhouse with its little fire-place and lamp of brightly coloured pebbles and bed of moss, mute witness to the active little minds and hands of bygone Eskimo children.

MUSIC.

A characteristic specimen of an Eskimo “fiddle” was obtained on this trip. It consists of a rude box, with a square hole in the top, three sinew strings with bridge and tail-piece, and a short bow with a whalebone strip for hair. It must be a rude imitation of “fiddles” seen on whaling ships, as the drum is the only indigenous musical instrument of the Eskimo. Most Eskimo fiddles have only one string. When I asked an Eskimo musician once about this he said, “One string is plenty for an Eskimo song.” Anyone who understands the range of the Eskimo scale will appreciate the answer.

The Eskimo have a keen appreciation of music and not unpleasant voices, which have been turned to account by the Moravian missionaries. One is considerably surprised in stepping into a mission service to hear the Eskimo congregation singing their native hymns to Bach's grand old chorals, in perfect harmony and with deep feeling and evident emotion. The men have deep, rich bass voices, but some of the women's voices

are rather shrill. Nathaniel, the choir leader at Nain, has composed an anthem in four parts, showing that the Eskimo are not incapable of constructive work in music. The Moravian Mission Eskimo also show an aptitude for civilized musical instruments, and there is a well balanced band at both Nain and Okkak. The organist, Jeremias, at Nain, the Moravian headquarters, is a musician of no mean ability. He can play classical selections on the pipe organ and any band instrument. The Eskimo have a good ear for music, and will catch an air after it has been sung once or twice to them, and repeat it with great gusto and evident feeling for the rhythm. Rhythm is the foundation of their native drum and dance songs, and it is not so remarkable that they excel in it, as it is that they are able to catch the entirely foreign time of the complicated music of civilization.

The Eskimo music differs from civilized harmony in having a pentatonic scale, and in the constant reiteration of a note or phrase, particularly in their *a-ya-aya-ya* chorus. A drop of an octave or a shift into another key is not uncommon in the same song. The time is 2-4, formed on the double drum beat, which the voice accentuates in the music. The body, with odd jerking of the arms and stamping of the feet, answers the roll of the drums in the dance. The women stand with feet together and sway the body from the hips, and wave their hands. (In some sections, as in north Greenland, the men also stand with fixed feet while dancing and singing.) The song is delivered at the top of the voice, the idea seeming to be that the more noise the better is the music. The men's songs are interspersed with shouts. The women have soft cradle-songs which they sing to the babies in the hood while they are swaying them to sleep. These are more melodious than the drum-songs. Among the Alaskan Eskimo the young girls have a curious type of song which they perform among themselves as a sort of game or amusement. It is called "throat-singing" and consists of a series of guttural ejaculations, which they attribute to the Raven. Incantations are chanted; the text at the end of this volume is an illustration. In story-telling, a man often stops to sing a short phrase or song, as delivered by a character in the legend.

As Mena'dlook an Alaskan Eskimo once told me, "The Eskimo have many songs. They have songs to make the wind blow, songs to make the seals come, songs to dance by, songs for play, songs to keep off the spirits songs to make their hearts strong." Songs are property among them, and the originators or old men who have learned appropriate songs sell them on ceremonial occasions.

Until they have been educated to it and understand the intricacies of modern music, Eskimos as a rule do not like civilized music. They say that there are too many notes, too much noise, that the time is confusing, and that they prefer the simple rhythm of their native songs. Of the "white man's songs," they like best the old-style hymns.

RELIGION.

TORNGARSOAK AND SUPERGU'KSOAK.

The religious ideas of the Labrador Eskimo appear to be intermediate between those of the Greenland and Central Eskimo, as might be expected from their geographical situation. Influences have flowed in from both sides which have given rise to conflicting ideas concerning the attributes and location of their deities, but the main features are clear.

The Labrador Eskimo have two main deities: a female deity Supergu'ksoak who presides over the land animals, especially the reindeer, and a male deity Tornga'rsoak, who presides over the sea animals. The male deity is the husband of the female deity. A similar arrangement was found by Captain Comer on the west coast of Hudson bay¹ and also occurs in Bering strait among the Island and Asiatic Eskimo.²

The legend concerning these two deities, as given by an Eskimo named At'u'nga to the early Moravian Brethren, is as follows:

"In the inland lives an old woman, who presides over the land animals, especially the reindeer. She will always assist

¹ See Boas, *Eskimo of Baffin land and Hudson bay*, Bul. A.M.N.H., vol. XV, p. 145.

² See Bogoras, *The Chukchee*, Jesup North Pacific Expedition, vol. VII, pp. 317, 318.

the Innuït in their pursuit of game, when she is appealed to. Through their connexion with her, the angekut are able to draw the reindeer."¹

The old woman does not live alone, but there are many more with her, who spend their time in hunting. (The Eskimo told the early missionaries that when they died, their souls would go "into the country and hunt reindeer"; it is supposed, then, that the old woman is surrounded by the souls of departed Eskimo, who spend their time in hunting.)

The old woman's name is Supergu'ksoak.

Her husband is Tornga'rsok. He lives in the water, and all creatures that live in the water are subject to him. It is he to whom the Labrador Eskimo appeal when in search of whales or seals.

Through their relation to Supergu'ksoak, the angekut (shamans) are able to draw the reindeer. A very interesting description of this ceremony, performed through the medium of a doll fetish,² is given by Turner (*Ethnology of the Ungava District*, page 197). The control of the reindeer, however, is assigned by the Ungava Eskimo, according to Turner, to Tornga'rsok. He says:

"A great spirit controls the reindeer. He dwells in a huge cavern near the end of Cape Chidley. He obtains and controls the spirit of every deer which is slain or dies, and it depends on his good will whether the people shall obtain future supplies. The form of the spirit is that of a huge white bear."

The Eskimo of the east coast recognize the same deity in Tornga'rsok or Tunga'rsuq.³ He lives in a cave in the great black mountains at the northern extremity of the peninsula, which they call the Tornga'it, or Spirit mountains. The scenery here is wild and impressive. Tornga'rsok takes the form of a

¹ Both of my informants approved the legend, and added the additional information that when the old woman wished to call the reindeer, she would chant "kai'te, kai'te, ka'guqlu'ya," "Come, come, I am hungry."

² In Alaska this act of conjuring has been expanded into a ceremony, called the Doll Festival or Deer Festival (see Nelson, *The Eskimo about Bering Strait*, p. 494). In this festival the location of the deer is divined by the presence of a reindeer hair on the doll at the conclusion of the ceremony.

³ South Labrador dialect.

huge white bear when he appears to angekok novices. He devours them limb for limb, and then spews them out again, when they become endowed with superhuman power. It will be noticed that Turner says that Tornga'rsoak controls the spirits of every deer which is "slain or dies," implying that he is master of the spirit world rather than the living deer, which does not conflict with the idea that Superguk'soak controls the latter. Tornga'rsoak also controls the future supply. Consequently none of the foetal deer are allowed to be eaten by dogs (Turner, *ibid.*, page 201). The same idea occurs at Point Barrow, Alaska.¹ In Alaska the idea of the connexion of the shade of the animal with the future supply is marked and finds expression in the religious ceremonies.² The belief in Sedna, prominent among the Baffin-islanders, is not unknown in northern Labrador. At Cape Chidley, an Eskimo informant spoke of an old woman whose home was at the bottom of the sea. Sometimes she came up to breathe across the strait, near the shores of Resolution island (Tutjarluk). She controls everything that swims in the sea; the fish, the seals, and especially the polar bear. She must be appeased, else she would drive the polar bears northward to Tutjarluk (Resolution island) where there are no hunters, or she might send a shark to eat their seals and cut up their nets, or make the codfish refuse to bite. The Cape Chidley Eskimo used to throw their broken knives, worn-out harpoon-heads, and pieces of meat and bone into the sea as an offering to the old woman.

The Cape Chidley (Killinek) people were evidently much more afraid of Tornga'rsoak than the Old-woman-who-lived-in-the-sea, and, whenever anything went wrong, the angekut and sometimes a chosen body of men would visit the cave where Tornga'rsoak was thought to reside and make due offerings of reindeer fat and tobacco.

It appears to me that the belief of the original stock of Eskimo must have included both a male and female deity, holding sway over the land and sea-animals. The Sedna

¹ See Murdoch, *The Point Barrow Eskimo*, 9th Annual Rep. B.A.E., Washington, p. 267

² See Hawkes, *The Inviting-In Feast of the Alaskan Eskimo*, Memoir 45, Anthropological Series No. 3, Geological Survey, Canada, p. 3.

legend is found in practically every Eskimo tribe, while the belief in Tornga'rsoak as the chief or most dreaded spirit is found in Greenland and Labrador, and in different forms on the west coast of Hudson bay and in Bering strait. The belief of the male deity appears to have been intensified in the eastern regions, and of the female deity in the central. In the west, the old religion has broken down and new ideas have been adopted by the Alaskan Eskimo from the Indians of the northwest coast and by the Asiatic Eskimo from the Chukchee. Yet Eskimo conservatism is such that the Eskimo of Indian point (Siberia) still sacrifice to the Old Woman (Nulirah) of the Sea, and the island Eskimo of Bering strait to Kácak, the male deity corresponding to Tornga'rsoak.

THE INUA AND TORNAIT.

The Eskimo believe that not only all animals but also any prominent physiographical feature, such as a rock, point, cove, or mountain, is inhabited by a spiritual counterpart, the *inua*, the genius or thinking spirit of the object or spot. This is the third person possessive form of *inuk*, man, and means literally "its man," which perhaps expresses the idea as well as it can be explained. This belief is illustrated in the dance masks of the Alaska Eskimo, which are often made double, with the outer portion showing the animal form and the inner mask the *inua*. The illusion is completed by having the outer mask hinged, so that the *inua* can be revealed at will. The idea is also prominent in Alaskan mythology, where animals change from their own shape to that of men by the simple expedient of pushing up their beaks or muzzles.

There is another class of spirits, sometimes disembodied, sometimes associated with strange and terrifying forms, more or less under the control of the shamans. These are called the Tornait¹; singular, Torngak (northern Labrador and Baffin island), Tungak (Ungava and southern Labrador), Tungak (Alaska), which perhaps originally meant nothing more than "spirit," but in missionary accounts becomes "devil." The Tornait are malignant spirits who are to be propitiated.

¹ Tungat, South Labrador.

From them the shaman in Alaska derives his name, the *tuyra'lik* or "possessor of a spirit." Usually he possesses several spirit familiars.

The supreme control of all the Tornait is assigned to Tornarsuq in Baffin island; Tornga'rsoak in northern Labrador, "the great To'rngak." I cannot agree with Turner's suggestion that "this Tungak is nothing more or less than Death, which ever seeks to torment and harass the lives of people that their spirits may go to dwell with him."¹ The legend which he relates of Tornga'rsoak's origin, *i.e.*, that he was once a fond father who was changed by the death of his children to a vicious spirit preying on all mankind, is also found in Alaska, where the additional information is given that the shamans, through their magic art, got him into their power and bound him, so that he could do no further harm (cf. Nelson, *The Eskimo about Bering strait*, page 481).

For this reason the dead are bound. In this case the Tornait represent the malignant influence of the dead during the three days while they still linger on earth before they take their departure to the spirit world, but this is only one of the phases of their appearance. During this period no work may be done with a sharp-edged instrument for fear of wounding a wandering spirit and inviting its anger.

THE ANGEKUT.

The angekut are the accredited mediators between the Eskimo and the spirit world which surrounds them. Without their assistance in dealing with such powerful influences, the Eskimo believe they would be undone. Consequently the angekut exercise a great power over their people. The angekok combines in one the three offices of priest, prophet, and physician. He attains his power and knowledge of the spirit world only after a long and arduous apprenticeship.

When an Eskimo feels that he has been called to be an angekok, through some mysterious event which has happened to him, or a chance meeting with some supernatural being, he

¹ *Ethnology of the Ungava district*, 11th Annual Report B.A.E., p. 194.

retires to a lonely place, where for a space of time he lives the life of a hermit, praying and fasting until his familiar spirit appears. Torngarsoak appears in the form of a great white bear and devours the aspirant limb for limb. Other Tornait appear in different but no less terrible forms. An angekok novice, Angurkvaluk, thus described the terror of the acolyte to Jens Haven, the famous Moravian missionary.¹

"My parents told me that their familiar spirit, or Torngak, lived in the water. If I wished to consult him, I must call upon him as the spirit of my parents to come forth out of the water, and must remember this token, that I should observe a vapour ascending; soon after this spirit would appear and grant what I asked.

"Some years ago, when my little brother was ill, I tried this method for the first time, and called upon the Torngak, when I really thought I perceived a thin vapour rising, and shortly after, the appearance of a man in a watery habit stood before me.

"I was filled with horror; my whole body shook with fear, and I covered my face with my hands."

Having passed through this ordeal, the apprentice receives a portion of power and the promise of future assistance from his familiar spirit. He returns to the village and relates his adventures. His power is soon put to the test. A séance is held the first favourable evening. Singing and shouting and beating his drum, he quickly works himself up into a frenzy. The appearance of his familiar spirit and its possession of him is heralded by frightful cries and the redoubled beating of the drum. At this point the demeanour and speech of the labouring angekok entirely changes. The method of a famous early Labrador Eskimo conjurer, Seguilak,² is described in Jens Haven's Diary:

"Falling into an ecstasy, he first sang to his wives, then muttering some unintelligible jargon, made strange gestures, blew and foamed at the mouth, twisted his limbs and body together, as if convulsed, throwing himself into every possible

¹ During their long stay on the Labrador coast, the Moravian Missionaries have kept a constant diary. The following quotations are from that of Jens Haven, the first and most famous of the early Labrador missionaries.

² Seguilak was a brother-in-law of the famous Mikak, the Eskimo woman who befriended the first Moravian missionaries.

posture. At intervals he would emit the most frightful shrieks, then placing his hand on the missionary's face he would groan out, 'Now is my Torngak come!' "

"At such times," the missionary adds, "the Eskimo present would lie flat upon their faces, as if they were dead men."

While the angekok is possessed by the spirit, advantage is taken of his trance-like condition to ask him questions. The response of a female angekok, Millak, is further described by Jens Haven:

"... She began, with deep sighs and groans, to invoke the Torngak, till at length her loud, shrill voice made the house tremble. After a brief silence she shouted aloud to me and then another what the Torngak had told her in reply to their questions. If the replies were unfavourable, the Torngak was again invoked, until the results were satisfactory."

Needless to say, at such times the angekok takes advantage of his connexion with the torngak to confound his enemies in his responses. But, on the whole, the angekok does not use his power for harm.

The concluding ceremony of driving the torngak out of the house, which is a common practice among the Asiatic Eskimo, was also the finale of the Labrador shaman's performance.

"Then suddenly a terrific noise was heard, like the report of a gun—apparently caused by striking a sealskin stretched tightly on a hoop and hung up for the purpose.¹ She then chased the Torngak through the house with a stick, striking furiously right and left, stamping with her feet, and uttering frightful sounds."

The work of the angekok is not limited to such public exhibitions, but also includes doctoring the sick, officiating at ceremonials, determining the presence of game, foretelling or changing the weather, making amulets, instructing novices in his art,² etc.

¹ The Labrador Eskimo of the east coast have not used the drum for several generations, although they still understand the construction of it. It is one of many old customs which have passed away.

² Young shamans usually attach themselves to an older angekok for several years, until they become proficient.

In sickness, the sufferer is thought to be possessed by an evil spirit, and it is the business of the angekok to drive it out of him with the assistance of his powerful familiar spirits. The method is much the same as observed in the séances, but usually accompanied by a thumping of the individual over the diseased part, or blistering it by sucking out the trouble through a hollow tube. Quite often the faith of the patient makes him whole. The doctor always takes his payment in advance, but is obliged to relinquish it in case of failure. The angekok is always ready with some trifling excuse for a miscarriage of his art, which never fails to convince the Eskimo.

The performances of the shaman include not only the séances described, but some very clever ventriloquistic work and not unskilful juggling. This art is acquired by the novice after a long training as an assistant to the angekok. On the other hand, the assistant is sometimes very useful to the angekok in helping him out of difficulties. During my stay in an Alaskan village, an angekok had himself hanged to gain greater power. His relatives despaired of his recovery, but his assistant revived him. Inasmuch as foreign spirits are commonly supposed to possess greater virtues, the spirits of the angekok often talk in a foreign tongue. (I am not referring to the angekok language, which is made up of descriptive and obsolete Eskimo words.) I heard an Alaskan shaman once whose tungak was supposed to be talking a dialect of Asiatic Eskimo, but an Eskimo friend in the audience who came from that district afterwards told me that the spirit "talked it very badly." Among the Western Eskimo, a shaman has a set of masks representing his spirit familiars, and he puts them on as they appear, changing his voice and attitude for each. This does not seem to be the case among the Labrador Eskimo angekut, who do not seem to aspire to more than one to'rngak. Among the Alaskan Eskimo the soul of the sick who die under his ministrations is thought to be acquired by the shaman and compelled to serve him with his other familiar spirits. I heard of no such belief among the Labrador Eskimo.

Some of the most common sleight of hand tricks of the angekok are: allowing themselves to be bound and getting free, stabbing themselves with knives (when a concealed bladder

filled with blood comes in handy); grinding up a bead and making it appear whole again; squeezing blood out of a handful of snow; and other tricks which appear crude to a white man but wonderful to an Eskimo.

DIVINING.

Modern representatives of the old angekok have degenerated into mere conjurers. One of the last of these was Toma'suk, a southern Labrador Eskimo, who lived in the vicinity of Sandwich bay. Toma'suk used to oblige his friends by calling up the spirits of the dead whenever they wished to inquire regarding the welfare of the departed or the whereabouts of absent relatives at sea.

He would blindfold the questioner, and rap three times on the ground with a stick. On the third rap, a spirit would come up, of whom he would make the inquiry desired. After the answer had been obtained, the spirit would be sent back by rapping three times on the ground again. This species of conjuring was known as *kilu'xin*, "conjuring with a stick."

I have seen a somewhat similar method used by an Alaskan angekok. He put on a raincoat, as the Alaskan and Asiatic shamans invariably do, as it is supposed to be the dress worn by Ka'cak, the Bering Strait male deity, and called up the spirit of the deceased's grandfather. The Western Eskimo believe that the spirit arises from the world beneath the earth and comes up through the body of the shaman. By a little clever ventriloquistic work the shaman carried on quite a conversation with the shade. After the information desired had been elicited, it was sent back to its abode beneath by a stamp of the foot.

The Moravians report that some harmless old fellows among the Mission Eskimo have a reputation for "rubbing" the pain away from an affected part. The Eskimo believe that when a part is affected, it is "broken," and the "doctors" mend it by certain mysterious manipulations. I could not get any information as to what they were like.

An ancient and different form of divining is described by Jens Haven:

"An Eskimo stretched himself on his back on the floor; one of his bows was laid across his legs and tied fast to his left leg; a woman sat on his right side and laid his right leg over his left, by which the bow and string were moved. The moving of the string was regarded as an affirmative answer."

HEAD-LIFTING.

When in northern Labrador a man kills a white whale, he must sleep the night following with his head off the platform. For this purpose a band is passed around his head, and fastened by a sealskin thong to the roof above the sleeping platform. Is this a relic of the ancient ceremony of head-lifting? The information came from the "heathen" tribe of Nachvak.

TABOOS.

Most of the taboos among the Eskimo have reference to the absolute separation of sea and land foods or to the avoidance by the hunter of catamenial contamination, which would render him visible to game. The former have mainly to do with the deer and the seal, the meat of which must not be eaten together, but has been further specialized in Labrador so as to separate the walrus from the seal. The whale is included in the taboo against mixing the food of sea and land animals, which is extended to include any parts of the two animals, or even a weapon wrapped with sinew. The infringement of the food taboos are punished with severity. An informant told me about a young Eskimo girl who lived at George river (Ungava), who persisted in eating deer meat and seal meat together. She was banished from her village in the dead of winter. She was found in the interior, in a famishing condition, by another tribe. They allowed her to live with them, but she never visited her native home, nor would she have been allowed to do so.

The food taboos are as follows:

Reindeer meat and seal meat must never be cooked or eaten together.

This taboo also applies to seal meat and walrus meat (east coast of Labrador).

Any weapon bound with sinew must not be used on a whale. Whaling lances and blubber hooks must be bound with sealskin thongs.

Weapons with a rotten shaft must not be used on the whale. No rotten wood must be brought in contact with a whale.

In killing seals, if the eyeball is cut, it will blind the other seals, and ensure their easy capture.

When the seal is cut up, if the tip of the heart and liver are thrown back into the water, more seals will come in future to the hunter.

During the whale hunt, the women and children must remain indoors silent and motionless while the men are out. Once at Nachvak, while the men were out whaling and the women and children were gathered inside the iglu, a mouse ran across the iglu, and a child saw it and ran after it. Consequently a whale, which the men had struck, was lost.

Of the second class of taboos, contamination, I secured the following:

During her catamenial period, a woman must never step over a kayak, but always go around. The evil influence believed to emanate from her condition would cause the game to avoid the kayak. She must wear the hind flap of her *qo'lituk* stitched to the back of the garment (to indicate her condition to the hunters). Her left hand must remain ungloved, and the first two joints of her right hand finger (representing the cut-off joints of Sedna's hand) must also be bared. She must not touch certain foods and skins.

The left nostril must be stopped with reindeer moss by those burying a corpse to avoid the contaminating influence of the dead.

Other customs and ideas of a more miscellaneous character are:

The knife with which bear meat is eaten must be bitten before the owner starts to eat.

After anyone dies, no work must be done for three days. During this period no sharp-edged instrument may be used which might injure the wandering ghost.

The twitching of the eyelids (*ci'akuk*) is said to indicate that a stranger is coming.

On long trips, if one wears a pair of tiny boots on the back of the a'tige, the owner's boots will not wear out.

In making a soapstone lamp or kettle, if a small model is made, the large lamp or kettle will last as long as the little model does not crack nor break.

Walrus must be cut up at the ice edge (*se'n'a'*).

A young hunter must share his first seal with everyone in the village.

The Eskimo have certain ideas, incipient proverbs, as it were which crystallize on occasion into speech. One of these is that a person who encounters considerable hardship in life will live a long life, perhaps through the training itself, perhaps as a recompense. I have heard it expressed as follows in contrary weather, "He who encounters head winds will live a long life."

Another idea is that those who are "wished" a long life will live to be very old.

A child who does not obey his parents willingly, will make a "bad-hearted" man, *i.e.*, a murderer.

A man who catches a strangely marked animal in his traps will soon die.

A man who boasts will soon be made ashamed. A bully will always meet his match.

FETISHES AND AMULETS.

There appears to be among the Labrador Eskimo the idea that not only the shaman, but every person, has his individual familiar spirit,¹ whose assistance is sought in hunting and other ventures. This is embodied in the material form of a doll or doll's head, which is carried somewhere about the person, often around the neck. When an Eskimo has a long streak of bad luck, he attributes it to his fetish and tries to get rid of it by passing it along to someone else. This must be done without the knowledge of the recipient, else it will be of no avail. I procured two

¹ I have used this term instead of "guardian spirit" because the idea appears to be different from that commonly given the latter.

of these specimens, which were found by a trader concealed in a bundle of skins which he had bought from an Eskimo (Plate XXXIV b and c).

At one time a whale fetish with a hole in the middle, so that it could be worn around the neck, was given me surreptitiously by an Alaskan Eskimo. This particular fetish is worn by the harpooner of a whaling crew. He had just lost a whale, and wanted to get rid of his bad luck.

It should be noted here that the assistance of the individual spirit is given grudgingly, and often the owner has to chastise it by stripping the fetish of its garments, subjecting it to blows, and by other forceful means until it grants good fortune again. If it proves obstinate, it is given away, as noted above. It is said to lose its power when taken off the person, and to regain it when put on, which may be due to the idea that it derives a certain vitality from the body of its owner.

Various charms are worn to ward off sickness. A thong of sealskin around the wrist is an almost universal custom. Wooden and fur amulets prepared by some famous shaman are in constant use. They are worn attached to the clothing, or over the part affected. Strange or peculiarly shaped objects are particularly efficacious. The feet of birds are a common amulet (Plate XXXIV a).

THE LIFE AFTER DEATH.

Death is not considered by the Eskimo as the end of existence, but merely as a break in one's life. For this reason articles which will be useful are placed on the graves of the deceased. No Eskimo would touch these under any consideration.¹ When they rot away, it is said that the shade has taken them.

The Eskimo distinguish between a man's body and his spirit. There is also another soul which corresponds to the vitality of the body, as exemplified in the breath and warmth of the same. This soul leaves a man at death, but the spirit lingers around the village for three days before taking his final

¹ A Moravian missionary told me about a modern Labrador Eskimo who wished to possess a fine knife, which he had seen on an old grave. He did not dare to steal it from the dead, so procured a spy-glass which he left in its place for the use of the deceased.

departure to the other world. The Eskimo are very careful not to offend the ghost at this time, and taboo the use of sharp instruments, loud talking, games, or routine labour, until it is gone. The ghost is thought to be irritable at this period and ready to vent its spleen on the community, and is viewed in an entirely different light from the affection displayed toward it later.

The place to which the spirit finally takes its departure depends more on the mode of death of the deceased than the manner of his life. Those who have been murdered or have committed voluntary suicide and women who die in childbirth are recompensed with the highest heaven, located in the Aurora Borealis, where they enjoy themselves playing football with a walrus head. Those who die an ordinary death descend to the world below, where they carry on a monotonous existence, which is free, however, from the cold and hardships of their earthly home. The Labrador Eskimo visit the graves of their dead regularly and place offerings of food and tobacco on them for the sustenance of the spirits. Clothing is also given. The Alaskan Eskimo have regular feasts for the same purpose, in which the namesakes of the dead figure as the recipient of such favours, which are enjoyed through them by the dead.

The spirits below communicate with their relatives on earth through the *angekok*. They ascend from below through his body, and answer questions concerning their welfare through his person. Sometimes they give advice or tell the reasons for sickness or disasters.

When people wish to communicate with the spirits, they must put on a gutskin raincoat. This is the dress of the spirits. The *angekok* always wears one when he is performing ceremonies or communicating with the spirits. Now people call up the spirits beneath the earth with a stick. It is called *kilúxin*, conjuring. It is not the old way, but is perhaps derived from the Indians. It is not performed by a regular *angekok*, but by old men and old women.

The dead require very different treatment from the living, and one must be very careful not to offend them. As soon as a relative expires one must weep hard, else the ghost will think

he is not sorry. Grave clothes are prepared when the end is thought to be near (and the Eskimo have an almost unerring sense in detecting the approach of death), and the body stripped and clothed anew. The material is always of the heaviest winter reindeer skins. If the patient unexpectedly recovers, the clothes must be given away. I knew a village loafer who got a beautiful pair of white reindeer skin trousers from the old headman on such an occasion.

The body is usually buried the day after the death. At night a watch is set over the corpse, at which someone acts as company to the nearest relative, lest the corpse might overpower him. There seems to be an idea prevalent among the Eskimo that until it is properly buried the corpse is liable to work harm on anyone. All except the relatives are forbidden to touch a dead body, and all who assist in the burial must stop up the left nostril with reindeer moss to avert the evil influence.

At night the cause of his sickness is inquired of the deceased by divining or head-lifting. This ceremony is performed by the nearest relative, and consists in passing a band around the head and lifting it. The corpse is questioned as the head is raised. If it is light, the answer is in the negative; if heavy, it is an affirmative response. I suspect that sometimes the head becomes heavy when an affirmative is desired.

After burial, the shaman who officiates calls the spirit of the dead, and inquires of his welfare for the benefit of the rest of the people. Spirits who have recently passed away are supposed to be in closer relation to the living, and hence better prophets of good huntings, etc. At such times it is occasionally revealed that some one had bewitched the dead and thus caused his sickness and death. The offender is killed by his relatives. Quite often a serious illness is attributed to the machinations of a neighbouring *angekok*. There is nothing to do in such cases except to fight him with local magic. Such a case came to my attention in Bering strait. An Eskimo girl who was sick could keep nothing on her stomach. The cause was attributed to a spirit(*tungak*) sent by another shaman to inhabit her stomach. As fast as she swallowed her food it was pushed up by this "devil." Five local shamans could not overcome the spell of the stranger.

Of the power of the *angekut* marvellous tales are related. The Eskimo believe in them implicitly and balk at no marvel which is attributed to them. They say that they have no knowledge of the spirit world and must believe those who possess it. For the same reason the Labrador Eskimo told the early missionaries that if they knew more of the spirit world than their *angekut*, they would listen to them.

Of the dark side of shamanism among the Eskimo, little has been said. There are persistent tales in Labrador, started by old travellers,¹ and also mentioned by the Moravians, of a custom of the *angekut* of sacrificing young children on the graves of their mothers (that their spirits may be joined in the other world ?). This I am very loath to believe, and would rather attribute it to physical necessity, which sometimes drives the Eskimo to strangle a child when the mother has died and the father is unable to rear it.

CEREMONIES.

WHALING FESTIVAL.

The early Moravian writers mention a festival which the Labrador Eskimo used to hold when a dead whale was discovered in prime condition (according to Eskimo tastes). A period of festivity followed, "as an expression of gratitude to *Torngak* (*Torngarsoak*)."

A large snow-house as much as 16 feet high and 70 feet in circumference, was built, and the interior arranged for dancing and sports. The latter consisted of contests with the lance and boxing (probably the Eskimo custom of taking blow for blow). There were singing and dancing by the people, and shamanistic performances. No details are given.

¹ "The Moravian Missionaries have laboured hard to implant the Christian faith upon the shores of Labrador, and they have succeeded as well as could be expected, but the Indians (Eskimo) are so attached to their ancient superstitions, that they hesitate not to sacrifice a favourite child on the grave of its deceased parent, under the belief that their earthly dissolution is immediately succeeded by a blissful reunion above; and this they do, notwithstanding their consciousness of the enormity attending so horrid an action." Chappell, *Voyage to Newfoundland and the Southern Coast of Labrador*, London, 1818.

The same author does not hesitate to say that the Eskimo are "honest in their principles, mild in their dispositions, and hospitable to unprotected strangers"; *ibid.*, p. 99.

The missionaries say that these feasts were accompanied by a great deal of "rowdyism," in which the women were involved, which may refer to an exchange of wives or favours at the close of the festival, as is recorded in other sections (see Boas and Nelson).

The whaling festival is undoubtedly an old custom of the Eskimo and formerly widespread. We find it among the Central, Alaskan, and Asiatic Eskimo as well. It may have been introduced in the west through Siberian tribes, as the Chukchee and Koryak have a similar festival, but in the east it has all the earmarks of an original Eskimo custom.

THE SCULPING (SKINNING) DANCE.¹

Information and pictures of this peculiar dance were obtained from Mr. Holloway of St. Johns, Newfoundland, who witnessed its performance on the "Home" some ten years ago by a Hopedale Eskimo named Simon. Simon was one of the Eskimo who took part in the World's Fair exhibition. Additional information was obtained from the Hopedale Eskimo and a former trader of the Hudson's Bay Company, who were acquainted with the dance. The dance is chiefly interesting as it raises the question whether the Eskimo did not have dances, like their stories, which contained an indirect ethical teaching. The Eskimo themselves said that it was intended to teach the people not to be too greedy.

Simon's assistant, a small boy, lay down on the deck with outstretched hands and feet, simulating a dead animal. A shawl representing a skin was thrown over him.

Then Simon started dancing around him, and began expressing his great joy at having killed so valuable an animal. He sang that he was a very ambitious young man who had fallen in love with a very pretty girl. To gain her favour he had travelled north for valuable furs, far beyond the limits that any of his tribe had ever known, and now he had slain this strange animal with its rare fur, and he would return home rich and marry the girl he had undergone such hardship to win.

¹ To "sculp" a seal is to skin it with the fat adhering to the hide. This is a term employed by the Newfoundland sealers.

He took out his knife and said an incantation over it. Then he began skinning the animal, rolling back the hide. During all this time his assistant remained perfectly motionless.

Simon continued his flensing, crooning to himself his great joy at his good fortune in catching so valuable a skin, and began to speculate on the sensation which his return would cause in his village. He kept rolling back the skin with each cut of the knife. The spectators watched him closely, but ventured no remarks until he was done.

As Simon made the last cut and rolled the skin off the "animal," it suddenly came to life, jumped up, and ran off, leaving Simon with the skin in his hand, much chagrined. Simon on further examination of the skin, found that it was worthless. He cast it from him in disgust, stood for some time scratching his head in perplexity, much to the enjoyment of the audience, and finally walked away, apparently deeply disappointed.

MYTHOLOGY.

The mythology of the Labrador Eskimo exhibits those interesting complications of motives which might be expected of a people bordering on other tribes. We find the old stories of the original Eskimo stock in fragmentary or abbreviated form, as in the tales of "The Girl who Married a Whale," the "Story of the Sun and Moon," the "Story of the Narwhal," and "The Orphan Boy and the Moon Man."

Little anecdotes of animal life, which may reflect Indian influence, are told to amuse the children. Such stories are quite plentiful in Labrador, as the "Origin of the Sea-Pigeons," "Origin of the Walrus and Caribou," the "Story of the Owl and the Raven," and "How the Caribou Lost their Large Eyes." The story of the "Quarrel of the Gull and the Raven," on which the future of the white and Eskimo race depended, is modern, but well known, both in Labrador and Baffin island.

Stories which show the strong belief of the Labrador Eskimo in their Tornait, or spirit helpers are the "Story of the Lame Hunter," "The Place where the Caribou Live," "How the Trout were made," and "How the Caribou Lost their Large Eyes."

(Under present conditions, it is sometimes difficult to tell whether an Eskimo means by "Torngak" an individual helper, or "the great Torngak," Torngarsoak, who was a deity among them, as the missionaries and Eskimo at the stations used the term interchangeably.)

Two stories were collected of the Adlit "strangers" (allat, South Labrador). I am not sure whether these stories refer to the Indians or the Tunnit.¹ The story of "The Girl who lost her Arms" is referred by the Labrador Eskimo to the Tunnit.

Local stories are illustrated in "The Thinking Image and Adlasuq and the Giant." "The Story of the Orphan Boy and the Moon Man" has been localized in Labrador, as elsewhere.

Considerable information regarding the Tunnit was gathered on this trip. It is placed in the mythological section for convenience in comparing with the traditions gathered by other writers. The author is of the opinion that the Tunnit are entitled to an historical position in northern Labrador.

THE MIGRATION LEGEND.

The Baffin Island Eskimo have a legend that the present tribes living on the northern and southern shores formerly lived together near Ussualung in Cumberland sound.² For some reason they quarrelled and separated, the Iglumiut (Labrador Eskimo) going to the south. The Sikosuilarmiut (Eskimo of southwest Baffin island) have intercourse with the Igolumiut of Cape Wolstenholme, crossing Hudson strait by Tudjaraaqd-jung (Mill island), Akugdliirn (Salisbury island), and Tudja-quaralung (Nottingham island).³ The crossing is dangerous and not often attempted.

At Cape Chidley, the Labrador Eskimo have a legend that their ancestors once crossed the strait by way of the Button islands and Resolution island to Baffin island, and found a strange people there whose words they could not understand. They call the Button islands, which stretch north from Killinek,

¹ The term *adlit* "strangers," is applied by the present Labrador Eskimo to the Indians of the interior, but generically may refer to any other people than themselves.

² See Boas, *The Central Eskimo*, 6th Annual Report B.A.E., p. 618.

³ See Boas, *ibid.*, pp. 462, 463.

the Tutjat, the "stepping stones." There are plenty of seal and walrus there and an occasional polar bear, but the tides are so strong that it is dangerous for the kayaks, so they seldom visit them. From the outermost Tutjak they can see Tutjarluk, "The Big Stepping Stone," Resolution island (Tudjaqdjuaq in the Baffin Island dialect). This route, at the eastern end of the strait, is about the same distance as the western route described, but more difficult on account of the heavy tides caused by the meeting of the waters of Hudson strait and the Atlantic. The similarity of the names of the first islands off the Baffin Island coast in the eastern and western link, Tudjaqdjuaq (Resolution island) and Tudjaraaqdjung (Mill island) suggests that they were considered by the Baffin-islanders as well as the Labrador Eskimo, as the "Big Stepping Stones" across the strait.

THE TUNNIT.

Tunnit (Tornit, Baffin island), according to tradition, were a gigantic race formerly inhabiting the northeastern coast of Labrador, Hudson strait, and southern Baffin island. Ruins of old stone houses and graves, which are ascribed to them by the present Eskimo, are found throughout this entire section, penetrating only slightly, however, into Ungava bay. Briefly we may say that there is evidence, archæological as well as traditional, that the Tunnit formerly inhabited both sides of Hudson strait. The oldest Eskimo of northern Labrador still point out these ruins, and relate traditions of their having lived together until the Tunnit were finally exterminated or driven out by the present Eskimo.

According to the account given by an old Nachvak Eskimo, the Tunnit in ancient times had two villages in Nachvak bay. Their houses were built on an exposed shore (the present Eskimo always seek a sheltered beach for their villages, where they can land in their kayaks), showing that they had little knowledge of the use of boats. When they wanted boats, they stole them from the Eskimo. From this thieving of kayaks the original quarrel is said to have begun.

For all their bigness and strength, the Tunnit were a stupid slow-going race (according to the Eskimo version), and fell an

easy prey to the Eskimo, who used to stalk them and hunt them down like game. They did not dare to attack them openly, so cut them off, one by one, by following them, and attacking and killing them when asleep. Their favourite method was to bore holes in the foreheads of the Tunnit with an awl (a drill in the Greenland story in Rink). Two brothers especially distinguished themselves in this warfare, and did not desist until the last of the Tunnit was exterminated. The Tunnit built their houses of heavy rocks, which no Eskimo could lift. They used the rocks for walls, and whale ribs and shoulder blades for the roof. At the entrance of the house two whale jaw-bones were placed. Ruins of these houses can still be seen, overgrown with grass, with the roof fallen in. They may be distinguished from old Eskimo iglus by the small, square space they occupy.

The Tunnit did not use the bow and arrow, but flint-headed lances and harpoons with bone or ivory heads. They were so strong that one of them could hold a walrus as easily as an Eskimo a seal.

They did not understand the dressing of sealskins, but left them in the sea, where the little sea-worms (?) cleaned off the fat in a short time. The Tunnit dressed in winter in untanned deerskins. They were accustomed to carry pieces of meat around with them, between their clothing and body, until it was putrid, when they ate it.

The Tunnit were very skilful with the lance, which they threw, sitting down and aiming at the object by resting the shaft on the boot. For throwing at a distance they used the throw-stick.

They did not hunt deer like the Eskimo, but erected long lines of stone "men" in a valley through which the deer passed. The deer would pass between the lines of stones, and the hunters hidden behind them would lance them. Remains of these lines of rocks may still be seen.

Their weapons were much larger, but not so well made as those of the Eskimo, as can be seen from the remains on their graves. The men used flint for the harpoon heads, and crystal for their drills. The women used a rounded piece of slate

without a handle for a knife. They used a very small lamp for heating purposes, which they carried about them. For cooking they had a much larger lamp than the Eskimo. Until trouble arose between them, the Tunnit and the Eskimo used to intermarry, but after it was found that an alien wife would betray her husband to her people, no more were taken. A Tuneq woman, who betrayed the Eskimo of the village she lived in to the Tunnit, had her arms cut off. After that no women were taken on either side. (The story of this incident is given following in "An Adlit Tale.")

The Tunnit were gradually exterminated by the Eskimo, until only a scattered one remained here and there in their villages. How these were overcome by stratagems is handed down in the tales of the giant at Hebron, said to be the last of the Tunnit, and Adlasuq and the Giant. The giant allows himself to be bound in a snow-house, and is slain by the Eskimo hunters. This story has attained a mythological character in Baffin island,¹ but is ascribed by the Labrador Eskimo directly to the Tunnit. A story about the Tunnit, giving considerable circumstantial detail, was obtained from a Nachvak woman:

"At Nachvak the Tunnit were chasing a big whale (this was before the time of the present Eskimo). They were in two skin boats, about twenty men and women in each boat. They had the whale harpooned, and were being towed round and round the bay by him. Somehow the line got tangled in one of the boats and capsized. The other boat with the line still made fast to the whale, went to pick up the people in the water, and was capsized too. Another boat came off from the shore, and picked up some of the people in the water. Most of them were drowned.

"They were buried under a hill on a big bank near Nachvak. There are some thirty graves on this bank, with pots, harpoons, and knives buried by the graves. Even the remains of the boats are there. The knives and pots are of stone. The harpoon blades are of flint. The umiaks were much larger than the present boats." My informant added that there were also

¹ See Boas, p. 292, Bull. Am. Mus. Nat. Hist., vol. XV.

remains of bows and arrows. "The bows were of whalebone and the arrows of flint."

Further information was obtained from another informant.

Tunnit Houses.

The houses had long stone passages. The two posts at the entrance were of whale jaw-bones and shoulder blades on top. The walls were of stone and turf. The roof was formed of whale ribs on props, and covered with turf. The roofs of the houses have now fallen in, but the walls are still intact.

Tunnit Boots.

The Tunnit did not know how to manufacture waterproof boots. They took a long strip of sealskin with the hair on, and wrapped it around the feet, starting at the toes. For a sole they would take a flat, square piece of skin, cut holes around the edge, "reave" it up with a drawstring, and tie it around the ankles.

Interpretation of the Evidence.

The old tradition of the Tunnit in Labrador, gathered from the resident Moravian missionaries, appears in Rink¹ as follows:

"Our ancestors and the tunneks or tunnits (in Greenlandish tornit, plural of tunek), in days of yore lived together; but the tunneks fled from fear of our people, who used to drill holes in their foreheads while yet alive. With this view they moved from here to the north, crossing over to Killinek (Cape Chidley).

"While dwelling among us they had sealskins with the blubber attached for bed robes. Their clothes were made in the same way. Their weapons were formed of slate and hornstone, and their drills of crystal. They were strong and formidable, especially one of them by the name of Jauranat, from which is formed javianarpok (Greenlandish uavianarpok). Huge blocks of stone are still to be seen which they were able to move. Some ruins of their houses are also found here and there in our country, chiefly upon the islands, having been built of stones

¹ Rink, *Tales and traditions of the Eskimo*, p. 469.

and differing from the abodes of our people. One of our ancestors when kayaking had a tunnek for his companion, who had a bird spear, the points of which were made of walrus tooth."

The Eskimo woman taken by Courtemanche, mentioned previously (page 5), also spoke of a hostile, foreign people in northern Labrador. She said they "were badly armed, as they had only knives and axes of stone and not of iron, but were feared by the Eskimo." She added the perplexing information that they "used snowshoes (raquettes) which also were not in use among her countrymen."¹ The Eskimo tribes of Hudson bay and farther west, however, use snowshoes.

Thalbitzer,² in a careful survey of the evidence concerning the Tunnit, offers three possible explanations of their presence in northern Labrador: (1), they may have been an Indian tribe which had made its way out to the sea; (2), or possibly Norsemen from Greenland; (3), or an older Eskimo tribe from the west who brought with them their more primitive culture. It seems to me that the first explanation is made impossible by the description of the life and material culture of the Tunnit. The second is very improbable. A careful survey of the ruins of the east coast revealed nothing which could not be assigned to the Eskimo. In *Tales and Traditions of the Eskimo*, gathered by Rink from Labrador and Greenland, a distinction is made between the Kablunit (Norsemen) and the Tornit (Tunnit), which would probably not have occurred if they had been regarded as one and the same people. While the Tunnit appear to have an historical connexion in Labrador, they have assumed a mythological character in the tales which have spread as far west as Hudson bay and as far east as Greenland. It was to be expected that the story would assume this form among the tribes who had heard of them but with whom they had not come in actual contact. (The Tunnit or Tornit (singular tuneq) must not be confounded, however, with the Tornait (singular Tornaq) "spirits.") The third explanation, that the Tunnit were simply a more primitive race of Eskimo with whom the Labrador

¹ Charlevoix (1744), p. 17.

² Thalbitzer, *Notes on ethnographical collections from East Greenland*, pp. 687-90. *The Ammassilik Eskimo*, Copenhagen, 1914.

Eskimo came in contact, appears to me to be the correct and obvious one. Judging from the scanty descriptions of their culture, they were not very different from old tribes in Hudson bay and Alaska. Old stone houses with whalebone ribs for roofs are described by Boas (pages 548, 549) as still existing, in a more or less ruinous state, among the Central Eskimo, by Nelson, among the Alaskan Eskimo (pages 259, 260), and by Bogoras among the Asiatic Eskimo (pages 181, 182). Their stone weapons could be paralleled in archæological collections from different Eskimo tribes. The fact that they had forgotten or did not understand the construction of the kayak should not count against them as an Eskimo tribe, because a like fact is recorded by Rasmussen (page 32) of the Polar Eskimo, who had also forgotten the use of the bow and arrow, as is recorded of the Tunnit, until its use was reintroduced by immigrant Eskimo from the south. That the Tunnit did not understand the dressing of skins is the main difficulty, but this should not be taken too literally, as in all their stories about them, the Eskimo like to exaggerate the stupidity of the Tunnit and their own cleverness in overcoming them.

THE LAST OF THE TUNNIT.

A big, overgrown giant, the last of the Tunnit left on the Labrador coast, lived a long time ago near Hebron. He would not hunt nor do any work. Whenever he wanted food he took it away from the hunters. He would watch when they brought in their seals at the end of the day's hunt, and go up to them and take his choice. They were all afraid of him on account of his size and strength and did not dare resist him.

Finally a hard winter came when the hunters could get no seal. Then he had to starve with the rest of them. When they were nearly dead with hunger, the people decided to send out six of their best hunters to see if they could not get some food. They were all surprised when the giant asked to go along too. Then they saw a chance to get rid of him. So they asked him to promise to obey all the customs of the hunters, which he did readily enough, suspecting nothing.

The first night out, after they had erected a snow-house, they told him that it was the custom for every young hunter to be bound the first evening on the hunt. So he allowed himself to be bound, having promised to obey all their customs. They tied his hands and feet with heavy lashing, *nu'pu'lu't*, from their komatiks. They did not dare trust ordinary line (*a'ilaunaq*).

When he was sound asleep, in the middle of the night, they set on him and killed him with their lances; but bound as he was, he managed to break the heavy line, and kill one of them before he was finally killed.

When the hunters returned home without him, his wife asked where he was, but the hunters would not tell her. Finally she understood. She went out and got his body and buried it. The grave can still be seen on the north side of Saglek bay.

Another version, which gives the additional detail that the hunters cut through the side of the snow-house to get at the giant, is as follows:

Once on a time there lived a giant near Hebron, who was so heavy that he could not walk on new ice.¹ He was the tyrant of the village. Whatever he wanted he took, and no one dared dispute him.

One year he expressed a wish that he would like to see how seals were killed and how the men went hunting. (He never hunted himself but stole from others). The hunters thought it a fine chance to get him in their power. They wanted to get rid of him because they were afraid of him and he was always bullying them. So they told him that if he wanted to go seal hunting with them, he would have to do exactly as they told him. He promised that he would, and they let him go with them.

So the first night they were out on the ice, they built a snow-house, and told him that it was their custom to be lashed with skin line and left alone in the snow-house all night. So he let them tie him up, and lay down to sleep.

Now the other Eskimo outside waited until they thought he was sound asleep. Then they cut a big hole in the side of the

¹ Cf. Boas, *Eskimo of Baffin land and Hudson bay*, p. 292, Bull. Am. Mus. Nat. Hist., vol. XV.

house and three men went in, while eight stood outside waiting. The three men inside jumped on the giant, and the eight men came in and joined in the fight. The giant broke the lines he was fastened with, and killed three men before the others overpowered him and killed him with their knives. So that was the last of the giant. His grave is to be seen to this day. It is a very large and long stone grave in Saglek bay.

Another story, concerning a giant character of the same locality, is told, in which he is overcome by a dwarf:

ALASUQ AND THE GIANT.

A long time ago there lived in Saglek bay a giant who played the tyrant over the people there. He would do no work, but stole seals from the hunters. They did not dare to show their resentment because he was so big and strong. Finally they killed him by getting him to allow himself to be bound.

In the same village there lived a dwarf named Alasuq. He lived alone with his mother. His father had died when he was young, and he had supported his mother ever since, like a man. Although he was so small, he was very strong. He was a jolly little fellow and well liked by all the people.

One day the giant, who was always boasting what he could do and frightening the hunters, challenged them to a kayak race around an island in the bay. None of them dared to accept, but little Alasuq said he would try him. Everyone laughed at him, but it did not turn him from his purpose.

He laid aside his usual paddle, and made himself an enormously large one, larger even than the giant's. It had holes in the middle for hand grips.

When he came out to race, all the people remarked about it, particularly the giant, who made fun of the little man and his big paddle.

But when they started, no one laughed any more. The little fellow handled his paddle so strongly that he would have broken an ordinary paddle. He quickly outdistanced the giant. When he was rounding the island, long before he came in sight,

the people could hear his kayak, shish, cleaving the water. The giant was badly beaten, but took it goodnaturedly, as, of course, he had to, having challenged the hunters.

The little dwarf lived for a long time afterwards, and was always much respected by the people.

The Baffin Island Eskimo of Cumberland sound have a tale of a dwarf who was very strong and a great kayaker. He defeats two young men who had taunted him on account of his small size.¹

AN ADLIT TALE.²

Once an Eskimo found an Adlit girl by the side of a river when he was out hunting. She was starving. All her relatives were dead. So he took her home and adopted her as his daughter. Her name was Ivaranax.

One day she asked her foster-father for some reindeer fat. She said she was tired of seal meat, and wanted something nice to eat. That made her foster-father angry. So he told her to go to the Adlit and get some reindeer fat. She went out. He could not find her that evening.

The next morning she returned, dressed in a reindeer-skin coat and eating reindeer fat. The same day all the men went hunting. Then the Adlit, who had followed her, attacked the village. They killed all the women and children but three, who hid under a pile of skins. When the men returned, they found their women and children killed. So they made many arrows and followed the trail of the Adlit. When they came up to their tents, they looked in. The Adlit were eating and laughing. The girl was among them. Then they killed them all but the girl. Her they kept for punishment. They led her out and cut off both her arms. She ran off with the blood streaming from her arms. She had not gone far before she fell dead.

THE GIRL WHO LIVED AMONG THE ADLIT.

Once an Eskimo scolded his wife for not taking proper care of his boot-soles. She went out along the shore and cried.

¹ See Boas, *Eskimo of Baffin land and Hudson bay*, p. 270.

² Adlit, northern Labrador; Allat, southern Labrador.

While she was there, two Adlit came up and asked her what was the matter. She told them, and they offered to take her to their home. She went with them, and married one of the Adlit. Later this Adlit met her former husband when out hunting. He told him who he was but would not take him to his former wife.

Once the people were travelling and came across a camp of Adlit. They could not understand each other, until someone cried, "Call the Eskimo woman." Then a woman came out and acted as interpreter. It was the girl who had run away. She would not go back to her husband, so they left her. She lived with the Adlit until she died.

ORIGIN OF MAN AND THE ANIMALS.

In the north lives Torngarsoak, the great Torngak; he made man from nothing. The man travelled a long way, and found a woman. They married, and from them sprang all the Eskimo.

One day Torngarsoak set some puppies adrift in a pair of old boots. The puppies drifted off in different directions. Finally one returned bringing with it the Indians; very much later the other puppy returned as a man, bringing people with white skins in a big umiak. They were the white people. The man then turned back into a dog.

There was a woman who married the dog. Her father was ashamed of her and took her in his umiak to a lonely island. When out to sea he threw her overboard. She seized hold of the side of the boat, but he cut off her fingers with his knife. The thumb became the walrus, the first finger the seal, and the middle finger the white bear.

*The woman sank, and now lives at the bottom of the sea.

Another version:

One day an Eskimo was chopping down a tree. He noticed that the chips that fell into the water became water animals and the chips that fell on the land became land animals. That is how the animals were created.

Before this time the earth had been covered with water. Finally the water went away, and the dry land appeared. The seaweed and kelp became the grass and trees.

ORIGIN OF THE WINDS AND RAIN.

There is a giant spirit who lives in the north. When he blows his breath, violent snowstorms occur. Other spirits live in the east and west. They breathe soft winds and summer weather. Female spirits dwell to the south. They send the flowers and summer rain. They live up in the sky and keep the rain in big bags. When they run across the sky the water escapes. The thunder is the noise of their running across the sky.

THE HEAVENLY REGIONS.

The ends of the land and sea are bounded by an immense abyss, over which a narrow and dangerous pathway leads to the heavenly regions. The sky is a great dome of hard material arched over the earth. There is a hole in it through which the spirits pass to the true heavens. Only the spirits of those who have died a voluntary or violent death, and the raven, have been over this pathway. The spirits who live there light torches to guide the feet of new arrivals. This is the light of the aurora. They can be seen there feasting and playing football with a walrus skull.

The whistling crackling noise which sometimes accompanies the aurora is the voices of these spirits trying to communicate with the people of the earth. They should always be answered in a whispering voice. Youths and small boys dance to the aurora. The heavenly spirits are called *sélamiut*, "sky-dwellers," those who live in the sky.

THE REGIONS BELOW.

For three days after an Eskimo dies, the spirit lingers around the scenes of its earthly existence. Then people must be very careful not to offend it. After taking a last look at its native village, it sets out for the land of the nu'namit, "the earth people," or "those who dwell in (beneath) the earth."

The way to the world beneath lies through a long dark tunnel guarded by a big dog (?). He is always on the lookout for unwary spirits.

Having arrived at the land of the nu'namiut, the spirit finds them dwelling in villages much as on the earth. He seeks out the location of his relatives and lives with them. They lead a monotonous existence depending on the offerings made at their graves for food and drink. If their relatives neglect them, they go hungry and naked.

There is no cold nor sleet in the world beneath, but it is dark and gloomy.

THE PLACE WHERE THE CARIBOU LIVE.

There was once a great angekok who felt it his duty to find out for the people the place where the caribou went to when they passed in great numbers into the interior. So he asked his torngak to show him where they went. His torngak told him the way to go. He told him to walk on and on, and not to stop until he told him. So the angekok started off. He walked day after day. For two moons he walked. His boots did not wear out because his torngak was with him.

At last, one day, his torngak said, "Stop! Make no noise, and wait till the sun sets. Then you will see the resting place of the caribou. You must not wish to kill what you see, or I will turn you into a mouse."

So the angekok did as he had been told. When the sun went down, he saw a very large house made of turf and rock. Standing across the door was a very big deer. It was the king of the caribou. He was so big that the other caribou could walk in under him without touching him.

The caribou came up in big bands, and all passed under the king into the house. When the last one had passed in, he lay down and kept guard over the others.

The angekok went home and told the people what he had seen. But he did not dare tell them where to find the wonderful place, for fear that they might desire to kill so many caribou and his torngak would turn him into a mouse. So the Eskimo know that there is a place where the reindeer live and stay with their king, but although they are always looking for it, they can never find it. But they hope to do so some time.

HOW THE TROUT WAS MADE.

Once upon a time a man who was a great angekok went out walking along the shore. He looked at the beautiful calm water and wished that he could make something to live in it out of something that grew on the land. So he looked around and saw some willows growing not far from him. He went over and broke off a little dry stick. Then he told his torngak to make it into something alive, and as he spoke he threw the stick into the water. It sank.

After a short time a fish came up and said to him, "I am very wet and cold. I would rather grow on the land again."

So the man took the fish out of the water, and folded a piece of seaweed around it. Then he threw it back into the water and bade it go and be useful to all the Eskimo. He named it *exa'lupik*, the trout.

The stripe that runs along the side of the trout is the seam where the folds of seaweed meet.

THE QUARREL OF THE CROW AND THE GULL.

The Crow and the Gull had a quarrel. The Crow was for the Eskimo, and the Gull for the white man. Whichever won the fight, his side was to be the strongest. So they fought. The Gull won. That is why the white men are more numerous and stronger than the Eskimo.

THE GIRL WHO MARRIED A WHALE.

Once a girl was walking along the shore. She wished she had a husband. She saw a whale's skull lying on the sand. So she said, "I will take the whale bone for a husband." It came to life and married her.

She went to live with the whale in the sea. The whale was very jealous of her, and tied a line to her for fear she would escape.

One day the girl saw her father and brothers going by in an umiak. She called to them to take her aboard. Soon the whale discovered her escape. He came swimming furiously after the boat. When he was quite near, the girl took off her

mittens and threw them into the water. While he was tearing them up, they gained a little. Then he came on again, making the water foam in his anger. Then she took off her boots and threw them into the water. While he was thrashing them with his tail, they made for the shore. But he caught them again, when they were close to the shore. Then the girl took off her *qo'lituk*¹ and threw it into the water. While he was tearing this up, they landed. But he was so angry that he did not notice the land, and came on again. He stranded in the shallow water, and was easily killed by her father and brothers. Then he changed back into a bone.

THE STORY OF THE SUN AND MOON.

At one time when all the rest of the people were in the singing-house (*qa'g'i*) a young girl was visited nightly by a man whose identity she could not discover. So she smeared some soot and oil on her breast to discover him. The next day, when she went to the *qággi* to take her brother's meal, she was horrified to see that he had a black streak on his face. She immediately took a knife and cut off her breasts, and placed them on the dish, saying, "Since you desire me, eat them."

Her brother was so angry that he chased her out of the *kagi*, and around and around the house. Finally, she ran up into the sky and he ran after her. They were changed into the sun and moon. The sun is constantly following the moon, but sometimes they meet (when there is an eclipse).

THE STORY OF THE FOX-WIFE.

Once there was a man who had lost his wife and who lived all alone. But every day, when he returned from hunting, he found that everything was in order as his wife would have done. There were no signs of anyone in the house, nor tracks outside. He could not understand it, and determined to find out who was taking care of the house.

¹ This is the term used in northern Labrador for the deerskin frock. It is a cognate of the Baffin Island *qo'lituŋ*.

So, one day, instead of going to hunt, he hid himself a little way from the entrance, where he could observe if anyone went in. Finally he saw a fox enter. He thought that the fox was after his meat, so followed it into the house. What was his surprise to find, on entering, a beautiful woman dressed in skins. On the rack above the lamp hung the skin of a fox. He asked her to marry him, and she became his wife.

They lived together for a long time happily, until one day the husband detected a strong odour in the house. He asked her where the smell came from. She replied that it was the odour of the fox, and if he was going to scold her, she would run away. She slipped on the fox-skin and was gone in a moment. The man never saw her again.

THE SON WHO KILLED HIS MOTHER (STORY OF THE NARWHAL).

There was once a young man who lived with his mother and sister. He was snow-blind, and for some reason his mother wished to get rid of him. She tried to starve him. But his sister on the sly, used to bring him bits of meat. He could not hunt because he was snow-blind.

But one day a bear came to the snow-house, and his mother guided his bow so that he could shoot the bear through the window. He shot the bear, and killed him. But his mother did not want him to know that he had killed the bear, so she told him that he had missed it, and that his arrow had stuck into the hard ice on the side of the snow-house. So she was living on the meat of the bear, she and her daughter, while her son was starving.

But his sister managed to feed him something on the sly. At first she would not tell him where the meat came from, but he kept questioning her, and at last she told him that he had killed the bear. Then he knew that his mother was trying to starve him, and he planned to be revenged on her. So in the spring, after the ice had broken up, when he had got his sight back, he used to hunt for white whales along the shore.

One day he and his mother and sister were all standing on the beach, and he was waiting with his harpoon to strike a whale.

He struck one with his whale harpoon, which had a long line attached. He tied the end around his mother's waist; as the whale swam out to sea, it dragged her down the beach and into the water. As she went, she kept crying, *inyialuma*, "My son did it." When the whale went down, she would go down too, and when it came up, she would come up too, crying, *inyialuma*, "My son did it," over and over again. Finally she disappeared.

She still lives with the white whales, and in the spring, when they are going along the shore, the people can hear her crying, *luma*, *luma*, *inyialuma*, and say that she is still alive among them.¹

THE ORPHAN BOY AND THE MOON MAN.

Near Okkak there is a rock, curiously marked with what the Eskimo say are the blood and brains of the people in the following story.

A long time ago there lived in a village near Okkak a poor orphan boy. He had no relatives and the people he lived with treated him very badly. They made him sleep in the entrance tunnel with the dogs and flung him only bones to pick. They would not give him a knife, but the little daughter of the house gave him one secretly, and carried him bits of food when she could do so. Her kindness pleased him very much, and made him long to escape and improve his hard condition in life.

One night he was lying on the ground, outside the passageway, trying to think of a plan for escape, and gazing at the moon. The more he gazed at it, the more he thought he discerned the outlines of the face of a man in it. Finally he was sure it was a man, and cried out to him to come down and help him escape from his hard life.

The man in the moon heard him, and came down. He took the little orphan boy down to the beach and beat him with a big whip. Every time he struck him he grew bigger and stronger. When he had finished, the little orphan boy was

¹ This story is also told in Baffin island in more detail. Dr. Boas informs me that in the Baffin Island version, the mother cries *uluga*, my ulu, my ulu; the consequent remorse of the son does not figure in the Labrador version.

so strong, he could throw about big boulders like so many pebbles. Then the moon man went back up into the sky. The boy practised lifting and throwing big rocks all night; then he went home.

When the people with whom he lived saw how big and strong he had grown, and remembered how they had abused him, they were very much afraid. But the minute he saw them, he went mad with anger. He seized them by the legs and dashed their brains out on the rocks. The boy killed everyone but the little girl who had been kind to him. He took her for his wife. He took all the possessions of his former housemates, and became the head man of the village.

THE STORY OF THE LAME HUNTER.

There was once a hunter who was lame, and, although he was a good hunter, he found it very hard to keep up with the other men, when they went hunting for seals and bears. One day he went up on a hill to spy for seal on the ice. He saw a bear far off on the ice. Now he could not get near the bear, because he could not walk fast enough, and the bear was making for the drift ice.

So he wished his *torngak* would come to his aid, and he moaned and groaned as if in great pain. He closed his eyes and said, "If I could get to that bear, nobody would be able to say that I was a poor hunter any more. I would be the best hunter, for none of the others are killing anything, and the people are going hungry."

When he opened his eyes, he saw that the bear was walking about and stumbling as if it could not see. Then he knew that his *torngak* had indeed helped him and made the bear blind. He limped out on to the rough ice, and got near enough to kill the bear with his bow and arrows. He gained the good favour of all the other hunters by his deed, and of all the Eskimo living in snow-houses at the hunting ground.

THE THINKING IMAGE (*Ix'asū'ktaq*).

About half a mile from the old Hudson's Bay Company post at Nachvak (now abandoned) is a curiously formed stone.

It is situated on a point, and in going by in a boat, it appears like a woman seated with her chin on her hand, thinking. The Eskimo of that vicinity relate the following story in connexion with this rock.

Once there was a woman who was an outcast from the village. She had no people nor relatives, and was a slave for everybody. One day she was going along in a boat by this point. She had been rowing in the umiak all day, and was very tired. She went ashore, and sat down on a rock and started thinking.

First she wished that she were dead and her labour over. Then she wished that she could be changed into a stone, like the one she was sitting on. While she was thinking this, a crow flew over her. He made three circles over her, and as he cawed three times, she was gradually turned into a stone.

She is still seen in the same position with her hand to her chin, thinking. The Eskimo make offerings to her of needles, tobacco, and matches, whenever they pass. Some of the women have put a necklace of beads around her neck.

ORIGIN OF THE WALRUS AND CARIBOU.

Superguksoak made the walrus from her boots and the caribou from her breeches. The spots on the deer correspond to the marks on her breeches. When first made, the walrus had antlers on its head and the caribou had tusks. But the walrus upset the kayaks with its antlers and the caribou killed the hunters with its tusks, so Superguksoak changed them. She told the caribou to go inland and stay there. When she wants the caribou she calls *kaite*, *kaite*, "Come, come."

THE OWL AND THE RAVEN.

Once the owl and the raven had a quarrel. The owl became angry and tipped a lamp over the raven. He was completely covered with soot. He was very much ashamed, and flew off, crying, "kaq, kaq." That is why he is black.

THE ORIGIN OF THE SEA-PIGEONS.

Once upon a time there were some children playing on the top of a high cliff overlooking the sea. Below them the sea was covered with ice, but while they were playing, the ice opened, and the crack between the ice and the shore was filled with seals. Then the men of the village ran to get their kayaks to kill the seals.

The children paid no attention to the seals, but kept on playing, shouting at the top of their voices. When the men arrived at the crack in the ice, the seals were gone. They had been frightened away by the children's voices. The men were very angry at the children, and one of them said, "I wish the cliff would fall over and bury those noisy children." He had no sooner spoken than the cliff toppled over and buried the children in the boulders at its foot. But they were changed into sea-pigeons, with red feet. They dwell at the foot of the cliffs to this day.

HOW THE CARIBOU LOST THEIR LARGE EYES.

When the caribou were first found by the Eskimo, they had very large eyes. They could see a long distance and were very savage. So the Eskimo found it exceedingly difficult to get near enough to shoot them with their bows and arrows. Consequently they often went hungry.

They asked their Torngak (Torngarsoak) to help them, and to make the caribou tamer. Presently one of the caribou grew very thoughtful. He said in caribou language to the others, "I wish our eyes were not so large, then we should be better looking." So the other caribou said, "Sew our eyes up then." So the thoughtful caribou took a little bone out of its foreleg and a piece of sinew and sewed up the corners of their eyes. The caribou became tamer and could not see so quickly, and the Eskimo were able to take them more easily.

The Eskimo say that it is because the Torngak of their forefathers helped them that the caribou are not so savage and cannot see so far, and they are able to kill them and eat their meat and wear their skins for clothing. They always show the

bone in the foreleg that was used by the caribou that their
Torngak made thoughtful, when they tell the story. It is a
bone in the ankle that seems to be loose under the skin.

ESKIMO INCANTATION FOR GAME.

ulu'me po'i'γisioxauvu'na Kaiya'kat
To-day seals-for-I-am-hunting kayak-in.

mau'na Kai'liye'tse
Over here, come all of you.

qi'oyavu'na a'niyo'mik
Cold am I very much.

toyomi'nila'se toyo'mia'nik takoyouma'qipo'γut
Unwelcome you are not strangers to see we are glad.

na'mu't ai've'se
Where going are you?

me'natuma'γepo'na qa'niñito'mit pi'su'γa'ma'
Tired I am very far from walked have I.

sunau'na su'l'u' tu'ktu' qa'niñito'me
What is like deer far away?

u'lu'me ei's'et si'lilu'kpok
To-day again rains it.

Free translation:

To-day I am hunting for seals in the kayak.

Come over here, all of you.

(I am very cold.)

You are not unwelcome, we are glad to see strangers.

Where are you going?

(I am very tired; I have walked from far.)

What is that like deer far away?

To-day it rains again.

This incantation is half-sung, half-chanted in a rhythmical sing-song. Scanned:

PHONETIC SYSTEM.

Vowels:

- a' , as in *father*.
- a , as in *man*, modified by dentals.
- e' , as in *they*.
- e , as in French *été*.
- i' , as in *pique*.
- i , as in French *fini*.
- o' , as in *note*.
- o , as British *o* in *got*.
- u' , as *oo* in *moon*.
- α , as *u* in *but*.

Consonants:

- p , as in French *pas*.
- m , as in English, but often long.
- b , as in English (rare).
- v , as in English (rare).
- ϕ , unrounded bilabial spirant, Kleinschmidt's f .
- β , unrounded bilabial spirant, Kleinschmidt's v .

t, as in French, without aspiration.

tʰ, aspirated before *e* and *i*.

n, as in English.

ɲ, palatal sonant nasal, as *ng* in *sing*.

k, palatal stop; like *t*, frequently aspirated before *e* and *i*.

q, velar stop; in southern Labrador dialect often replaced by *χ*.

s, voiceless *s*; replaced in southern Labrador dialect by *c*, as *sh* in *should*.

l, as in English.

l̥, lateral surd spirant (rare): cf. Alaskan *thl* (Barnum).

y, as *j* in German *ja*.

ɣ and *ɣ*, palatal and uvular voiced spirants.

x and *χ*, palatal and uvular voiceless spirants.

h, initial breathing; replaces *k* in southern Labrador dialect.

Affricatives:

tc, as *ch* in *church*.

ts, as in *nuts*.

dj, as *dg* in *trudge*.

Accents:

˘, lengthened consonant or vowel.

ˈ, main stress.

BIBLIOGRAPHY.

- Boas, F.—“The Central Eskimo.” 6th Annual Report of the Bureau of American Ethnology, Washington, D.C.
- Boas, F.—“The Eskimo of Baffin land and Hudson bay.” Bulletin of the American Museum of Natural History, vol. XV, parts I and II.
- Bogoras, Waldemar.—“The Chukchee.” Jesup North Pacific Expedition. Memoirs of the American Museum of Natural History, vol. VII.
- Cartwright, George.—“A journal of transactions and events during the residence of nearly sixteen years on the coast of Labrador.” London, 1792.
- Chappell, Edward.—“Voyage of His Majesty’s Ship Rosamond to Newfoundland and the southern coast of Labrador.” London, 1818.
- Gordon, G. B.—“Notes on the Western Eskimo.” Transactions of the University of Pennsylvania, Department of Archæology, vol. 2.

- Gosling, W. G.—“Labrador: its discovery, exploration, and development.” London, 1910.
- Grenfell, Wilfred T.—“Labrador; the country and the people.” New York, 1912.
- Hawkes, E. W.—“The Inviting-In Feast of the Alaskan Eskimo.” Memoir 45, Anthropological Series No. 3, Geological Survey, Canada.
- Hutton, S. K.—“Among the Eskimo of Labrador.” New York, 1912.
- Leith, C. H. and A. T.—“A summer and winter in Hudson bay.” Madison, 1912.
- Low, A. P.—“Report on the explorations in the Labrador peninsula.” Annual Report of the Geological Survey of Canada, 1895.
- Mason, Otis T.—“The ulu or woman’s knife of the Eskimo.” Report of the United States National Museum, 1890.
- McLean, John.—“Notes of a twenty-five years’ service in the Hudson’s Bay territories.” London, 1849.
- Murdoch, John.—“The Point Barrow Eskimo.” 9th Annual Report of the Bureau of American Ethnology, Washington, D.C.
- Nelson, E. W.—“The Eskimo about Bering strait.” 18th Annual Report of the Bureau of American Ethnology, Washington, D.C.
- Rasmussen, Knud.—“The people of the polar north.” London, 1908.
- Rink, H.—“Tales and traditions of the Eskimo.” London, 1875.
- Russel, Frank.—“Explorations in the far north.” University of Iowa, 1898.
- Thalbitzer, William.—“The Ammassalik Eskimo.” Copenhagen, 1914.
- Turner, Lucien M.—“Ethnology of the Ungava district.” 11th Annual Report of the Bureau of American Ethnology, Washington, D.C.
- Wintemberg, W. J.—“Bone and harpoon heads of the Ontario Indians.” Archæological Report of the Provincial Museum, Toronto, 1905.

A.

B.

C.

A. Eskimo girl in duffle dicky and moleskin trousers.

B. Killinek Eskimo woman in cotton dicky and sealskin trousers, back view.

C. Killinek Eskimo woman, front view.

By permission of the Moravian Mission, Killinek.

A.

B.

A. Caribou skin dicky from Cape Chidley.
B. Man's sealskin dicky from Cape Wolstenholme.
Division of Anthropology, Museum Nos. IV B 283, 298.
Collected by E. W. Hawkes.

A.

- a. Combination legging and boot, from east coast of Hudson bay. Length 38 inches.
 b. Skin boot from Hamilton inlet.
 c. Skin boot from Davis inlet.
 Division of Anthropology, Museum Nos. IV B 115, 272, 281.
 Collected by J. B. Tyrrell (a) and E. W. Hawkes (b and c).

B.

- B. Sealskin trousers from Cape Wolstenholme.
 Division of Anthropology, Museum No. IV B 292.
 Collected by E. W. Hawkes.

PLATE IV.

a. Child's sealskin bonnet from Hamilton inlet. Depth 7 inches.

b. Baby's fur cap from Cape Chidley.

c. Hareskin cap from Cape Wolstenholme.

d. Birdskin cap from Mansel island.

e. Squirrelskin cap from Hamilton inlet.

Division of Anthropology, Museum Nos. IV B 237, 299, 293; IV C 752; IV B 235.

Collected by E. W. Hawkes.

a. Beaded breast ornament from Cape Chidley. Length 11 inches.

b. Fur "beads" from Labrador.

c. Pair of ear ornaments from Cape Chidley.

d. Beaded band for woman's dicky hood, from Cape Chidley.
Division of Anthropology, Museum Nos. IV B 512, 177, 513, 514.
Collected by E. W. Hawkes.

PLATE VI.

a. Gut raincoat from Cape Wolstenholme. Length 31 inches.

b. Gut trousers from Cape Wolstenholme.

Division of Anthropology, Museum Nos. IV B 294, 295.

Collected by E. W. Hawkes.

- a. Slipper worn inside boot, from east coast of Labrador. Length 10 inches.
 b. Corrugated sole from Ungava.
 c. Fur slipper from east coast of Labrador.
 d. Child's shoe from Hamilton inlet.
 e. Woman's shoe from Hamilton inlet.
 f. Caribou moccasin from Hamilton inlet.
 Division of Anthropology, Museum Nos. IV B 222, 287, 223, 243, 241, 274.
 Collected by E. W. Hawkes.

A.

A. a. Tobacco bag with pipe cleaner, from east coast of Labrador.
Width 4 inches.

b. Caribou skin bag from Karawalla, Hamilton inlet.

c. Cloth shot bag, from Karawalla, Hamilton inlet.

d. Loonskin bag from Karawalla, Hamilton inlet.

Division of Anthropology, Museum Nos. IV B 225, 445, 437, 446.
Collected by E. W. Hawkes.

B.

B. a. Sealskin waterproof mitten from Aillik bay, Labrador.
Length 9 inches.

b. Man's tanned deerskin mitten from Hamilton inlet.

c and d. Pair of embroidered cloth mittens from Hamilton inlet.

Division of Anthropology, Museum Nos. IV B 172, 265, 279 a, b.
Collected by F. G. Speck (a) and E. W. Hawkes (b, c, and d).

PLATE IX.

a *b*

- a. Bag made from leg of deer, from Cape Chidley. Depth 14 inches.
b. Sealskin bag from east coast of Labrador.
Division of Anthropology, Museum Nos. IV B 452, 351.
Collected by E. W. Hawkes.

PLATE X.

a. Sealskin mitten from east coast of Labrador. Length 17 inches.
 b and c. Sealskin mitten from Hamilton inlet.
 d. Sealskin mitten from east coast of Labrador.
 Division of Anthropology, Museum Nos. IV B 220, 256, 255, 221.
 Collected by E. W. Hawkes.

A.

A. Completed snow-house with boy sitting on key-block. By permission of S. H. Parsons, St. Johns, Newfoundland.

B.

B. Caribou skin tents of Eskimo fishermen, Cape Childey. By permission of the Moravian Mission.

Eskimos of Great Whale river, Labrador. Taken by A. P. Low, 1896.

A.

A. Dog-team viewed from behind, showing method of hitching and position of team. By permission of R. P. Holloway, St. Johns, Newfoundland.

B.

B. Process of building a komatik. By permission of S. H. Parsons, St. Johns, Newfoundland.

PLATE XIV.

a

b

A.

A. a. Model of kayak, from Norton sound, Alaska. Length 30 inches.

b. Model of kayak from Ungava bay.

Division of Anthropology, Museum Nos. IV E 135; IV B 59.

Collected by F. Mercier (a) and A. P. Low (b).

a

b

B.

B. a. Model of komatik with seal load, from Cape Chidley. Length 18 inches.

b. Wooden model of sled or komatik, from Labrador.

Division of Anthropology, Museum Nos. IV B 327, 72.

Collected by E. W. Hawkes (a) and A. P. Low (b).

PLATE XV.

a *b* *c*

- a. Model of kayak from the Arctic Red river. Length $21\frac{1}{2}$ inches.
 b. Model of deerskin baidarka, probably Aleut.
 c. Model of umiak or sealskin boat from Norton sound, Alaska.
 Division of Anthropology, Museum Nos. IV D 16; IV X 50; IV E 134.
 Collected by H. A. Conroy (a), S. H. Harris (b), and F. Mercier (c).

PLATE XVI.

a-e. Arrows from northern coast of Labrador. Average length 23 inches.

f. Bow from Labrador.

g. Bow from east coast of Labrador.

h. Bow from northern coast of Labrador.

Division of Anthropology, Museum Nos. IV B 532 b, c, d, e, f, 70, 71, 532 a.

Collected by E. W. Hawkes (a, b, c, d, e, and h) and A. P. Low (f and g).

PLATE XVII.

a. Quiver from Labrador. Length 40 inches.

b. Ptarmigan snare from Labrador.

c. Sling from Cape Wolstenholme.

Division of Anthropology, Museum Nos. IV B 109, 111, 496.

Collected by A. P. Low (a and b) and E. W. Hawkes (c).

A.

- A. a. Stone lamp from Cape Chidley.
 b. Large stone lamp with ridge, from Okkak, Labrador. Length 18 inches.

Division of Anthropology, Museum Nos. IV B 476, 499.
 Collected by E. W. Hawkes.

B.

- B. a. Small stone lamp from Okkak, Labrador. Length 10 inches.
 b. Stone lamp from Cape Chidley.
 c. Model of soapstone lamp from Okkak.
 d. Soapstone lamp from Chesterfield inlet.

Division of Anthropology, Museum Nos. IV B 501, 502, 329; IV C 776.
 Collected by E. W. Hawkes.

PLATE XIX.

a *b*

a. Stone kettle from Cape Chidley. Length $12\frac{1}{2}$ inches.

b. Large stone kettle from Okkak, Labrador.

Division of Anthropology, Museum Nos. IV B 503, 500.

Collected by E. W. Hawkes.

a.

b.

c.

d.

- a and b. Model of sealskin dish and bailer, from Chesterfield inlet.
Length of bailer 4 inches.
c. Small kettle from Cape Chidley.

d. Model of stone kettle from Baffin island.
Division of Anthropology, Museum Nos. IV C 762 a, b; IV B 504; IV C 760.
Collected by E. W. Hawkes.

PLATE XXI.

- a. Large wooden spoon from Hamilton inlet. Length 15 inches.
b. Wooden spoon from Hamilton inlet.
c. Wooden dish from Hamilton inlet.
Division of Anthropology, Museum Nos. IV B 310 b, 308 h, 307.
Collected by E. W. Hawkes.

A.

- A. a. Scraper made from leg bone, from Eskimo point, east coast of Hudson bay.
 b. Scraper made from reindeer leg, from Mistake bay, east coast of Hudson bay.
 c and d. "Firestones" of pyrites, from Coats island, Hudson bay.
 e. Bone scraper from Hudson bay. Length 7 inches.
 Division of Anthropology, Museum Nos. IX C 10; IX B 42; IX B 35 b, IX B 35 a; IV C 468.
 Collected by E. W. Hawkes (a-d) and Capt. G. Comer (e).

B.

- B. a. Ivory snow-knife with bone handle, from Coats island, Hudson bay.
 b. Ulu or woman's knife from Sangunjok.
 c. Stone knife from Norton sound, Alaska. Length $4\frac{1}{2}$ inches.
 Division of Anthropology, Museum Nos. IX B 32; IX A 50; IV E 442.
 Collected by E. W. Hawkes (a and b) and F. Mercier (c).

A.

- A. a. Small whetstone from Cape Chidley. Length 2 inches.
 b. Beaver tooth knife for carving, from Norton sound, Alaska.
 c. Slate knife from Norton sound.
 d and e. Crooked knives from Cape Chidley.
 f. Whetstone from Cape Wolstenholme.
 Division of Anthropology, Museum Nos. IV B 465; IV E 500, 421;
 IV B 480, 481, 495.
 Collected by E. W. Hawkes (a, d, e, and f) and F. Mercier (b and c).

B.

- B. a and b. Bow-drill (mouthpiece, drill, and bow), from Cape Chidley. Length of drill 9 inches.
 c. Caribou horn-handled awl or knife from Joksut.
 d and e. Knives with horn handles from Eskimo point, west coast of Hudson bay.
 Division of Anthropology, Museum Nos. IV B 471 a, b, c; IX A 49;
 IX C 11; IX C 12.
 Collected by E. W. Hawkes.

- a. Ivory needle case from east coast of Hudson bay. Length 4 inches.
- b. Ivory needle case from Labrador coast, probably Ramah.
- c. Ivory needle case from east coast of Hudson bay.
- d. Ivory needle case from Labrador coast, probably Ramah.
- e. Ivory needle case from east coast of Hudson bay.
- f. Ivory needle case from Labrador coast, probably Ramah.
- g. Ivory comb from east coast of Labrador.
- h. Ivory pendant from east coast of Labrador.
- i. Stone pipe from Chesterfield inlet.

Division of Anthropology, Museum Nos. IV B 36, 135, 41, 136, 43, 137, 17, 6; IV C 781.

Collected by A. P. Low (a-h) and E. W. Hawkes (i).

a. Ivory carving of man in kayak with hunting outfit, from east coast of Labrador. Length 6 inches.

b. Ivory carving of Eskimo woman from east coast of Labrador.

c. Ivory carving of Eskimo man from Labrador coast, probably Ramah.

d and e. Ivory sled and dog-team from east coast of Labrador. Division of Anthropology, Museum Nos. IV B 535 (a and b), 129b, 321 (d and e).

Collected by E. W. Hawkes (a, b, d, and e) and A. P. Low (c).

- a. Ivory carving of knife, from east coast of Labrador. Length 3 inches.
 b. Ivory carving of knife from coast of Labrador, probably Ramah.
 c. Ivory carving of powder horn, from coast of Labrador, probably Ramah.
 d. Ivory model of gun from coast of Labrador, probably Ramah.
 e. Ivory model of boots from coast of Labrador, probably Ramah.
 f. Ivory model of bag from coast of Labrador, probably Ramah.
 Division of Anthropology, Museum Nos. IV B 535, 140, 144, 139, 143, 142.
 Collected by E. W. Hawkes (a) and A. P. Low (b, c, d, e, and f).

PLATE XXVII.

- A. a. Ivory carving of whale from Southampton. Length 2 inches.
 b. Ivory carving of walrus from east coast of Labrador.
 c. Ivory model of seal from coast of Labrador, probably Ramah.
 d. Stone carving of fish from east coast of Labrador.
 e. Ivory carving of narwhal from Southampton.
 f. Ivory carving of white whale from east coast of Labrador.

Division of Anthropology, Museum Nos. IV C 55; IV B 535 (b and f), 131 d, 534; IV C 52.

Collected by Capt. G. Comer (a and e), E. W. Hawkes (b, d, and f), and A. P. Low (c).

- B. a. Ivory carving of fox from east coast of Labrador. Length $2\frac{1}{2}$ inches.
 b. Ivory carving of polar bear, from Southampton.
 c. Ivory carving of reindeer, from east coast of Labrador.
 d. Ivory carving of bear from Hudson bay.
 e. Ivory carving of musk-ox from Southampton.
 f and g. Ivory carvings of wolves on the trail, from Southampton.

Division of Anthropology, Museum Nos. IV B 535 (a and c); IV C 53 (b), 51 (d); IV B 315 (e); IV C 57, 59 (b, g).

Collected by E. W. Hawkes (a and c) and Capt. G. Comer (b, d, e, f, and g).

A.

A and B. Eskimo girls in winter costume. By permission of R. P. Holloway, St. Johns, Newfoundland.

B.

A.

- A. a. Tobacco pouch from east coast of Labrador. Width 5 inches.
 b. Child's moccasin from Hudson bay.
 Division of Anthropology, Museum Nos. IV B 213; IV C 610.
 Collected by E. W. Hawkes (a) and Capt. G. Comer (b).

B.

- B. a. Man's fur mitten with fur appliqué work, from Hamilton inlet.
 Length 15 inches.
 b and c. Sealskin tobacco pouches from Labrador coast.
 d. Sealskin tobacco bag from Hamilton inlet.
 Division of Anthropology, Museum Nos. IV B 253, 362, 379, 380.
 Collected by E. W. Hawkes.

PLATE XXX.

a *b* *c* *d*

Coiled basketry from Hamilton inlet. Length of *a*, 7 inches.
 Division of Anthropology, Museum Nos. IV B 180, 181, 184, 183.
 Collected by E. W. Hawkes.

B.

A.

A. Coiled basketry from Hamilton inlet. Width of a, 6 inches. Division of Anthropology, Museum Nos. IV B 179, 190, 195, 182.

B. Coiled basketry from Hamilton inlet. Width of a, at top, 10 inches. Division of Anthropology, Museum Nos. IV B 194, 191. Collected by E. W. Hawkes.

- a. Ivory "cup and ball" game, from Labrador coast, probably Ramah.
Length $4\frac{1}{2}$ inches.
- b. Six ivory dominoes belonging to set of 19, from east coast of Hudson bay.
- c. Two sets of ivory ducks belonging to game, first and fifth belonging to set of 10, rest to set of 7, from east coast of Hudson bay, and from Labrador coast.
- d. Miniature human figures used in game, from east coast of Hudson bay.
Division of Anthropology, Museum Nos. IV B 134, 8; IV B 16, 13, 132, 15, 132, 11; IV B 25, 31, 26.
- Collected by A. P. Low.

a

b

c

d

a. Doll representing woman, from Chesterfield inlet. Height 13 inches.
b. Doll representing woman from east coast of Labrador.
c. Doll representing man from east coast of Labrador.

d. Doll representing woman from Baffin island.
Division of Anthropology, Museum Nos. IV C 763; IV B 347, 346; IV C 764.
Collected by E. W. Hawkes.

PLATE XXXIV.

a. Feet of horned owl, used as amulet, from east coast of Labrador. Length 6 inches.

b and c. Soapstone figures, used as fetishes, from Aillik, near Hopedale, Labrador.

Division of Anthropology, Museum Nos. IV B 533, 319, 320.

Collected by E. W. Hawkes.

A.

A. Eskimo walled grave, Baffin island. Taken by E. W. Hawkes.

B.

B. Eskimo women at Moravian Mission in northern Labrador cutting up white whales.

Gift of the Moravian Mission

PUBLICATIONS OF THE GEOLOGICAL SURVEY.

The Geological Survey was established in 1842 and "Reports of Progress" were issued, generally in annual volumes, from that date to 1885, the first report being that for the year 1843 published in 1845. Beginning with the year 1885, "Annual Reports" (new series) were published in volumes until 1905, the last being Vol. XVI, 1904. Many of the individual reports and maps published before 1905 were issued separately and from 1905 to the present, all have been published as separates and no annual volume has been issued. Since 1910, the reports have been issued as Memoirs and Museum Bulletins, each subdivided into series, thus:—

Memoir 41, *Geological Series 38.*

Memoir 54, *Biological Series 2.*

Museum Bulletin 5, *Geological Series 21.*

Museum Bulletin 6, *Anthropological Series 3.*

In addition to the publications specified above, a Summary Report is issued annually; and miscellaneous publications of various kinds including Reports of Explorations, Guide Books, etc., have been issued from time to time.

Publications Issued Since 1909.

MEMOIRS.

- MEMOIR 1. *Geological Series 1.* Geology of the Nipigon basin, Ontario, 1910—by Alfred W. G. Wilson.
- MEMOIR 2. *Geological Series 2.* Geology and ore deposits of Hedley mining district, British Columbia, 1910—by Charles Camsell.
- MEMOIR 3. *Geological Series 3.* Palæoniscid fishes from the Albert shales of New Brunswick, 1910—by Lawrence M. Lambe.
- MEMOIR 4. *Geological Series 7.* Geological reconnaissance along the line of the National Transcontinental railway in western Quebec, 1911—by W. J. Wilson.
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