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A M E R I C A N N A T U R A L I S T .

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ALASKAN MUMMIES.

BY W. H. DALL.

FOR nearly a hundred years it has been known, through the quaint accounts of the early voyagers, that certain tribes of southern Alaska preserved the bodies of their dead. Up to a very recent period, however, no examples of this practice had reached any ethnological museum, or fallen under the observation of any scientific observer. When the territory was purchased, had it continued as accessible as during 1868, it might have reasonably been expected to attract many investigators in Natural History and Ethnology, whose chief difficulty would have been an *embarras de richesse*. But private interest and public indifference united to seal it up from inspection. Naturalists generally are less easily muzzled than poorly paid political appointees, and hence the obstacles thrown in the way of exploration have been so great that we can hardly wonder that so few have been able to enter this rich and interesting field.

During the last four or five years, the investigations of M. Alphonse Pinart, and of the writer, have spread among the residents of the territory some knowledge of the value attached to the ethnological material which surrounds them, and to this fact we owe the collection and preservation of much that is of interest. Among other things which have come to hand in this manner are the only specimens of Alaskan mummies extant.

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The practice of preserving the bodies of the dead was in vogue among the inhabitants of the Aleutian Islands and the Kadiak archipelago at the time of their discovery, and probably had been the custom among them for centuries. We find nothing of it on the mainland. It is curious to trace the customs of the wild tribes in this respect in connection with their external surroundings. In the Chukchee peninsula on the Asiatic side of Bering Strait, there is no soil in many places. The substratum of granitoid rock is broken by the frost into hundreds of angular fragments, which are covered with a thin coating of various mosses, which may be stripped off in great pieces like a blanket. There are no trees and but little driftwood. Burial is impracticable, cremation impossible, and the natives expose their dead on some hillside to the tender mercies of bears, dogs and foxes.

In the Yukon valley at a short distance below the surface the soil is permanently frozen, and excavation without iron tools extremely difficult. But timber abounds, and the bodies of the dead, doubled up to economize space, are placed in wooden coffins which are secured without nails and elevated above the surface of the earth on four posts. To scare away wild beasts poles are frequently erected around the coffin, bearing long strips of fur or cloth which are agitated by the wind.

The poor and friendless may be simply covered with a pile of logs, secured by heavy stones; but in general the method is as above. Various modifications are found in various localities; the coffin on the lower Yukon is sometimes filled in with clay, packed hard; and the Nowikakhat Indians sometimes place their dead erect, surrounded by hewn timbers secured like the staves of a cask.

On the islands the soil is unfrozen and there are no obstacles to digging. But wood is only found on the shores, drifted by the ocean currents, and usually not in large quantities. However there are no wild animals to disturb the remains; the beetling cliffs which are found on every hand, shattered by frequent earthquakes, afford in the talus of broken rock at their bases, abundant and convenient rock-shelters. Here the natural depositories exist, of which the natives have availed themselves. On all these customs, originally prompted by the bare necessities of the case, the slow development of sentiment and feeling (which undoubtedly does take place in savage people, though we may not be able to

trace its growth) has grafted animistic rites and ceremonies. Thus, the original practice, which was less completely masked or concealed, has been adopted by no people have ever adopted the practice on the sea.

Without attempting, at present, to describe the method, I will briefly describe the method of the Alëut branches of the Eskimo stock. The details are partly given in the original text, confirmed and supplemented by an examination of the mummies, and the traditions.

The body was prepared by making a hole in the skin and removing all the internal organs, and the body was filled with dry grass and the body was in a short time removed most of the skin and muscular tissues. The body was then cut to the chin, and the whole body secured by cords. The bones of the arms were cut off to facilitate the process of compression. The body was then dried. This required a good deal of time, the moisture being carefully wiped off. When thoroughly dried the cords were removed, the body was wrapped in a shirt, made of the skin of a seal, with feathers on, and variously trimmed with a very finely fine embroidery. Over this was a matting made of *Elymus* fibre, carefully prepared from quite coarse to exceedingly fine. The delicate work of the natives of Fayal was not possible to conceive of finer work done.

The matting was frequently ornamented with stripes of colored fibre, with small designs, and with the rosy breast-feathers of a seal inserted into it. Over this sometimes a wrapping of the split intestines of the sea lion was used. The inner wrappings vary in number, and are referable to one or the other of the two methods. They were usually the skins of the sea lion, and the whole was secured in a case made of similar material secured firmly by cords, capable of suspension.

the bodies of the dead was in vogue in the Aleutian Islands and the Kadiak Islands. Their discovery, and probably had been made in several centuries. We find nothing of it on the islands to trace the customs of the wild tribes in connection with their external surroundings. In the Asiatic side of Bering Strait, there is a substratum of granitoid rock is composed of angular fragments, which are covered with a carpet of various mosses, which may be used as a blanket. There are no trees and the soil is impracticable, cremation impracticable. They bury their dead on some hillside to the west of the mountains and foxes.

A short distance below the surface the remains are found in excavation without iron tools except in small amounts, and the bodies of the dead are placed in wooden coffins and elevated above the surface of the ground by means of scare away wild beasts poles are placed around the coffin, bearing long strips of fur or seal skin.

The bodies are simply covered with a pile of seal skin; but in general the method is as follows: The bodies are found in various localities; the coffins are sometimes filled in with clay, packed with seal skin. The Eskimoes sometimes place their dead in wooden coffins secured like the staves of a

house. In the frozen and there are no obstacles to their discovery on the shores, drifted by the icebergs in large quantities. However, the discovery does not disturb the remains; the beetle holes are abundant, shattered by frequent earthquakes. Here the natural depositories exist, and the bodies have secured themselves. On all these customs are the bare necessities of the case, the feeling of respect and feeling (which undoubtedly exists) and feeling (which undoubtedly exists), though we may not be able to

trace its growth) has grafted animistic ideas, and semi-religious rites and ceremonies. Thus, the original utilitarianism is more or less completely masked or concealed. It is a singular fact that no people have ever adopted the plan of committing their dead to the sea.

Without attempting, at present, to trace the growth of the custom, I will briefly describe the method adopted by the Kaniag and Alëut branches of the Eskimo stock, in preserving the dead. The details are partly given in the older voyages; and have been confirmed and supplemented by an examination of a large number of the mummies, and the traditions of the present natives.

The body was prepared by making an opening in the pelvic region and removing all the internal organs. The cavity was then filled with dry grass and the body placed in running water. This in a short time removed most of the fatty portions, leaving only the skin and muscular tissues. The knees were then brought up to the chin, and the whole body secured as compactly as possible by cords. The bones of the arms were sometimes broken to facilitate the process of compression. In this posture the remains were dried. This required a good deal of attention, the exuding moisture being carefully wiped off from time to time. When thoroughly dried the cords were removed and the body usually wrapped in a shirt, made of the skins of aquatic birds with the feathers on, and variously trimmed and ornamented with exceedingly fine embroidery. Over this were wrapped pieces of matting made of *Elymus* fibre, carefully prepared. This matting varies from quite coarse to exceedingly fine, the best rivalling the most delicate work of the natives of Fayal. It is, indeed, quite impossible to conceive of finer work done in the material used.

The matting was frequently ornamented with checks and stripes of colored fibre, with small designs at the intersections of the stripes, and with the rosy breast-feathers of the *Leucosticte* sewed into it. Over this sometimes a water proof material, made from the split intestines of the sea lion sewed together, was placed. The inner wrappings vary in number and kind but they are all referrible to one or the other of the above kinds. Outside of these were usually the skins of the sea otter or other fur animals, and the whole was secured in a case of sealskins, coarse matting or similar material secured firmly by cords and so arranged as to be capable of suspension.

The case was sometimes cradle shaped, especially when the body was that of an infant. On these occasions it was often of wood, ornamented as highly as their resources would allow, painted with red, blue or green native pigments, carved, adorned with pendants of carved wood and suspended by braided cords of whale sinew from two wooden hoops, like the arches used in the game of croquet.

The innermost wrapping of infants was usually of the finest fur, and from the invariable condition of the contained remains it is probable that the bodies were encased without undergoing the process previously described. The practice of suspension was undoubtedly due to a desire to avoid the dampness induced by contact with the soil. The bodies of infants thus prepared were often retained in the house, by the fond mother, for a long time. Afterwards they were sometimes suspended in the open air: but adults were as far as I have been able to find out, invariably consigned to caves or rock-shelters.

Among the localities which have been visited personally by the writer, are caves in Unga, one of the Shumagin Islands, and others on the islands of Amaknak and Atka, further west. In all of these the remains of mummies existed; but the effect of falling rock from above, and great age, had in all the caves except that of Unga, destroyed the more perishable portions of the remains, and in the latter place only fragments remained.

Many stories, however, came to hand in relation to a cave on the "Islands of the Four Mountains" west of Unalashka, where a large number of perfectly preserved specimens were said to exist, in relation to which the following legend was current among the natives.

Many years ago¹ there lived on the island of Kagamil (one of the Four Mountains) a celebrated chief named Kat-hay-a-kut-chak, small of stature but much feared and respected by the adjacent natives for his courage and success in hunting. He had a son whom he fondly loved, and who was about fifteen years old. For this son he made a bidarka (or skin-boat) highly ornamented and of small size. When it was finished, the boy entreated his father for permission to try it, and after much coaxing was permitted to do so, on condition that he did not go far from the shore. After

¹ The date is fixed as being the fall before the spring in which the first Russians made their appearance at these islands, about 1760.

seeing the boat safely launched watching its progress. The boy of a diving bird at which he thre from the shore carried the boy av promise.

His father shouted to him but th and presently it becoming dusk, h the chief returned to his dwelling.

The boy did not become conscio dled until out of sight of his own made for the nearest shore.

In those days an Alëut marrying tomed to leave his wife with her pe and a native of another island who chief was on his way to visit his v in front of him and recognized his did not however recognize the nativ sued paddled away as fast as he co to frighten him by throwing darts carelessly that it hit the boy's pa The brother-in-law made all speed tempted to right the boat; but he the custom, being tied into the aper did succeed, he found that the boy imagined, and at first he thought of was, but on reflection he took it to curing it in the kelp, that it might his own island without having seen

In the morning the chief's serv great sorrow, Kat-hay-a-kut-chak r

He caused the body to be prep preparation was complete he sent Mountain Islands to unite in the body in the place where the Alëut The people collected, and togethe formed in procession, with songs native tambourines on the way t autumn and some snow was on th had partially melted. On the roa sister of the boy, who was great w

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seeing the boat safely launched the father sat on the hillside watching its progress. The boy became interested in the pursuit of a diving bird at which he threw his dart and which receding from the shore carried the boy away in pursuit, forgetful of his promise.

His father shouted to him but the boy was too far away to hear, and presently it becoming dusk, he could no longer see him and the chief returned to his dwelling.

The boy did not become conscious of the distance he had paddled until out of sight of his own island, and in the darkness he made for the nearest shore.

In those days an Alëut marrying into another family was accustomed to leave his wife with her people, at least for a certain time; and a native of another island who had married a daughter of the chief was on his way to visit his wife when he saw a little canoe in front of him and recognized his little brother-in-law. The boy did not however recognize the native, and supposing himself pursued paddled away as fast as he could. The brother-in-law tried to frighten him by throwing darts at his canoe, and threw one so carelessly that it hit the boy's paddle and his canoe overturned. The brother-in-law made all speed to catch up with him and attempted to right the boat; but he could not do it, the boy, as is the custom, being tied into the aperture in the top; until, when he did succeed, he found that the boy was dead. His grief may be imagined, and at first he thought of abandoning the canoe where it was, but on reflection he took it to the landing at Kagámil and securing it in the kelp, that it might not float away, he returned to his own island without having seen his wife.

In the morning the chief's servants brought it in, and, to his great sorrow, Kat-hay-a-kut-chak recognized his beloved son.

He caused the body to be prepared for burial, and when the preparation was complete he sent for all the people of the Four Mountain Islands to unite in the ceremonies of depositing the body in the place where the Alëuts were used to put their dead. The people collected, and together with the chief and his family formed in procession, with songs of lamentation, beating the native tambourines on the way to the burying place. It was autumn and some snow was on the ground which the warm sun had partially melted. On the road lay a large flat stone. The sister of the boy, who was great with child, having her eyes cov-

ered, did not see the stone, slipped, and fell, injuring herself severely, and bringing on premature delivery, which caused her death with that of the infant, on the spot. Now the poor old chief had three to bury instead of one. So he ordered the procession to return to the village, bearing the dead with them.

He then had a cave near his house, which had been used as a place for storage, cleaned out, and after due preparation, the bodies were deposited in this cave, and with them many sea-otter skins, implements, weapons, and all the personal effects of the dead. He then distributed presents and food to the people, saying that he intended to make of this cave, a mausoleum for his family; and that when he himself should die it was his desire to be placed there, with his children. He then told them to eat and drink as much as they desired, but as for himself he should fast and weep for his children. His wishes were carried out, and he was placed in the cave after his death, and since that time the Four Mountain Islands have been abandoned as a place of residence by the natives and only occupied by casual parties of hunters.

The writer attempted in 1873 to reach this locality, but bad weather prevented anchoring; as the shores are mostly precipitous, and there are no harbors. In the summer of 1874, however, the captain of a trading vessel sent there to take off a party of hunters, was guided by some of them to the cave, and succeeded in removing all the perfect mummies and such implements and other ethnological material as could be found. Through the liberality of the Alaska Com. Co. these remains have been received by the National Museum and a careful and detailed account of them has been prepared.

Most of the mummies were wrapped up in skins or matting as previously described, but a few were encased in frames covered with sealskin or fine matting, and still retaining the sinew grumets by which they were suspended. These cases were five-sided, the two lateral ends subtriangular; the back, bottom and sloping top, rectangular, like a buggy top turned upside down.

With them were found some wooden dishes, a few small ivory carvings and toys, a number of other implements, but no weapons except a few lance or dart heads of stone. Two or three women's work bags with their accumulated scraps of embroidery, sinew, tools and raw materials were among the collection.

While space will not suffice here to describe this material in

detail, it may be mentioned that mummies, from infants to adults, California; and two detached sk

None of the material showed a all was of indigenous production, derived from inter-native traffic o prised a few pieces of pine resin ments of reindeer skin from Alias

It will thus be seen that this is c tions to our knowledge of the people. So far as the specimens more modern times they resembled use among the Eskimo of the m those of true aboriginal Alëuts.

The Kaniagmut Eskimo, inhab the Kadiak archipelago and the i added, to the practice of mumm preparing the remains in some case them in elaborately ornamented c armor, and carved masks. They serving or nursing children; hunte and transfixing wooden effigies of pursue; old men beating the tamb ment at all the native festivals. merly practised before a stuffed im mask which had no eye-holes, but only see the ground at their fee thought that a spirit, whom it was descended into the idol. Hence t similar idea led them to protect th of spirits, from the sight of the su dances were over the temporary ido

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In Kadiak still another custom who hunted the whale formed a Although highly respected for th contributions they made to the fo considered during the hunting seas descended in families and the bo preserved with religious care by t

slipped, and fell, injuring herself severely at the time of her premature delivery, which caused her death on the spot. Now the poor old man had only one. So he ordered the people to go, bearing the dead with them.

His house, which had been used as a storehouse, and after due preparation, the people went to the cave, and with them many sea-otter skins and all the personal effects of the deceased, and presents and food to the people, saying that this was his cave, a mausoleum for his family; and that if he should die it was his desire to be placed there. He then told them to eat and drink as they pleased, for himself he should fast and weep. The remains were carried out, and he was placed in a coffin. Since that time the Four Mountain Cave has been used as a place of residence by the people, and as a place of casual parties of hunters.

In 1873 to reach this locality, but had to return; as the shores are mostly precipitous, and in the summer of 1874, however, the people were sent there to take off a party of hunters, and of them to the cave, and succeeded in recovering the mummies and such implements and articles as could be found. Through the liberality of the U. S. Government, these remains have been received, and a careful and detailed account of

the mummies wrapped up in skins or matting as they were found, few were encased in frames covered with sinew, and still retaining the sinew grummed. These cases were five-sided, rectangular; the back, bottom and sloping sides were of wood, the top turned upside down.

Among the collection were some wooden dishes, a few small ivory articles, and other implements, but no weapons or articles of stone. Two or three women's articles of clothing, such as embroidered scraps of embroidery, sinew, and other articles, were among the collection.

See here to describe this material in

detail, it may be mentioned that it contained thirteen complete mummies, from infants to adults, two of which were retained in California; and two detached skulls.

None of the material showed any signs of civilized influences, all was of indigenous production, either native to the islands, or derived from inter-native traffic or drift wood. The latter comprised a few pieces of pine resin and bark, birch bark, and fragments of reindeer skin from Aliaska Peninsula.

It will thus be seen that this is one of the most important additions to our knowledge of the prehistoric condition of these people. So far as the specimens differed from those in use in more modern times they resembled more nearly the implements in use among the Eskimo of the mainland. The remains are all those of true aboriginal Alēuts.

The Kaniagmut Eskimo, inhabiting the peninsula of Aliaska, the Kadiak archipelago and the islands south of the peninsula, added, to the practice of mummifying the dead, the custom of preparing the remains in some cases in natural attitudes, dressing them in elaborately ornamented clothing sometimes with wooden armor, and carved masks. They were represented, women as serving or nursing children; hunters in the chase, seated in canoes and transfixing wooden effigies of the animals they were wont to pursue; old men beating the tambourine, their recognized employment at all the native festivals. During the mystic dances, formerly practised before a stuffed image, the dancers wore a wooden mask which had no eye-holes, but was so arranged that they could only see the ground at their feet. At a certain moment they thought that a spirit, whom it was death or disaster to look upon, descended into the idol. Hence the protection of the mask. A similar idea led them to protect the dead man, gone to the haunts of spirits, from the sight of the supernatural visitor. After their dances were over the temporary idol was destroyed.

We found many relics of this practice in the Unga Caves.

In Kadiak still another custom was in vogue. Those natives who hunted the whale formed a peculiar caste by themselves. Although highly respected for their prowess and the important contributions they made to the food of the community, they were considered during the hunting season as unclean. The profession descended in families and the bodies of successful hunters were preserved with religious care by their successors. These mum-

mies were hidden away in caves only known to the possessors. A certain luck was supposed to attend the possession of bodies of successful hunters. Hence one whaler, if he could, would steal the mummies belonging to another, and secrete them in his own cave, in order to obtain success in his profession.

While M. Pinart was in Kadiak, he heard of the existence of one of these mummies but was unable to discover the locality. Afterwards Mr. Sheeran, the U. S. Deputy Collector of the port of Kadiak, through a peculiar superstition of the christianized(?) natives, was able to discover and secure it. It appears that though nominally all members of the Greek Church they still have great faith in the superstitions of their ancestors, and while the whaleman's superstition has passed away, the natives still regarded the mummy as possessing the power of averting the ill nature of evil spirits, and consequently were accustomed to take to it the first berries and oil of the season. This they asserted, the mummy ate, as the dishes were always empty when they returned for them. Thus annually, they furnished the foxes and spermophiles with a feast. By watching, when the spring offering was made, the locality was detected. The mummy was secured by Mr. Sheeran and placed in an outbuilding near his house. During the season the natives came to him and remonstrated at his not feeding the dead man sufficiently; for he had been seen by a native watchman one foggy night, prowling about the town, presumably in search of food.

This mummy was only covered with a tattered gut-shirt or kamlayka, was in a squatting posture, and held in his hand a stoneheaded lance, on the point of which was transfixed a rude figure cut out of sealskin, supposed by the natives to represent the evil spirits which he held in check. It was that of a middle aged man with hair and tissues in good preservation.

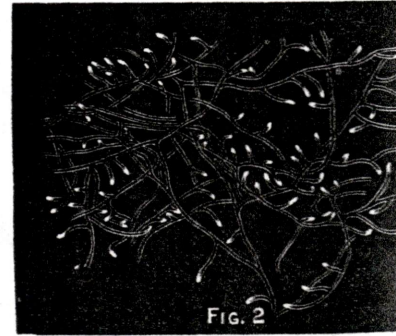
BIOGRAPHIES OF

BY A. S. PACKER

VI. THE POLYZOON.

The Polyzoa or moss animals distinguished by their resemblance to mosses. For example

Fig. 185.



Fresh water Polyzoon.

cella Walcottii (Fig. 185, after Hyatt) is a moss growing on a submerged stick.

Fig. 186.



Branching Marine Polyzoon. The cells are composed of several cells and form mat-like encrustations (Fig. 186, cells enlarged); or as in *Mytilus*