

MEMOIRS
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American Museum of Natural
History.

VOLUME III, PART IV.

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By GEORGE T. EMMONS.

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Lieutenant United States Navy.

With Notes on the Blanket Designs, by FRANZ BOAS.

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IV. — THE CHILKAT BLANKET.

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PLATES XXIV—XXVII.

THE distinctive ceremonial robe of the several native tribes of the North Pacific coast, from Vancouver Island to Prince William Sound, is commonly known as the "Chilkat blanket," — an exquisite piece of weaving in wool, as harmonious in coloring as it is original in design, presenting in all of its features the highest development of the textile art throughout this region, and comparing favorably with the best productions of other lands.

"Chilkat blanket" is an expression, coined in recent years, current among Europeans, but meaningless to the natives, except in a commercial sense. It originated either from ignorance of the aboriginal name, or from difficulty in its pronunciation; but its propriety is evident, as it is a blanket for personal use, and its production has been for several generations confined to the Chilkat tribe, — a division of the Tlingit family living about the head of Lynn Canal, in southeastern Alaska.

The Tlingit name *naḡin* is also used in the Haida language. Its origin is by some accredited to the old language of the Tsimshian, although in both the Nass and Tsimshian dialects the blanket is called *gus-halai't* ("dancing-blanket"). Its meaning is interpreted, as, "the fringe about the body" (*na*, "about the body;" and *ḡin*, "fringe"), referring to the long fringe pendant at the bottom, which is a noticeable feature of the robe when worn in the dance.

To the Tsimshian is attributed the first knowledge of this particular type of weaving in wool; and from them the Tongass, the Stikine, and later on the Chilkat, learned the art.

The following Tsimshian tradition, which, however, is current among the Chilkat, is told as accounting for the origin of the blanket.

In the early days of native life, animals and human beings approached much nearer to one another than they do to-day: indeed, the different species of animals were then regarded as separate tribes. Their coats of fur were mere protective coverings to be removed at will, and they often appeared in human form; while their living-places, whether in the woods or in the sea, differed in no wise from the houses of their human brothers. Many traditions, and particularly those relating to the history of the family, whereby the animal emblem is assumed, are founded upon the union of the two.

In mythical times — when animals were still men, wearing the animal skins as blankets — a party of women went out to search for the wild celery, the first harbinger of spring, that is so eagerly anticipated after the winter diet of dried salmon and oil. Having gathered what they required, and tied it into bundles for carriage, they started homeward towards evening.

Among them was the daughter of the chief, who, picking twigs as she followed in the trail, slipped into the footprints of a brown bear, and loosened her pack. Impatiently abusing the bear family in general, she stopped to adjust her bundle, and so lost her companions in the distance. As dusk came on, she heard a footstep behind her, and, turning round, found herself in the embrace of a handsome youth, who whispered soft words in her ear, and persuaded her to follow him to his home, to become his wife. Deep in the forest they reached a village of the Bear tribe, where she learned that her suitor was of that family.

In time she escaped, and reached the shore, and, looking off on the water, she saw a fisherman in a canoe. She cried to him for succor, but he would not approach until she had promised to be his wife, when he touched the canoe with his killing-club, and it sprang to the land; and she stepped in just as her husband and his friends emerged from the woods. Her rescuer was not human, but the benevolent sea spirit *Ḡonaqadē't*.

The canoe with its occupants now put out to sea, and descended to the bottom, where the spirit lived in a great rock house. He told the woman that he was already married to the Lynx, but that he should kill her, as she ate human flesh and was cruel to man. Upon reaching his abode, he wrapped her in his canoe-mat of cedar-bark, and carried her through the house to the rear apartment, telling her that she must pay no attention to anything she might hear or see. Looking through the cracks in the partition, she saw the Lynx wife weaving a beautiful robe, which was the original Chilkat blanket.¹

Another version of this legend, going back to the rescue of the woman, says that the sea spirit killed the Bear husband by striking him on the forehead, back of which his heart lay; but it makes no mention of the Lynx wife, and goes on to relate that the woman became greatly attached to her kindly, gentle husband, and bore him a son who was human in form. As the prevailing system of matriarchy gives the children wholly to the mother, and requires that the boy be trained by the maternal uncle, he consented to let his wife return to earth, on the condition that she should not forget him; and to this end she promised to weave for him a ceremonial robe commemorative of their meeting and courtship. This she faithfully did, and brought it to him when the son had reached his majority. And this was the origin of the Chilkat blanket.

Now, *Yēi*, personified by the Raven, the creator and benefactor of man, had wrested from the powers of darkness and chaos the elements necessary to make life possible on the earth; and, before leaving his children to return to his home in the bosom of the lofty snow-peaks that surround the Nass River, he travelled over the world, gathering what knowledge he could for their benefit. Wandering along the seashore, he entered a great cavern, and there found *Ḡonaqadē't* seated in state, with the Chilkat blanket thrown over his shoulders. He received the Raven cordially, and placed the food before him in long, carved wooden platters. After the Raven had feasted, he taught him many dances, and, upon his leaving, gave to him his blanket, which later was given to the human race to unravel and copy.

The belief in the mythical being *Ḡonaqadē't* occurs along the whole coast. He lives in the sea, and brings power and fortune to all who see him. Sometimes he rises out of the water as a beautifully painted house-front inlaid with the much-prized blue and green halotis-shell, again as the head of an immense fish or as an elaborately painted war-canoe. In decorative art he is generally represented as a large head with arms, paws, and fins.

¹ Compare J. R. Swanton, *Contributions to the Ethnology of the Haida* (Publications of the Jesup North Pacific Expedition [Leiden, 1905], Vol. V, pp. 202, 220); F. Boas, *Indianische Sagen von der Nordpazifischen Küste Amerikas* (Berlin, 1895), pp. 85, 299; A. Krause, *Die Tlinkit Indianer* (Jena, 1883), p. 275.

Unrestricted intercourse along this coast has long existed. The network of inland channel-ways extending through thousands of miles —protected from the sea, and interspersed with numerous sheltered harbors abounding in food, wood, and water —invited travel, and promoted trade. Native copper from the far northern valleys of the White and the Copper Rivers found its way south in exchange for the great sea-going canoes hollowed out of the trunks of the giant red-cedars of the Queen Charlotte Islands; seal and olachen grease was packed on the mountain-trails to the interior, to be paid for in caribou and moose skins, so esteemed by the coast and inland people; intertribal marriages were consummated; and petty wars were constantly engaged in. All these contributed to a mutual acquaintance and to an interchange of ideas. Thus it can readily be seen how the arts of one tribe were disseminated coastwise, and found a home in far-distant lands and among stranger people, where they were perpetuated even after they had become lost to their originators.

Our knowledge of the earliest products of the loom is very vague. The Spanish explorer Maurelle, who visited the west coast of Prince of Wales Island in 1779, makes mention of "a woven scarf with fringe," that was most probably the Chilkat blanket; and La Perouse, a few years later, speaks of a native manufacture resembling tapestry. The only very old specimen of woven fabric that I have ever found in the possession of the Chilkat I procured from a chief's family in 1888. They assured me that it had been in their possession for many generations, and that it represented the type of ceremonial blanket used in the earliest days (see p. 341, and Fig. 544, p 343).

In the whole region between Puget Sound and Alaska a simple type of weaving is quite common. Blankets, aprons, and capes of shredded yellow cedar-bark, which is twined together, are made. Many of these, particularly the blankets from the northern part of Vancouver Island, resemble in shape the Chilkat blanket. Some blankets of the Nootka even have the characteristic fringe and the setting with fur which occurs along the upper border of many of the older Chilkat blankets. In the interior of the State of Washington, among the Sahaptin tribes, blankets woven of mountain-goat were used. A few of these are preserved in the United States National Museum. Farther to the north, among the Delta tribes of Fraser River in the southern portion of Vancouver Island, a particular kind of dogs was raised, whose hair, mixed with stripped feathers, was used for weaving coarse blankets. Wool of the mountain-goat was used for the same purpose.¹ In the British Museum there are two blankets said to have been collected on the west coast of Vancouver Island, one of which seems to resemble in type of manufacture the Chilkat blankets (Plate XXIV, Fig. 1). It seems that the body of this blanket is made in the ordinary cedar-bark weave, while the simple ornamental border is made of yellow wool and brown cedar-bark apparently, in a technique similar to that of the Chilkat blanket. The second specimen, from Nootka (Plate XXIV,

¹ See Teit, *The Lillooet Indians* (Publications of the Jesup North Pacific Expedition, Vol. II, pp. 210 et seq.).

Fig. 2), is painted in red and black, while near the lower border is a zigzag band which is woven in, and is partly made of wool. The history of these specimens is not definitely known. The former was transferred from the United Service Museum about 1868, while the second is believed to have been collected by Captain Cook.

From the testimony of those best informed, the first woven blanket was known as *tān* or "thlaok klee"¹ ("worked-together blanket"), a combination of twisted cedar-bark and the wool of the mountain-goat, showing a plain white field. Then followed the introduction of color in geometric design, in which longitudinal stripes of the herring-bone pattern appeared on the white field. This was named *Yēl-kū'uu* ("the raven's tail"), from the resemblance it bore to the vanes of the tail-feather of that bird. Finally the crowning effort of the loom was evolved in the present beautiful robe. To-day no trace of this art is to be found among the Tsimshian, with whom it originated, nor in the country of the more southern Tlingit, who later practised it. Old blankets are still preserved by them, packed away in cedar chests with the other family treasures, to be brought forth on festive occasions, as is the custom of the other coast people far and wide; but no part of a loom or a pattern-board have I ever seen thereabouts. To them this art is wholly lost, even as though it had never been theirs, although, according to their reckoning, only four generations have passed since they themselves were the principal producers. This changed condition is the result of civilization, which has ever arrested aboriginal development, and stifled native genius, degrading the arts to mere commercialism.

In the early half of the past century the Hudson Bay Company established itself in the heart of the Tsimshian Peninsula, at Fort Simpson, which soon became the most important factory on the coast, and attracted the tribes far and near. This advanced the material interests of the home people, who themselves became traders and middlemen, and gradually forsook the ways of their forefathers, and copied the life of their visitors.

Three elements enter into the construction of this robe,—the wool of the mountain-goat (*Aplocerus montanus* Rich), of which the blanket may be said to be woven, as it constitutes the woof and the covering of the warp, and is alone visible; sinew of the caribou or whale twisted into a thread, by means of which the divisions of weave are united; and the inner bark of the yellow-cedar (*Chamaecyparis nootkatensis*) laid up in a two-stranded cord, and forming the body of the warp. When the latter cannot be obtained, the bark of the red-cedar (*Thuja plicata*) is substituted.

The goat is a habitant of this region, and abounds in the rugged coast mountains from Puget Sound to Cooks Inlet. Its preference is the glacial belt and snow-fields in the most broken country, and the terraced sides of precipitous cliffs. It is unknown on the contiguous islands, which may account for the

¹ Indian words quoted are given in Lieutenant Emmons's original spelling, while others have been changed to phonetic spelling by Dr. John R. Swanton.

absence of this art thereabouts. It is gregarious in habit, being found in bands of from ten to fifty or more. It is a particularly stupid animal, having fair scent and sight, but depending almost entirely upon the inaccessibility of its home for protection. I have hunted the goat beyond the usual limit of native travel, where the mountain-tops were intersected by trails worn deep in the rock, showing centuries of constant travel; and from a point of vantage small bands could be seen all about, feeding in the early morning or evening, or sleeping on the snow-fields or on some rocky shelf during the heat of the day. Before the introduction of fire-arms, when the bow, the arrow, and the spear were only known, dogs were used in hunting, as the goat would disregard the hunter for the dog. But now it is simply a matter of endurance and climbing, and one deserves all the goats he gets. From September until April, the skin is in prime condition, with an abundance of soft wool under a heavy covering of long coarse hair; but the principal hunting is done in the fall, when the early snow drives them coastwise from the feeding-grounds farther inland. The Tlingit believe that the goat has a spirit sacred to the shaman, and its image finds frequent representation upon his robes and implements of practice.

The mountain-goat is intimately associated with the practice of the shaman; and its characteristic head, with the slightly curved horns, is easily distinguishable when met with, in relief or in outline, on his implements of practice or his robes. The following legend comes from the Hū'na country, and was given to me by one of the oldest men of that tribe, some years back.

In the early days of Tlingit life there lived on the mainland shore of Cross Sound, near the entrance of the cold lake Hū'na ("Glacier Bay"), an old goat-hunter and his wife, and, in obedience to the matriarchal law that here prevails, his sister's son had been given to him to bring up, that he might worthily succeed him in the totemic line, and perform all of those ceremonial rites so necessary for the peace of his spirit and for the honor of his name after death.

The life of the nephew, Kokesak, was made miserable by his jealous aunt, who looked with small favor upon the lad, who was to be her lord in the future; and during the frequent absences of the hunter she had ample opportunity to visit her displeasure upon him. One day she detected him in the act of cutting off the fat of the goat hanging on the drying-frame, — for the lad was ill fed, while the house had abundance, — and she abused him shamefully, and scratched his face, which caused him to run away. Upon the return of the husband she said that she had sent him for water, and that he had never returned.

Now, the lad in his wanderings came to the Tcuka'n hī'ni ("grass creek"), a glacial stream winding through the old moraine, and, seeing a black pebble, he picked it up, and, sitting on the bank, fashioned it to represent a fish, and, throwing it into the water, he told it to jump; and directly it was changed into a silver salmon, which came to him; and when he took it in his hand, it again became the black stone, which he transferred to his bag. As he approached the lofty mountains, night drawing near, he climbed into a tree, and was soon lost in sleep. As his senses left him, a spirit took possession of his body; and when he opened his eyes again, he was high up on a precipitous mountain, surrounded by all of the animals, — as bears, goats, wolves, foxes, and marmots, — but for some time he could neither speak nor move.

His uncle, who was searching for him in the plains below, was attracted to the mountain by the babble of voices, which seemed to say, "Come up, my uncle! come up, my uncle!" But,

seeing nothing, he returned home much perplexed, and held his peace. The following day he again came to the spot, and, finding the rock walls inaccessible, he opened a bag of feathers and down that he carried. Throwing a handful into the air, he watched them ascend until all were lost to view, when, soon after, a single feather, larger than the rest, sailed down as if driven by an invisible force, and entered the open mouth of the bag that he carried suspended around his neck. That night, when camping in the woods, he was aroused by a gnawing-sound in the bag of feathers, from which, when opened, his nephew stepped forth. Now, he told his uncle that to him had come the spirit of a shaman, and in proof of it he desired him to call together the wild animals. When they were assembled, the shaman's spirit in him commanded him to dance, and the animals accompanied him in song; and when he stopped, they all fell down dead [the Tlingit meaning of death in this sense is a trance], and he gave them to his uncle. He then said, that, with such an abundance of food, he wished to give a feast to his aunt. When she had gorged herself with the fat of the goat, the animals were called in; and the bears so frightened her, that, in her endeavor to run away, her life went out. The husband mourned for her, but, when the lad told him how badly she had used him, he was less grieved.

That evening he said to his uncle that, when next the animals were summoned, a very savage brown bear would appear, and that he himself would step into the fire, but that, if a small piece of his flesh was saved, he would come to life again. When the animals were called, a very large mountain-goat and an ugly brown bear accompanied them, and the boy went into the fire; but his uncle, in his fright, ran away, and, forgetting the instructions given, neglected to save a particle of the body, which was totally consumed, while the spirit entered into the great goat. And ever since, this animal has possessed a spirit sacred to the shaman.

In the division of labor, the man supplies the skin of the goat, and provides the loom and the pattern-board; the woman procures the bark, prepares the material, and weaves the blanket. Throughout these several processes of the woman's work, no tool or implement is used, if we except the framework upon which the warp is hung. The human hand alone performs all the labor required in the manufacture of the blanket.

Preparatory to plucking, the skin is kept wet on the under side and rolled up for several days, in order to loosen the hold of the fleece. Then the woman, seated on the ground, takes the skin in her lap, wool side uppermost, and, with the thumb and fingers of both hands, pushes the fleece from her, the moistening process having loosened the roots. In removing large patches, which she places to one side, she preserves as far as possible the natural relation of the wool and the hair, so that the latter may the more easily be separated from the former. This is next done by plucking out the hairs, which are thrown away; and the wool is now ready for spinning. Much of the very fine hair always adheres to the wool, and this serves as one of the surest means of determining the genuineness of the material.

The process of spinning is now in order. The woman seats herself on the ground with legs outstretched, and the crude wool by her left side, within easy reach. She draws it out with her left hand, and feeds to her right hand, in the amount necessary to form the required size of thread; and as it is received between the palm of the right hand and the right thigh, it is rolled from the

body, and falls to the side as a loose connected thread, which from its character is called *ltū'tcī*¹ ("drawn apart to make loose in waves"). This soft thread is next spun between the palm of the hand and the thigh to form a single tightly twisted strand, *katak*¹ ("cord"); and by the same process two of these strands are rolled together to form the working-thread or woof, which, in the parlance of the sea, would be denominated "two-stranded cord." After each stage of procedure, the strand, for convenience, is usually rolled into a ball or around a shuttle. In early days, when the old regulations were still observed, the woman lived apart from man for two months before handling the material: otherwise it would be uneven in color. And she fasted throughout the first day of its preparation. But of late years these customs have fallen into disuse.

The warp of the blanket consists of a heart of two-stranded twisted cedar-bark, which is wrapped around with a covering of the soft wool. The use of the bark cord is to add stiffness and body to the texture, which the soft yarn of wool could not give. The bark of the yellow-cedar is preferred, although the bark of the red-cedar is also utilized. The abundance of these trees in the Tsimshian country renders its gathering easy; but in the land of the Chilkat the cedar does not occur, so the bark has to be procured in trade from the south. This bark is gathered in the spring to produce the best material, neither winter nor summer bark giving as good results. It is cut from the tree-trunk in long narrow strips. In early days the great cedar-trunks, free from branches, were ascended by means of a climbing-apparatus, consisting of a wooden foot-rest with a fathom of twisted bark rope, and a broad strap of woven bark sennit going around the back, under the arms; the two, attached to each other and secured around the body of the tree, permitting the climber to hold himself in place while he stripped off the bark.

As soon as possible after the bark is gathered, while it is still green, it is split. The rougher outer portion is removed and thrown away; the smooth inner layer is dried and cured, and, if not immediately required, it is done up in convenient-sized bundles and hung up on the house-walls. The next process is the elimination of any resinous matter, which is accomplished by boiling in fresh water for the better part of a day or even two days, after which it is taken out and washed in cold water; or, for convenience, it may be weighted down with stones in a running stream, and allowed to remain until thoroughly cleansed and softened. It is then removed, and shredded by twisting and bending with the hands; and, when the fibres are well divided, it is thrown on the fish-frame to dry. When required for use, the bundles of shredded bark are softened by wetting, and fibres of the required size are drawn apart, and twisted on the thigh with the palm of the hand, as in spinning the wool; and, from being soft and pliable in this moistened condition, the twisted strand contracts slightly when dry, and retains its form. These single strands are now covered with loose wool, and again twisted on the thigh. The warp consists of two such

¹ The phonetic value of this word is not quite certain.

cords laid up together, which is rolled into balls ready to be wrapped around the measure, to be cut into lengths.

It is estimated that the wool from three goat-skins is necessary for the manufacture of one ordinary sized blanket.

The warp of the blanket is never colored. It is entirely enclosed in the weave, except the side rolls and the bottom fringe. The woof or working-thread, besides the natural white of the wool, is colored black, yellow, and a bluish-green. No other colors have ever been employed by the Chilkat, nor is there any evidence to show that any other colors were used by the more southern Tlingit and the Tsimshian. In very old blankets the black often shows a reddish-brown shade, and the blue has turned to a dull green; but this is the effect of age, and it does not mean that a variety of colors was employed. The use of these three colors was as fixed as the design and the weave. I know of two blankets from British Columbia, in which some Hudson Bay Company's red trade-yarn had been introduced; but this was purely an individual conceit.

The coloring of the wool is accomplished after the thread is spun; and for each color the weaver fasts one day, else want of uniformity will result.

Black is produced by soaking the fresh-stripped bark of the hemlock in a bath of strong urine. Into this the yarn is plunged, and boiled for several hours, and then allowed to steep for some days. It is now removed, rinsed well in fresh water, and dropped into another bath of urine in which copper has been steeped for some time; and the whole is boiled for half an hour. The yarn is then removed, thoroughly washed in fresh water, and dried, when it is ready for use. The more southern Tlingit tell me that the black mud of certain springs was boiled with hemlock-bark to produce the color; while some Tsimshian say the bark of the alder was used instead of that of the hemlock.

Yellow was obtained from the lichen *Evernia vulpina*, known as saxōti.¹ It does not occur on the coast, but is most abundant back of the mountain-range, and was procured in trade from the interior. The color is extracted by boiling the moss in the fresh urine of children until the desired shade is developed. Into this decoction the yarn is dropped, boiled for a very short time, and allowed to steep: it is then removed, rinsed, and hung in the sun to dry.

The greenish-blue, the most esteemed of all the colors, came from the oxidization of copper in urine and the boiling of the same. The yarn is introduced and boiled, removed, well washed in fresh water, and dried in the sun. The Tsimshian tell me that a blue clay-stone was used to produce this shade. The Tlingit use this same stone for the decoration of masks, houses, robes, etc., as a paint, but not as a dye.

The native dyes give very pleasing effects; and in the older blankets soft, dull bluish-green and yellow harmonize beautifully with the slightly discolored white and reddish-black. But some fifteen years ago the trading-stores flooded the country with colored wools, and the demand from tourists for blankets

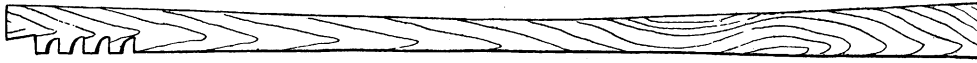
¹ The phonetic value of this word is not quite certain.

induced the weavers to supply all of the colors from those foreign yarns. This resulted in coarsely woven blankets in discordant shades of yellow and blue, which overstocked the market, and discounted their values. When the weavers recognized their mistake, they returned to primitive methods; and to-day the few blankets produced are on aboriginal lines, except that the blue coloring is more often procured from aniline dyes than from the copper mordant.

The loom is both simple and complete. It is always fashioned from some deciduous wood, the black-alder and the maple being preferred. It can be set up and taken down at a moment's notice; and this is necessary, as the Chilkat — in his search for food, his trading-trips, and ceremonial visiting — is a wanderer during much of the year: and as weaving has to be carried on at odd times, when the care of the children and household duties permit, a blanket is often a year or more in making. The loom consists of two uprights resting in heavy shoes, one broad cross-piece on which the blanket is hung, and two narrow slats to keep the uprights from spreading, to hold the cover down, and to hang the extra woof upon. The uprights are about 1.25 metres high by 3 cm. square. They rest in substantial blocks of wood roughly cut from half-sections of small alder or hemlock tree-trunks. Sometimes they are ornamentally carved in the totemic emblem of the weaver's clan. From the head, down through a quarter of their length, two or three rectangular holes are cut through the sides to take the cross-pieces. The uppermost cross-piece consists of a broad flat batten (see Fig. 536) narrowing at the ends to rounded shoulders which fit into and against the uprights; and when the loom is set up a temporary lashing secures the two together (Plate XXV). This batten is pierced along the lower edge with a series of small holes, through which is rove a fine line of spruce-root, sinew, or cord, by means of which the head line, over which the warp-strands of the blanket are hung, is attached to the loom. The two narrow cross-slats are variously used. Sometimes one is lashed to the extreme tops of the uprights to keep them in place; again, they may go through the lower holes in the uprights or be lashed to them; and, besides steadying the frame, they serve to hold the body of the blanket in place while being handled, to keep the cover in place, and to hang the woof and embroidery-strands upon. There seems to be no particular rule in regard to the use of these narrow cross-pieces. Some weavers use one, others use both, and they are placed at the convenience of the worker.

The loom being set up, the balls of warp, consisting of the two-stranded cedar-bark cord covered with wool, are brought out to be measured and cut, and hung over a narrow line of hide extending across from upright to upright, and which is later secured by a lacing to the head batten. The angular shape of the bottom of the blanket requires that the warp be graduated in length from the centre to either side; and this is accomplished by winding it around a measuring-staff (Fig. 535) fitted with a number of notches at one or both ends; the longest central warp being carried around the ends a given number of times, and all of the parts cut through at a mark in the middle of the stave, each single

length giving one double-warp strand. Then the next longest warp would be coiled around one end and over the outermost notch a given number of turns, and so on to the inner notch, which would give the shortest or side warp. The number of turns taken over the different notches varies, which gives the lower fringe a more rounding graduation.



• Fig. 535 (7081). Measuring-Staff. Length, 152.5 cm.

The cutting of the warp being completed, each bundle of lengths is middled and hung over the head line, and sorted as to length, gradually decreasing from the middle to either end; and the lacing of fine cord or split spruce-root is rove off, which attaches the head line to the head batten, when the body of the blanket may be said to be set up ready for the weaver, who has abstained from food on the day she accomplishes this work, as she must also do on the day she commences to weave.

All now being in readiness, with the warp hanging in position, the weaver seats herself on a goat or caribou skin before the loom in the characteristic Tlingit pose,—the knees drawn up to the chin, the feet close to the body, the shoulders inclining forward, and the arms around the knees,—and proceeds to secure the warp in place by means of one or two lines of plain, two-stranded woof-twining around each double-warp element close up to the head line, over

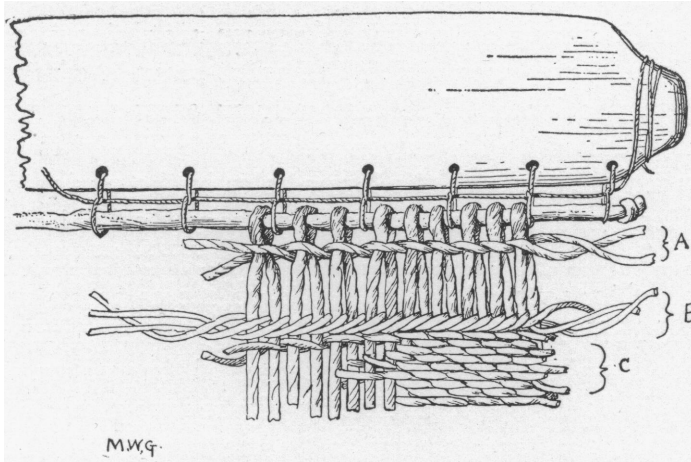


Fig. 536. Batten and Weave forming Upper Border of Blanket.

which they are hung (Fig. 536, A); but in the case of the extreme outer warp-strands — which do not enter into the weave proper, but go to form the ornamental border-braiding — a greater number are enclosed in each twining. This weave—wuctu qaki (“close-together work”), from the closeness of the texture — forms the standard stitch in Tlingit basketry, but is only used in succession in

some very fine old specimens of blanket-work, in the white-ground figures, as a relief to the general diagonal effect of the body-weave.

The warp is now divided into sections of convenient size, from eleven to fifteen generally; and these, in bundles, are wrapped around for about half of their length, and are put into small bags made from the intestines of the goat,

which are tied about at the mouth. This is necessary for the convenience of the weaver, as the tightly twisted bark cord wrapped in the soft wool would continually tangle in the course of handling, and greatly impede the progress of the work.

After the binding-together of the warp-strands at the head, an interval of a quarter of an inch or more generally follows, to allow them to spread out and lie flat, one alongside of another, and so form the full width of the blanket before they are next enclosed in the three-stranded twist-weave,—*ati'q!* ("twist"),—in which each woof-thread encloses two warp elements on the outside, and takes a half-turn around the preceding woof, and then passes around one warp-strand on the under side, giving a winding, rope-like appearance on the face, and showing the two-ply twined stitch on the back. This weave is used for strength and durability, and is employed around the entire woven field (Fig. 536, *B*). In some more carelessly made blankets, this line of weave is omitted, and the body-weave follows directly. This consists of the twilled diagonal weave,—*x'ixtc!* *hee-kar-ree*¹ ("rough" or "uneven," like the skin on the back of the frog [*x'ixtc!*]), from its irregular appearance. In this a pair of warp-strands are enclosed in the two-ply woof-twining, but alternating pairs in each successive line of weave, thus breaking joints above and below, which gives the irregularity of surface (Fig. 536, *C*). When a narrow vertical band of a certain color is to be made, the weave in this color is executed across and back, and from up down. The broad bands of black and yellow that surround the ornamental field are generally worked in this weave along the head and down the sides.

The ornamental field, consisting of many small figures in different colors, is worked in sections of color, which are interwoven to form independent divisions. The union of color-fields follows naturally in a horizontal direction, in the line of the weave, but vertically or obliquely where they meet, they are joined, as shown in Fig. 537, which gives in the weave the effect shown in Fig. 538, *b*; or they overlap one another in the units of weave, intruding one on another's field in echelon, and giving that dove-tailed appearance to the meeting plainly visible on the under side (Fig. 538, *a*), while on the upper side the irregularity is covered with false embroidery.

Several figures or color-fields thus interwoven go to form divisions, which are united by means of a fine cord of sinew laid alongside of the outside warp-strand, and woven into the selvage of that section by alternately enclosing it within the twining of a certain number of woof-threads, and then leaving it free. When the adjoining strip is worked, its selvage is caught into the remaining portion or projecting loops of the uniting string by the alternate woof-

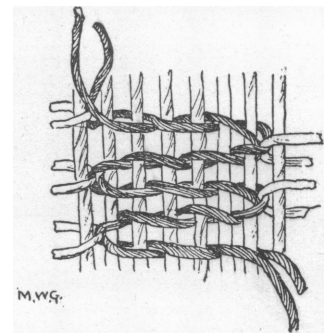


Fig. 537. Method of inserting a Narrow Field of Color.

¹ The phonetic value of the second part of this word is uncertain.

strands entwining it, when this lacing-thread is hauled taut, and the two edges are brought together (Fig. 539). The method of opening out the loops of the

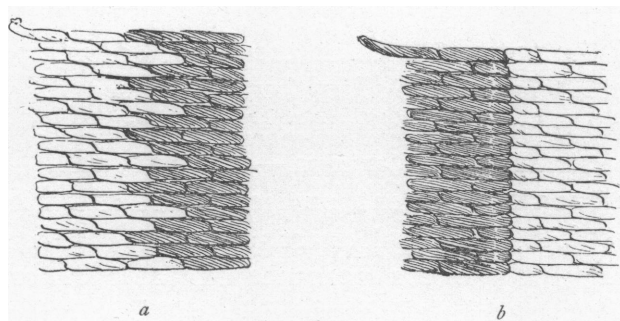


Fig. 538. Methods of joining Fields of Different Color.

lacing at the top, to allow the weaver to pass the ball of wool through, and the method of drawing it taut from below, are certainly ingenious. The drawing-string is most appropriately called *kayutca*¹ ("to pull together").

three-stranded plaiting around the entire woof-thread is employed to hide the irregularities of weave and to cover the openings. This embroidery — which is one of the most ornamental features of the weave, and adds greatly to the appearance of the field by relieving the flat surface, and bringing out each particular figure in detail — is effected by the introduction of three extra working-strands for each line of color (Fig. 540). These are knotted together, and let into the weave at any point.

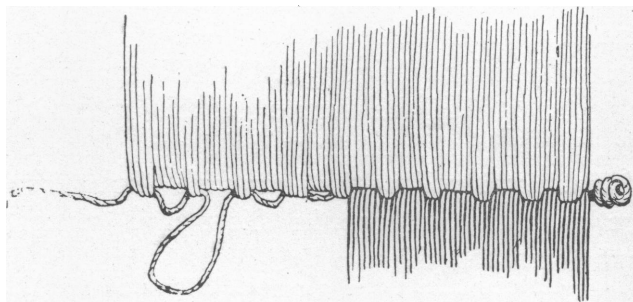


Fig. 539. Method of sewing together Adjoining Decorative Fields.

They are purely ornamental, and are twined around one another and under the outer woof-thread, and do not appear on the under side of the blanket.

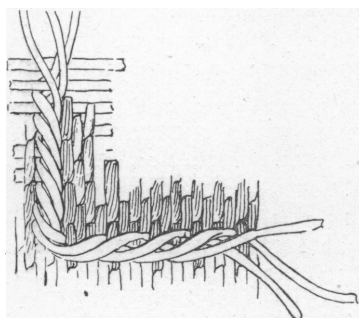


Fig. 540. Method of making Borders of Designs.

From three to eight separate lines of this embroidery enclose the figures, framing them as it were in several distinct, raised lines of color, for in no part of the weave of a blanket are two different colored threads used in the same twining.

The last line of weave around the color-field, like the first, is in the three-strand twisted weave, for the purpose of strength. Below this, at intervals of an inch or less, the pendant warp-fringe is held in place, flattened out by single lines of woof-twining (Fig. 541, *a*), from two to five in number. In order to give the border a fuller appearance, a false fringe of loosely twisted all-wool thread is let in from the first of these separate lines of weave, on the bight through

¹ The phonetic value of this word is not quite certain.

the outer woof-strand, and hangs down over the regular warp-fringe. The method of inserting this false fringe is shown in Fig. 541, *b*.

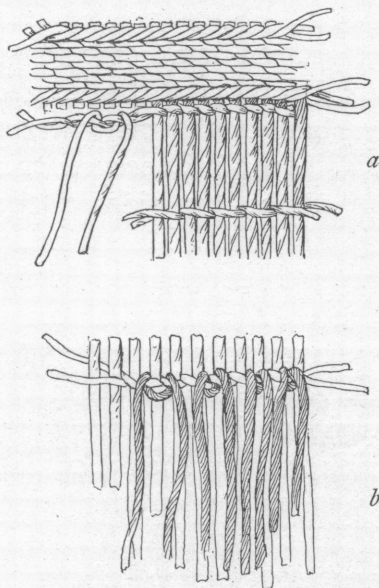


Fig. 541. Detail of Fringe of Blanket.

as the modern blanket, except that the old weave is looser. The method of joining two woven fields by means of a drawing-string should be noticed here in the left-hand portion of Fig. 544, *a*. The manner of finishing off the lower part of the blanket is shown in Fig. 544, *b*.

At the lower corners of the blanket the twined and braided borders of the warp are stopped by a twining of colored wool in checker-like pattern. This is called *awunqodziti* ("border-tying"); and each weaver signs her name, as it were, here, as the selection and arrangement of color in context is individual;

and this is the only instance in the whole blanket—in the weave, or the coloring, or the design—that is not conventional, for the design

The outer warp-strands at the sides, not included in the woven field, are twined together over one another diagonally to form a double border, which is rolled at the edge, and connected with the weave by means of a regular drawing-string passing alternately under the bight of the woof and over the border-warp (Fig. 542).

Very often, and generally in the finer blankets, a border-fringe of very fine lightly twisted goat's wool is secured in the double border, the single strands of which are middled, and hitched around a fine sinew strand that winds around the cord, connecting the edge of the weave and the border-warp (Fig. 543).

The technique of the old style of blanket referred to before (p. 331) is shown in Fig. 544. It will be seen that the blanket is made up of a warp which is twined together in the same way

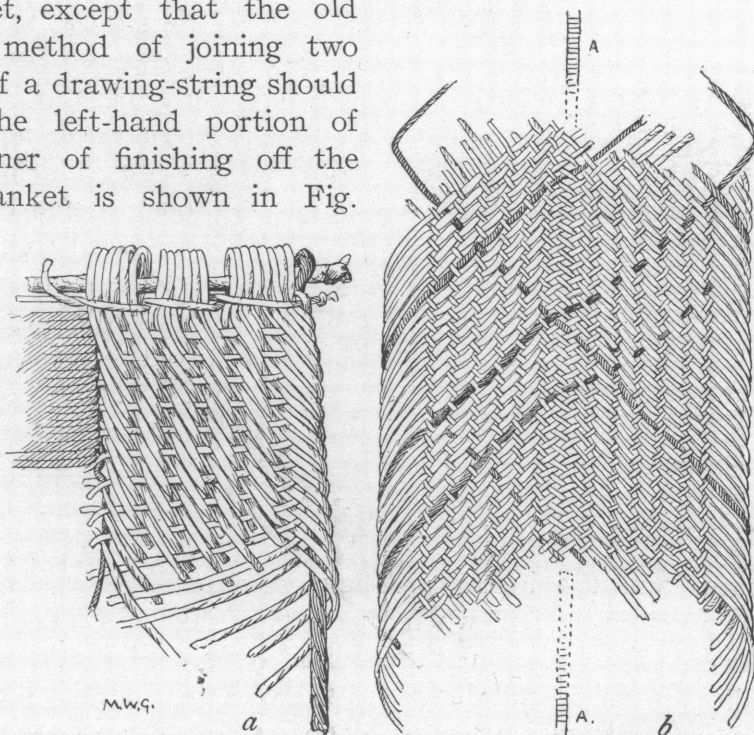


Fig. 542. Detail of Border of Blanket: *a*, front view; *b*, view from edge of blanket.

of the blanket is not evolved in the process of weaving. It is not like basketry, where colors may be chosen as the fancy wills, or different combinations may be used to best conform to the decorative field. Here no latitude is granted, for every design is carefully painted on a pattern-board (see Plate

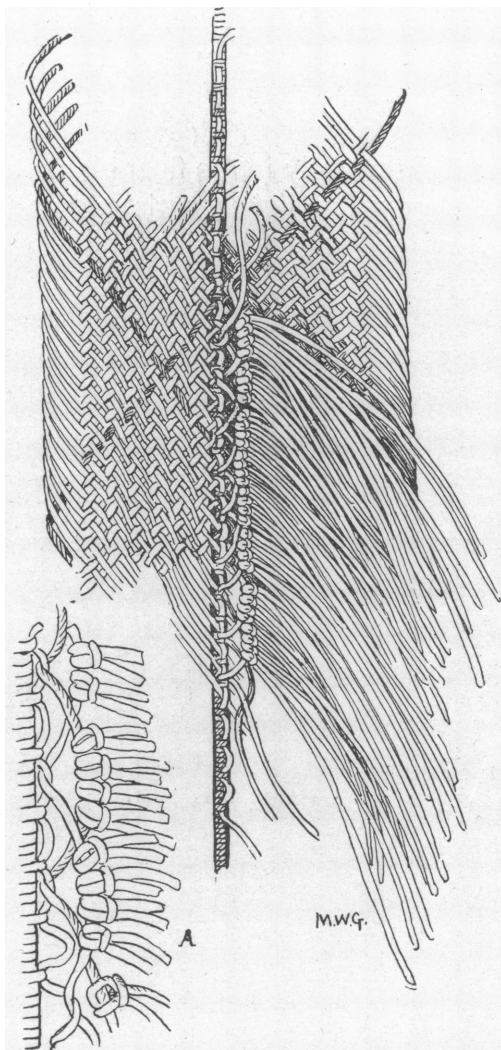


Fig. 543. Blanket-Edge with Inserted Fringe. A, side view of fringe, enlarged.

XXV, Fig. 2 and Fig. 545) which shows a little more than half of the ornamental field from the side beyond the centre; this being sufficient, as the two sides of the design are always the same. This painting is the exact size to be reproduced in the weave, and is kept at hand, within easy reach, and is referred to constantly, the measure of the figures being taken off with a thin strip of inner cedar-bark, which is laid on the pattern-board, scored with the thumb-nail of the left hand, and transferred to the woven field. I have also seen bark patterns, of the full size of the figures, used as guides where rounding lines occur. A pattern-board may carry a different design on each face; and when the figures become indistinct, they are carefully retraced, and painted anew. These boards are highly valued, for without them the weaver would be lost, although a new board could, of course, be reproduced from a blanket.

The story of the first pattern-board possessed by the Chilkat was told me by an old chief whose great-great-grandfather was Yesyat, a powerful chief of that people many years back, and who had two wives,—Łtan'yet, the elder, and Katłisi,¹ the younger. The Chilkat have always been great travellers between the salt

water and the interior. They considered the trade of the Yukon basin as their privilege; and when the Hudson Bay Company established a factory at Fort Selkirk, in 1851, they trailed over the mountains for three hundred odd miles, captured and destroyed the post, and, setting the factors free, bade them depart and never again encroach on their fur country. Southward they made annual trips to the country of the Tsimshian to purchase slaves, war-canoes, and red-cedar chests. On one of these excursions a blanket was obtained,

¹ The phonetic value of these names is not quite certain.

which the two wives of the old chief unravelled and studied until they learned the weave; but they could not utilize their knowledge, as they had no pattern-board to guide them. One night the elder wife dreamed of a beautiful blanket with many tiny white figures resembling raindrops scattered over it, and she said the spirits wished her to weave a blanket like it, but that she could not do it without a pattern-board. Now, the Tsimshian were recognized as the best weavers of the coast, as well as the most artistic people; and the chief said that she should go to them and tell her dream to a designer, who would reproduce it on the pattern-board. This was done; and, when they returned home, the two wives wove a ceremonial robe for their lord, which was the first produced by this people.

In weaving, the woman sits in front of the section she is working, the pattern-board at hand and the material within easy reach. That she may work to advantage without moving, may possibly account for the peculiar construction of the weave in vertical strips, as an uninterrupted crossing of the entire field would necessitate a constant change of position and the shifting of material. The blanket is held with the left hand, the thumb in front, the fingers in the rear. The woof-strands are manipulated with the right hand, one thread being

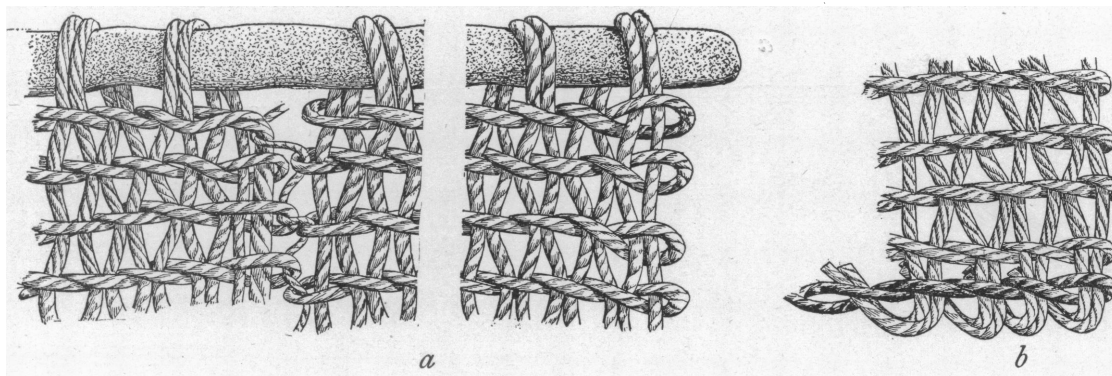


Fig. 544 ($\frac{8}{2382}$). Details of Old Blanket woven of Cedar-Bark and Mountain-Goat Wool.

carried under and around, and one over, each pair of warp-strands, which latter are separated by the left hand. As the twine is made, it is held in place by the left hand, and is drawn taut with the right forefinger and thumb. In the raised embroidery stitch, the strands are separated with the thumb-nail of the left hand, and carried around the woof and one another with the right hand. The twining-weave is across the strip and back. In passing from one color-field to another, the twining-strands are hung over one of the cross-pieces, ready for use upon the return. New strands are let in at any time through the weave, knotted, spliced, or simply enclosed in the previous weave. In the embroidery plaiting, where the extra sets of threads would hang down over the work, they are drawn up in small skeins with a slip-knot, and hung over the cross-piece. In working a section, the warp-strands are not removed from the intestine bags they are placed in, but they are loosened up sufficiently to allow an easy

separation for the passage of the twining. As the weave proceeds and the working-line becomes inconveniently low, the broad head batten to which the blanket is attached is withdrawn from the uprights, and a turn of the blanket is taken around it, when it is replaced in its rests, and secured. As the work progresses, it is protected by a covering of intestine; so that when it is complete,

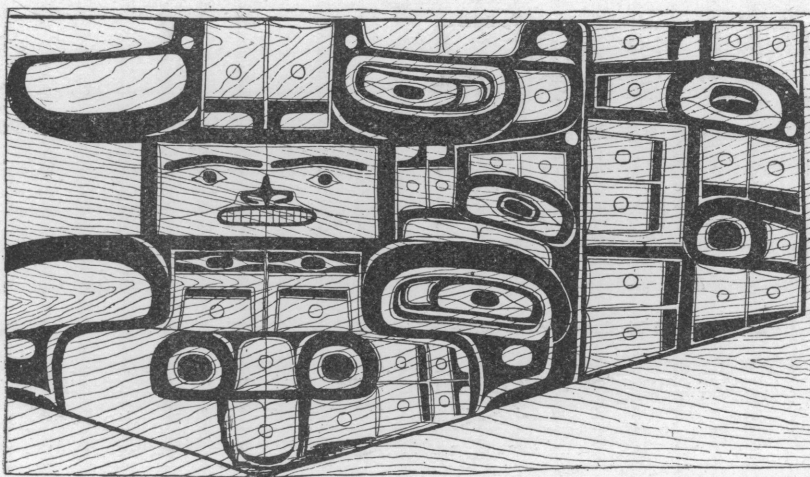
although its construction may have consumed a year or more, it is perfectly clean.

With practice the weaver becomes very expert, each finger performing its work with the regularity and precision of machinery, as if directed by a will of its own. The length of time required to weave a blanket is practically six months, while the preparation of the material takes as long, if not longer; that is, a weaver

turns out, on an average, one blanket a year, together with her woman's work in the household. It is claimed that continuous work for half of this period would accomplish the result; but this is seldom practicable. And when one considers the short days of winter,



a



b

Fig. 545. Pattern-Boards for the Blankets. Fig. 566, p. 376. b ($\frac{11}{16}$), width, 152 cm.

ter, the poorly lighted dwelling, and the many calls on the woman's time, it is a wonder that she can produce such delicate work even in years of labor.

Weaving seems to be confined to families, but this, I think, is a natural result of the mother's teaching. Slaves were never allowed to do this work on their own account; but they could, and often did, assist their mistresses. I have seen two weavers employed on the same blanket, but this is not usual.

The purpose of the blanket is that of a ceremonial robe. Its great value

in early days placed it beyond the reach of any but the wealthy, so it became a necessary part of a chief's dress upon particular occasions. It is worn by either sex; for among the Tlingit, woman is the equal of man, and can succeed to the highest position. It was never worn by the shaman in his practice; but upon general occasions of ceremony he might wear it as another, without any significance.

The Tlingit delights in color and movement, and this robe would seem to fulfil all of his desires. It was worn over the shoulders, fastened about the neck with ties of hide on the band; and in former days the head was almost always ornamented with a narrow strip of sea-otter fur. When dressed for death, the blanket is thrown over the lower limbs, for these people seem to know so well when the end is approaching. Indeed, it is universally believed that the spirits of the departed return at this time and are seen by the sick, who receive from them assurances of love and comfort for the life to come; and without fear, in perfect resignation, they accept death, for are their friends not waiting to guide them to a land of warmth and rest? After death, when the body is placed in state for the four days of mourning, these robes are draped over and around it, and in rare instances they may be committed to the flames of the funeral pyre; but more often they are hung on the outside of the grave-house, or on the mortuary column, as a token of esteem, and, thus exposed to the elements, they slowly go to pieces, until only a few tangled strands of cedar-bark remain to tell of the sacrifice.

During a potlatch, whole blankets may be presented to the most honored guests, but generally they are cut in strips and distributed; and such pieces are esteemed far beyond their intrinsic value, and are made into articles of dress, such as leggings, hats, fancy bags, etc. When not in use, the blanket is kept carefully packed away in a cedar chest. Thus it may be preserved in perfect condition through generations, and this makes it impossible to estimate the age of a blanket by any sign of wear. The coloring alone indicates this in a relative degree.

Besides this robe, the loom produces three other articles of dress,—the apron, the sleeveless shirt, and leggings,—all of which are woven of like material, in the same manner, from pattern-boards, and differ from one another only in their shape.

The apron or waist-robe, *kēt* ("front shield"), is a blanket in miniature, a reproduction in weaving of the shaman's skin waist-robe, from which it derives its name. It was unquestionably the earliest product of the loom in this material and type of weaving, and in the course of years it grew to the size of the blanket. The Chilkat story of its origin says that long ago there lived on the Skeena River, in British Columbia, a Tsimshian woman, a widow, of the village of Kitkatla, and her only daughter, "Hi-you-was-cla" ("rain mother"). It had been a season of extreme want. The deep snows of winter still covered the lowlands, and the spirit of hunger stalked abroad as a famished wolf. Day after day the

girl sat, half dazed from want of food, staring vacantly at the intricately carved and painted picture that covered the rear interior partition of the house; for, although poor, they were of high caste, and their surroundings spoke of past greatness. The picture finally took possession of her, and, setting up a rude frame, she forgot her suffering, and lost herself in the work of weaving an apron of like design. Later her hand was sought by the son of the chief, and, in the exchange of presents, her handiwork was given to the father-in-law, who honored the occasion by a great feast, at which he wore the apron, and sacrificed many slaves in token of his appreciation of the gift. Its fame spread abroad, and strangers came from afar to see it; and in time it was copied, until the Tsimshian became the acknowledged weavers of the coast.

It is always backed with caribou or deer hide, and, instead of the long warp-fringe, the hide hangs down in narrow strips, which are hung with puffin-bills, deer-hoofs, bits of ivory, bone, or metal; in fact, anything that will make a noise in movement.¹ It is worn in the dance, and also by the shaman in his practice, and at such times it constitutes his only article of clothing. Its manufacture has practically ceased, and few or no specimens can be had to-day.

The long sleeveless shirt, hanging from the shoulders and reaching below the knees, is in shape a replica of the primitive hide armor, from which it derives its name, qeka ("cover" or "protector"); but to-day it is more often called k!uda's ("sleeveless shirt"), to which is prefixed the name of the design, as, x̄uts! k!uda's ("brown-bear shirt"), or gōtc k!uda's ("wolf shirt"); but in a general way it is spoken of as nax̄i'n k!uda's ("Chilkat blanket work shirt"). It is undoubtedly the latest product of the loom; and judging from its greater abundance among the Tlingit, and its more marked realism of design,—which feature characterizes the art of this people,—it seems most likely that it originated with them.² It is woven on a loom somewhat higher than that of the blanket, but the head line forms a drawing-string. The front of the shirt alone presents the design, which is painted in full on the pattern-board. The back of the robe is generally ornamented with a head at the top, and two or more narrow bands of color in geometric lines; and the weave here is much coarser and more open, in the plain twining-stitch. Instead of fringe at the bottom, the warp-ends are evenly divided, and wrapped with colored yarn for the length of an inch or so to form tassels.

The shirt is purely a ceremonial robe, and has no place in the paraphernalia of the shaman. It might be worn by either sex, but I have never seen it used by women. It is much less common than the blanket, and commands double or treble the price of the latter. I know of but one Chilkat woman at present who weaves this dress, and pattern-boards are rarely met with.

¹ I believe that originally the apron was hung with its own warp-ends, as is the blanket; but I have never seen one so arranged among the Tlingit.

² Vancouver notices this dress in use in 1794, when his boat expedition, under Lieutenant Whidby, visited the head of Lynn Canal, and met with such an unfriendly reception at the hands of the Chilkat.

Leggings, known as q'los kē't ("foot shields"), were regularly woven in full design on a framework, from a pattern-board, and were generally ornamented with otter-fur and leather fringe, the latter hung with puffin-bills. But those found to-day are generally constructed from pieces of blankets torn and distributed at the potlatch. I have never seen a regularly woven pair of leggings among the Chilkat, or any evidence of a pattern-board. I think they go back to the earlier days of Tsimshian weaving.

The ornamentation of all blanket-work is aboriginal in conception, the pure essence of native art, free from the slightest suspicion of any civilizing influence. Indeed, its origin long antedates any knowledge of, or contact with, Europeans; while its rigid conventionality of figure speaks of a gradual development through many generations.

The design is always animal in form, and totemic in character; and it is through this system of picture-writing in the graphic and the plastic arts that the history of these people has been preserved and transmitted through centuries.

The dominant feature of this coast is the symbol of family. Its expression is fantastic and full of color. It is visible on the house-fronts, the interior supports and partitions, the canoe and the paddle; articles of dress and ornaments, implements of the chase and arms, even down to the most trivial household articles. This is most natural, as the family or clan is the unit of social and political life. The prevailing system of matriarchy clearly establishes the succession,—the brothers follow each other, or the nephew the maternal uncle. Substitution is never permitted, so doubt cannot exist. Union within the family is impossible, for all of like totem are considered as brothers and sisters, although they may be separated by hundreds of miles, with no single drop of blood in common, and may not even know of each other's existence; while the closest consanguineal ties on the father's side are meaningless. The totem is thus a birthright, as real as life itself. The personal guardian spirit may in extreme cases be destroyed, or driven away from its trust; but no act can ever change the relationship of the Tlingit to his clan. Individuality exists only within the family: beyond this limit every act affects the body politic, and not infrequently one wholly innocent is called upon to give life itself for the honor of the clan, in atonement for the act of another unworthy of the sacrifice. Such conditions tended to bring the families into constant relations with one another. While intermarriage, association, and the love of entertaining made for friendship; disputes, injuries, and feuds were, nevertheless, perpetually recurring, and these two diverse interests are responsible for a very perfect code of unwritten laws, the execution of which involved the public meeting of the families, and out of which has grown a most complex and elaborate ceremonial having for its end the display of the totem in the glorification of ancestry. And so the blanket is a family robe, elaborate in ornamentation, pleasing in color-effect, but above all a vehicle for the exhibition of the emblem of clan.

The decorative field of the blanket and the apron, and, in the most con-

ventionalized type, of the shirt, generally shows three vertical sections, which, though sometimes indefinite, are more often clearly defined by a sharp line of demarcation. In the broader central division the main portion of the figure is expressed, or, at least, its more characteristic symbols are grouped; while the side panels are, referable to the plainer body surface, wanting in expression, and, in fact, mere adjuncts, filled in for decorative purposes, each the counterpart of the other. This arrangement of the more prominent features in the middle is made necessary by the manner in which the robe is worn, as the portion covering the back alone presents an unbroken surface for the display of the picture. The sides, crossing in front, are more often folded back by the movement of the arms, which breaks the continuity of outline.

Thus it will be seen that the native artist would be greatly restricted in his choice of subjects, in order that they might conform to this very limited and almost square field, were he not allowed the widest latitude to practise a peculiar and highly original system of dissection, distortion, and elimination, having for its purpose the preservation of as much of the animal form as possible and the presentation of the parts in a relatively natural position. The more simple profile is rarely met with here. The restricted central area does not lend itself kindly to this end, as, in the case of a single large figure, the more characteristic head and tail would be lost in the folds of the sides, while the body would occupy the only advantageous position. But, as if to emphasize the general custom by contrast, advantage is sometimes taken of the more realistic profile, as shown in blanket and pattern-board illustrations (see Figs. 580-582, pp. 387-389). These effects are very intelligible, but they are neither graceful nor artistic, and have never found much favor with the people.

The prevailing custom presents the figure from directly in front, in a characteristic pose. An animal—as a bear, a wolf, or a beaver—is pictured as sitting up on its haunches; a bird, with distended wings, outstretched feet, and drooping tail; a fish, as diving, with the head at the bottom and the flukes of the tail flattened out. The figure is then split lengthwise, down the middle on the opposite side, and rolled out and flattened, as it were, which gives that undue breadth to length which is desired to fill the given space. The head, which is the most important feature, thus appears in double profile, greatly exaggerated; while the body proper is almost eliminated in favor of the more distinctive parts. In the case of a bird form, the head alone may be said to be dissected, and the expansion of the wings and tail may be considered as natural; and, in depicting a fish, the tail is not bisected, although it suffers distortion in the exaggerated breadth, in order to correspond with the double profile of the head.

The side panels, when forming separate divisions,—and these at a glance would seem to have no connection with the main figure,—are universally believed to represent the reverse portion of the body, each going to form half of it, when folded back in place. And this idea is rather corroborated by the

vertical divisions corresponding with the natural divisions of the animal figure in the central field.

The ornamentation of the side panels is often very uncertain and sketchy; but generally the idea is to represent a complete animal figure in profile, more often a bird sitting up with the wings folded, and the tail recurved and under the feet. Sometimes the figures are considered to represent the young of the animal shown in the main design. Their principal value is decorative, and their meaning is very vague in the minds of the most intelligent weavers.

The main figure sometimes intrudes upon the side spaces to such a degree that they are hardly distinguishable as separate sections; and again, in rare instances, they are wholly obliterated by the extension of the design across the entire field, but even then the characteristic features are grouped about the middle.

The sleeveless shirt follows a wider range of ornamentation than the blanket. In the most conventionalized type it is much the same; but in its more realistic form its outline is bolder, more in accord with the precepts of Tlingit art.

The apron or waist robe, when used by the shaman, follows a different line of decoration. Spirit figures and the pictorial representation of the practitioner's dreams take the place of the totemic character.

In all cases the design illustrates the fundamental principles of art as recognized by the Northwest coast people, not only in the practice of dissection and distortion, as heretofore noticed, but in an elaborate system of the ornamentation of the different members or parts of the body, by means of integral forms, faces, or figures, which have no meaning, totemic or otherwise, and must be considered as wholly decorative in character. The idea seems to be to cover the entire field in figure and color; and, while the effect is pleasing, the design suffers in clearness, and appears much as a collection of independent figures, disconnected, and bearing no relation to one another. The individual forms thus used, whether singly or in combination, have a fixed value of their own, and are named accordingly (see p. 366). Their use in certain connections is always recognized. Such as represent the salient features — as the eye, the nose, the ear, the mouth, or the foot — are always properly placed, and show a similarity of form, whether they go to make up the head of an animal, a bird, or a fish. The most variable, however, is the eye. This differs in form for different animals, and its application is very general. It is not only used to represent this organ in its proper position, but it may, as an ornamental figure, appear in any place. An examination of many animal representations will generally show the eye at a joint where movement occurs, whether of a limb, a fin, a wing, or the tail; and its meaning, as once interpreted by an old native, is indicative of intelligent action. He exemplified this in the case of a bird-carving, where the eye appeared at the base of the wings and on the tail, saying that the former carried the body through the air, and the latter guided it in flight, and both of them had an intelligence

and power of their own that told them what to do and how to do it; and this was indicated by the eye. Besides these bodily parts, there are a number of purely decorative figures that are used singly or in combination, and have no specific meaning. The most prominent and oft-recurring of these, which takes an indefinite number of easily recognizable forms, is named "Khoon tar-ou" ("the feather of the red-wing flicker"). It is much esteemed by all of the coast people for its brilliant red coloring, and is in great demand for use on the ceremonial head-dress. The illustrations of these figures are taken from several old blankets (see Fig. 559, p. 366). They might possibly be multiplied, but their similarity in different designs is so marked that this does not appear necessary.

The arrangement of color is as fixed in principle as any other feature. The presumption is always that the background is white; and this, too, is practically a fact; as the warp or body element is white, the fringe and border are white, and a narrow woven band of white extends around the outside. However, this may seem paradoxical at a glance, and particularly so in the case of the most elaborate type of decoration, where only a few narrow lines of the field are visible; but in the plainer shirt the outlined figure stands out convincingly on its white woollen field.

The design and all of the minor figures used in its construction and elaboration are outlined in black on the white field. This is seen to the best advantage in the pattern-board, where the black alone appears on the plain wood surface. The introduction of the yellow, blue, and white into the woven field, is purely decorative; and, while they add greatly to the effect, they decrease rather than increase the sharpness of the outline. Each one of these colors has its value, and an examination of many blankets will show how fixed this is in the mind of the weaver; for the pattern-board, outlined in black, gives her no intimation as to the use of the other colors. This she must know and always remember, as a transposition would be severely criticised. The flicker-feather figure is as indeterminate in color as it is in form: it is the one character that seems to transgress all rules.

The end of weaving is near at hand, and, as the art has disappeared from the home of its birth, so it will soon be lost to the Chilkat. To-day but fifteen weavers remain, and the majority of them are well advanced in years. The younger generation is not attracted by this work. Time becomes of more value every day, and the possibility of making an increased wage in the canneries and fisheries is much more attractive. Then the days of the dance are over, the old ceremonial houses are falling to pieces, and the use of the blanket is past. Another generation will know it only as a memory.

In conclusion let me add that the material embodied in this paper has been procured from Chilkat sources alone, except when otherwise noted. But the plates have a wider range, and represent blankets gathered throughout south-eastern Alaska and British Columbia as far south as Puget Sound, although the identification of the designs is from the Chilkat.

NOTES ON THE BLANKET DESIGNS.

By FRANZ BOAS.

THE designs on the Chilkat blankets take a unique position among woven designs in America, as well in their technical execution as in the forms that are represented. While ordinarily designs in weaving are made by the use of different colors in warp and woof, the Chilkat blankets, somewhat like the weavings of Peru, are made up of separate units, which are sewed or woven together as described by Lieutenant Emmons in the preceding pages. The designs used in the woven fabrics of North America are either geometric designs or strongly conventionalized representations of animals, in which apparently the difficulty of applying the technique of weaving to the representation of realistic figures becomes evident. In the Chilkat blanket we have, on the other hand, the clearest evidence that the blanket pattern is merely a painted design, which is transferred without any change to the technique of weaving. Hence we find here numerous curved lines which are ordinarily absent in weaving.

The clearest evidence of the transfer of the painted design to the blanket is given by the method of weaving. The pattern is prepared by the men, who paint it on pattern-boards. These pattern-boards are placed by the woman by the side of the blanket, and are transferred directly to the weaving, as described by Lieutenant Emmons (see p. 342). Examples of pattern-boards and of blankets copied from them are shown in Figs. 546 and 547.¹ All the pattern-boards are made in the same way as the one here illustrated; namely, only part of the whole middle pattern and one wing are shown, the other side being symmetrical with the one shown on the pattern-board. The symmetry of the design is brought about by the use of bark patterns in the same way as these are used in obtaining symmetry in painted designs. It will be seen, therefore, that the blanket design cannot be considered in any sense a textile design, but is a strict imitation of a painted design, no liberties for its adaptation to the technique of weaving being allowed. It is interesting in this connection to note that a considerable number of blankets are found identical in type, as might be expected, if we consider that the blanket design

¹ See also Figs. 545, 565, 569, 574, 575, 582, 584.

is produced as an accurate copy from a painted board. Thus the two blankets Fig. 546, *a* and *b*, are practically identical in design, and agree with the pattern-board (Fig. 547), which is reproduced from a photograph taken by Lieut. Emmons.

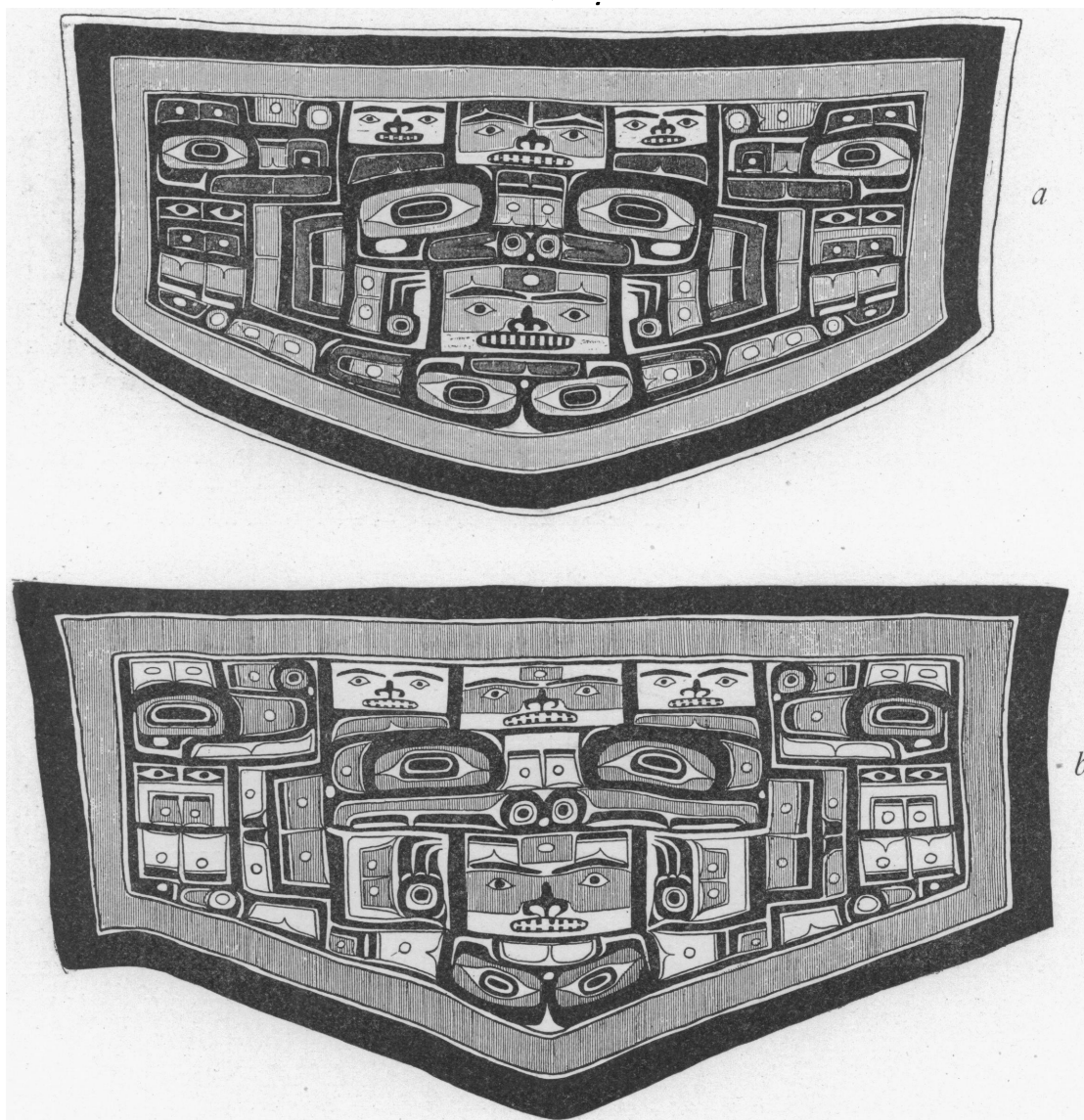


Fig. 546, *a* ($\frac{1}{2}$), *b* ($\frac{1}{2}$). Blankets. Width, 157 cm., 152 cm. *b*, From Klukwan, Alaska.

According to Emmons, the design represents a bear with young. The large central figure represents the male bear; the two inverted eyes in the middle of the lower border, with the adjoining round wing designs, the hind-quarters of the bear; the three heads in the middle, the female and two young bears; the lateral fields, each a young bear; the design along the lower border of the lateral field, a fresh-water stream on which the bear lives; the round wing design adjoining the medial eyes on the lower border, paws; the central head on the upper margin, the forehead of the bear.

According to Swanton, it shows the sea grisly bear. The explanation is the same, except that the three heads in the middle along the upper border are explained, the middle one as the top of the head, the lateral ones as parts of the ear; the wing design which extends sideways from the body, cutting into the lateral fields, as part of the front leg; the wing field which cuts into the lateral field, probably the fins, which are believed to be attached to the arms of the sea grisly bear; the two wing designs on the lower border, outside of the round wing design adjoining the medial eye, the paws.

There is still another blanket of the same type in the Peabody Museum,

Cambridge, Mass. It resembles practically in all details Fig. 546, *a*, with the sole exception of the fields adjoining the large eyes on the lower border, which consist of a single wing design. Further, the lateral fields differ in that the ring over the bird-beak is missing; that the goggle design is moved slightly towards the middle, leaving room at the outer border under the upper head for a single wing design, and under this for the eye which is so often found in this position (see, for instance, Fig. 561). The lower border of the lateral field consists of an eye design close to the border of the middle field, to which are attached a series of wing designs stretching along the lower border upward.

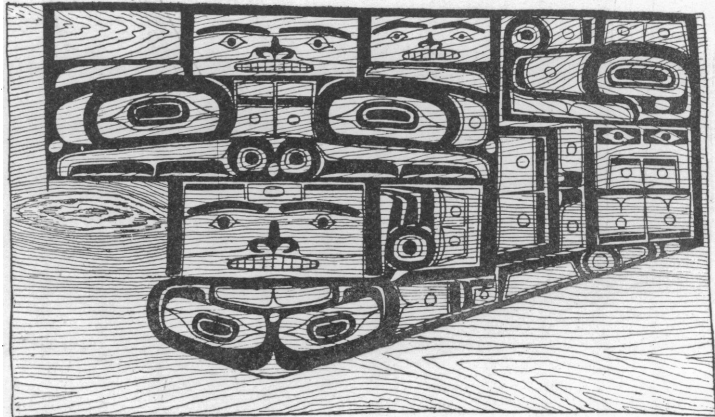


Fig. 547. Pattern-Board for Blanket shown in Fig. 546, *b*.

We shall see presently that other pairs of blankets show even better agreement among themselves. The present example, however, is selected here because not only the two blankets are available, but also the pattern-board. It is quite obvious that sometimes the pattern-boards have been copied, and that thus slight deviations in the details of a design are introduced. This probably accounts for the differences among patterns which in their whole plan must be considered as identical. The two specimens here described show a considerable number of minor differences. Thus, taking the figure in the upper right-hand corner of the blanket Fig. 546, *a*, which represents apparently the profile of a bird's head, it will be seen that the portion in front of the eye is occupied by two separate designs; while in the blanket Fig. 546, *b*, the same space is occupied by a single curved design with black tip and central white spot. The design occupying the space over the bird's head shows also certain variations. While in the blanket *a*, the circle which probably represents the nostril, and which is placed just over the tip of the beak, has a white centre, it has a black centre in *b*. Similar differences may be noticed in the field under the beak just discussed, and occupying the middle part of the lateral field. In *b* a number of circular white spots are indicated here which are not present in *a*. A detailed examination of the whole blanket designs brings out similar differences.

A better example of two blankets made from the same pattern-board is shown in Fig. 548, *a*, *b*. Here the agreement of the two specimens is practically perfect. It will be noticed that even the details of the ear, eye, body, foot, and tail, as indicated in *a*, are also repeated in *b*. Other sets of blankets made from the same pattern-board, or from pattern-boards that must have been copies of the same original, are shown in Figs. 564, 566, and 568.

Before discussing the significance of design elements and of the whole designs as explained by the Indians, it seems best to discuss the general style of deco-

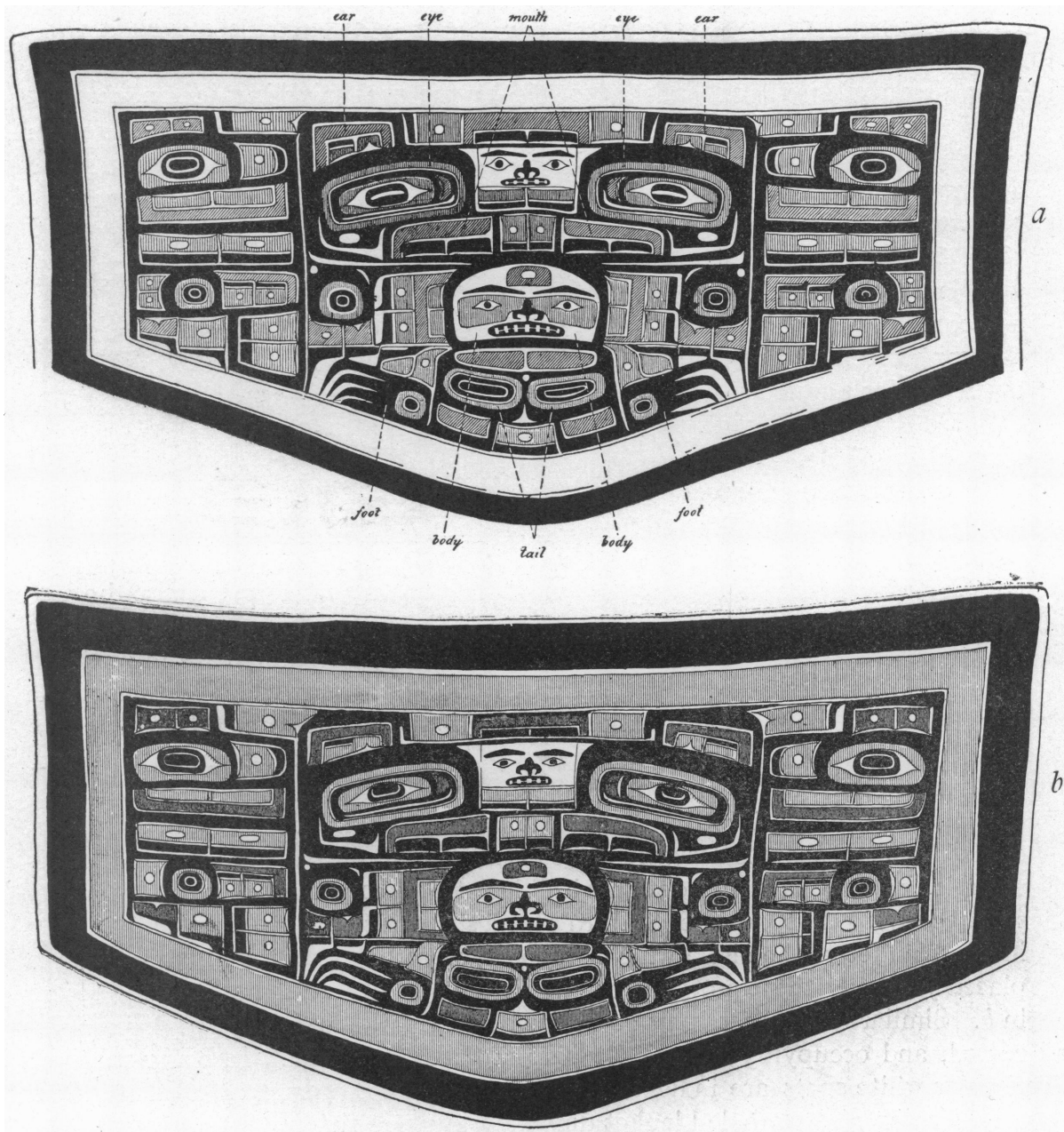


Fig. 548, *b* (T 35543). Blankets. Width, 172 cm.

According to Emmons, the design represents the osprey or thunder-bird standing with outspread wings. The lateral fields represent clouds, and at the same time the body of the thunder-bird and also the raven in profile.

According to Swanton, it represents the beaver. The two designs under the corners of the jaw represent the alder, which is the beaver's food; while the wing designs next to the body represent the fore legs. The middle portion of the mouth is interpreted as the two incisors of the beaver. The lateral fields are the beaver's house.

ration of the blankets, without reference to their symbolic signification and to the pattern names, but only in regard to the objective forms of the designs. An

examination of the first twenty-four blankets (Figs. 546, 548, 560-572) shows very clearly that the general form of the blanket is the same in every case, and that it is divided into three fields of unequal size,—a wide middle one, occupying approximately one-half of the surface of the blanket, or sometimes a little more; and two narrow lateral fields, each occupying about one-fourth of the whole width of the blanket. On almost all the blankets here mentioned, the line of division of these fields is perfectly clear, and indicated by black and white lines, the designs of the lateral fields and that of the central field being entirely distinct. These twenty-four blankets may again be divided into two groups. The fundamental pattern of the central field of the first twelve is indicated by the schematic representation shown in Fig. 549. The fundamental trait of the design consists evidently of two large eyes,—one in each upper corner of the central field,—a face in the middle, and two eyes turned upside down in the middle at the bottom. An examination of the twelve figures (Figs. 546, 548, 560-563) will show that this trait is com-

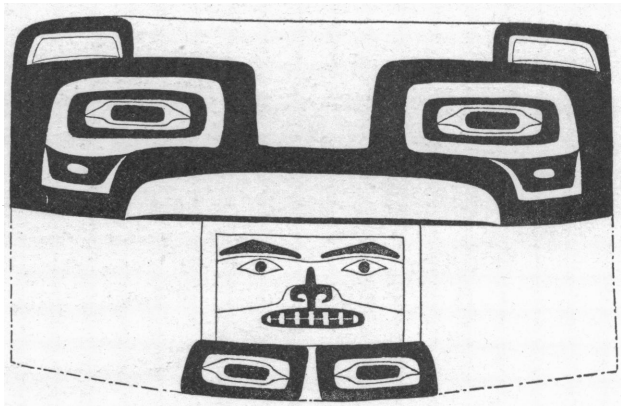


Fig. 549. Schematic Representation of the Design of Blankets, Type 1.

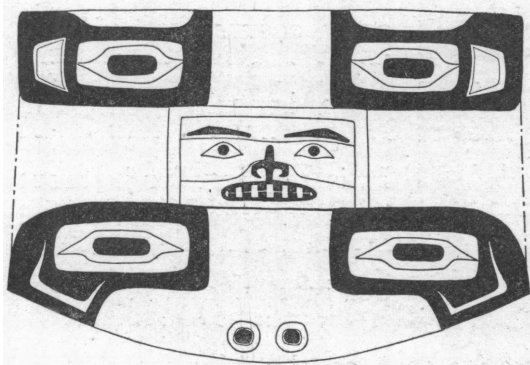


Fig. 550. Schematic Representation of the Design of Blankets, Type 2.

mon to all these designs. The two large eyes on top are always surmounted by ears, and have underneath a long, wide mouth, which varies considerably in form. The central face is always immediately under the mouth; while the two lower eyes vary somewhat in their position, being sometimes directly under the central face, sometimes moved out slightly towards the sides (see Figs. 561, 562). According to the characteristic art of the Northwest coast, these three elements in conjunction naturally represent an animal: the eyes, with the adjoining ears, jaws, and mouth, being the head; the central face being the body; while the two inverted eyes below are the double joint of the tail, every joint being represented by an eye design.

The second group of blankets (Figs. 564-572) represents a quite distinct type, which is shown in Fig. 550. Here the fundamental type of the middle field is the same central face that we found in the preceding type; but in place of the large eyes on top we find two large inverted eyes, often without the

adjoining jaw design. In the corresponding corners below, we find two large eyes with jaw design, while the centre of the lower border is occupied by two small circular designs. In this way a much more symmetrical pattern is obtained, consisting of a rectangular face, around which the four eyes are arranged fairly symmetrically.

In both types of designs the intervening spaces are filled with a variety of patterns, which depend upon the selection of the animal to be represented,

but partly also upon the fancy of the artist.

The general scheme of the narrower lateral designs is also quite definite. We find on practically all the blankets an eye design — part of the profile of an animal head — in the upper outer corner of the lateral field, and another eye design near the lower border, generally approximately in the middle of the lateral field (see Figs. 548, 562 *b*, and 563 *a*). The position and occurrence of this lower eye design is much more irregular than that of the upper eye design. It is missing, for instance, in Fig. 546, and it is placed near the outer border in Fig. 563, *b*.



a



b

Fig. 551, *a* ($\frac{E}{862}$), *b*, ($\frac{1}{1287}$). Painted and Carved Box-Fronts. Length, 53 cm., 73 cm.

investigate the origin of this peculiar arrangement of the blanket pattern. It seems likely, as Lieutenant Emmons points out, that the regular occurrence of a middle field and of the narrower lateral fields may be partly due to the manner in which the blanket is worn. When it is put on, the wide central field covers the back, and the narrow flaps are on both sides in front of the body. When the dancer is at rest, the sides of the central design would naturally be on the sides of the body; but when dancing and shaking his rattle, the elbows are often lifted, and by this motion the whole back is extended, and the whole central design may be seen in rear view.

The first of the central patterns is evidently closely related to the box patterns shown in Figs. 551-553. In all of these the large face with the two eyes, the depression between the eyes, the large mouth, and the small body, will be recognized, leaving the same lateral fields open that are found in the first type of the blankets. In some cases the body is decorated with the same face pattern that is found in the blanket (Figs. 551 *a* and 553 *d*); but the eye pattern will be noticed also in the body design of Figs. 551 *b*, 552, and 553 *b*. The box patterns have, in addition to the central figure with large head, an eye design in each corner. This is seen clearly in the broad box-fronts in Figs. 551 and 552, and also in the broad sides of the boxes in Fig. 553, except in that marked *a*, in which the body is omitted entirely, and only the eyes in the upper corners are shown. It seems quite possible that the narrow lateral fields of the blanket are related to these eye designs in the corners: at least, a comparison between the lateral fields of the blanket designs and the lateral strips on the box-



Fig. 552 (1188). Front (*a*) and Side (*b*) of Carved and Painted Box. Length, 82 cm.

fronts containing the two eyes, brings out a certain analogy in the position of the decorative designs. We find, for instance, in Fig. 551, *a*, the eyes in the upper corners, to which is attached a fin-like design extending along the upper edge towards the middle, which may be compared to the beak part of the heads in the upper part of all the lateral blanket fields. That portion which lies along the side of the head on the box-front seems to correspond to the portion of the lateral blanket field between the upper and the lower eye (see, for instance, Figs. 560 *a* and 562 *b*); while the lower eye in the blanket, with its attachments, corresponds somewhat to the lower eye in the box design. This similarity becomes perhaps even more apparent when we compare the design on the central field of the blanket with the designs on the narrow sides of boxes, as shown in Figs. 552 and 553. We recognize in all these cases (see particularly Fig. 553, *c*, *d*) a somewhat narrower head, large as compared to the body, but without the eye designs in the upper and lower corners. These occur only in the upper corners of the box-side shown in Fig. 553, *a* which, as pointed out before, consists of heads only, without the body.

The exaggeration of the head as compared to the body is a common trait of Northwest coast art, and occurs frequently in painted designs as well as in

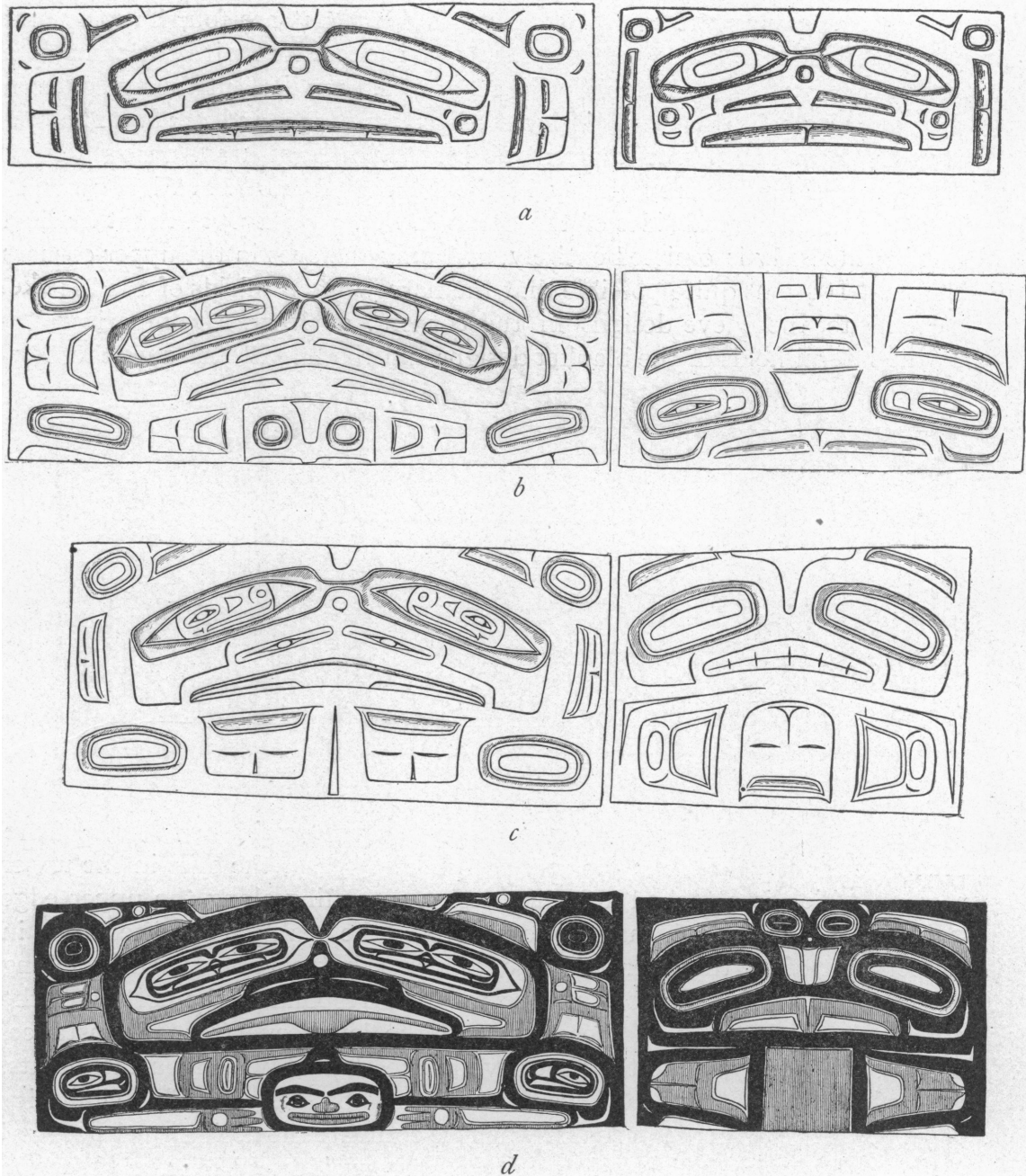


Fig. 553, *a* ($\frac{E}{1220}$), *b* ($\frac{E}{1292}$), *c*, *d*. Fronts and Sides of Carved and Painted Boxes. Length, *a-c*, 61 cm., 60 cm., 57 cm.

incised designs and in reliefs, while it is not so characteristic of sculptures in the round. It is commonly found on head-masks of the Tsimshian and Haida.¹

¹ See Bulletin American Museum of Natural History, Vol. IX, Fig. 13, p. 131; Fig. 17, p. 132.

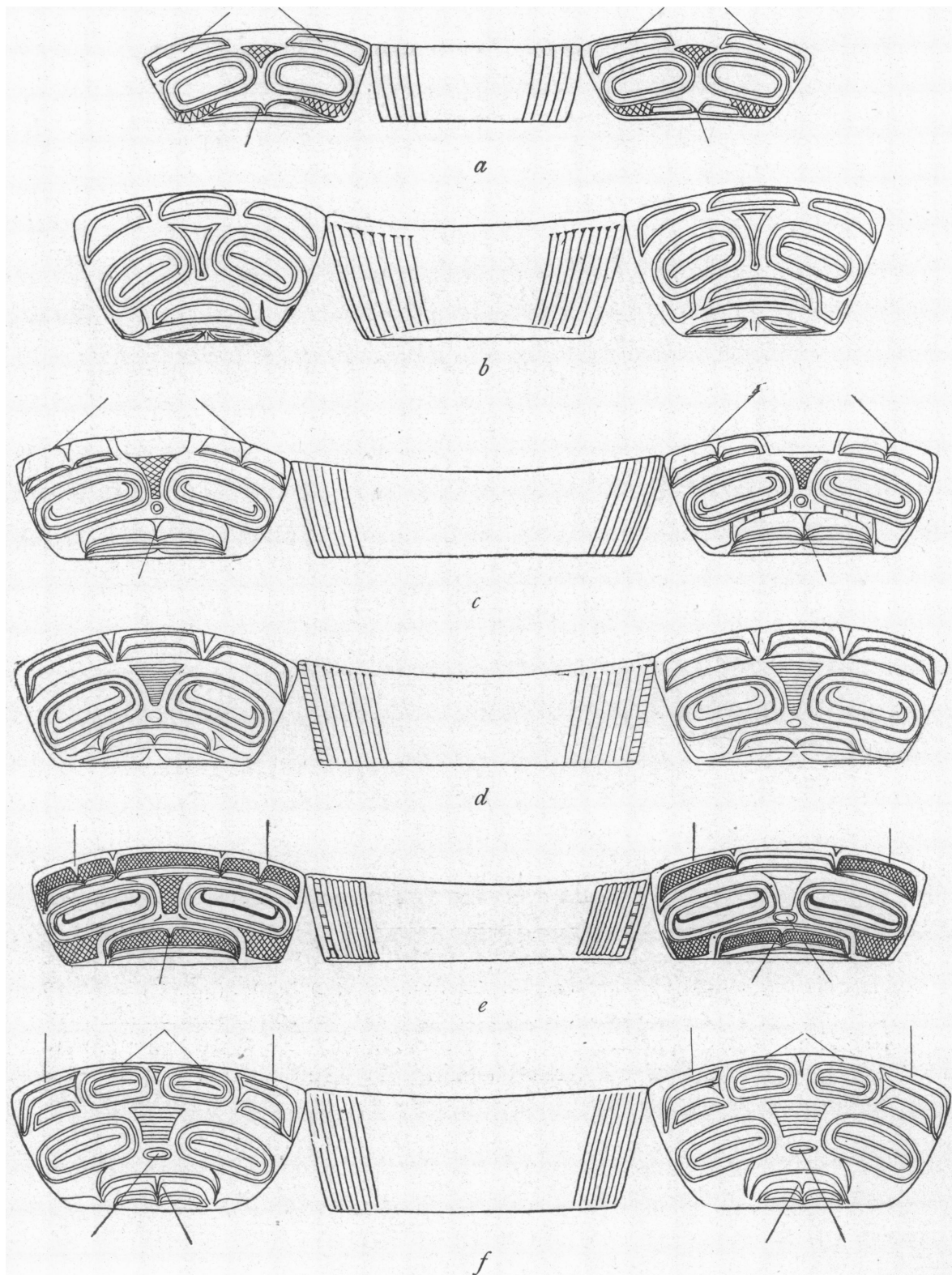


Fig. 554. Carved Trays. Length, *a*, 12 cm.; *a-f*, 43 cm., 40 cm., 21 cm. *a* ($\frac{1}{12}$), *b*, *c*, *d* ($\frac{1}{41}$), *e* ($\frac{1}{32}a$), *f* ($\frac{E}{358}$).
The lines indicate ears, forehead, nose and mouth.

The incised designs on bracelets¹ exhibit the same peculiarity, which may also be observed on painted designs on blanket-borders.² This exaggeration may be partly due to the tendency to represent the head as consisting of two profiles. The peculiar type of head here discussed is found on all the ends of food-trays of the Tsimshian which are shown in Figs. 554 and 555. I do not feel certain whether the form of this kind of food-tray, which among the more southern tribes occurs also without decoration, has had an influence upon the development of the decorative form of the head which is so commonly used, or whether the head was applied to this surface because its form coincides with it so well.

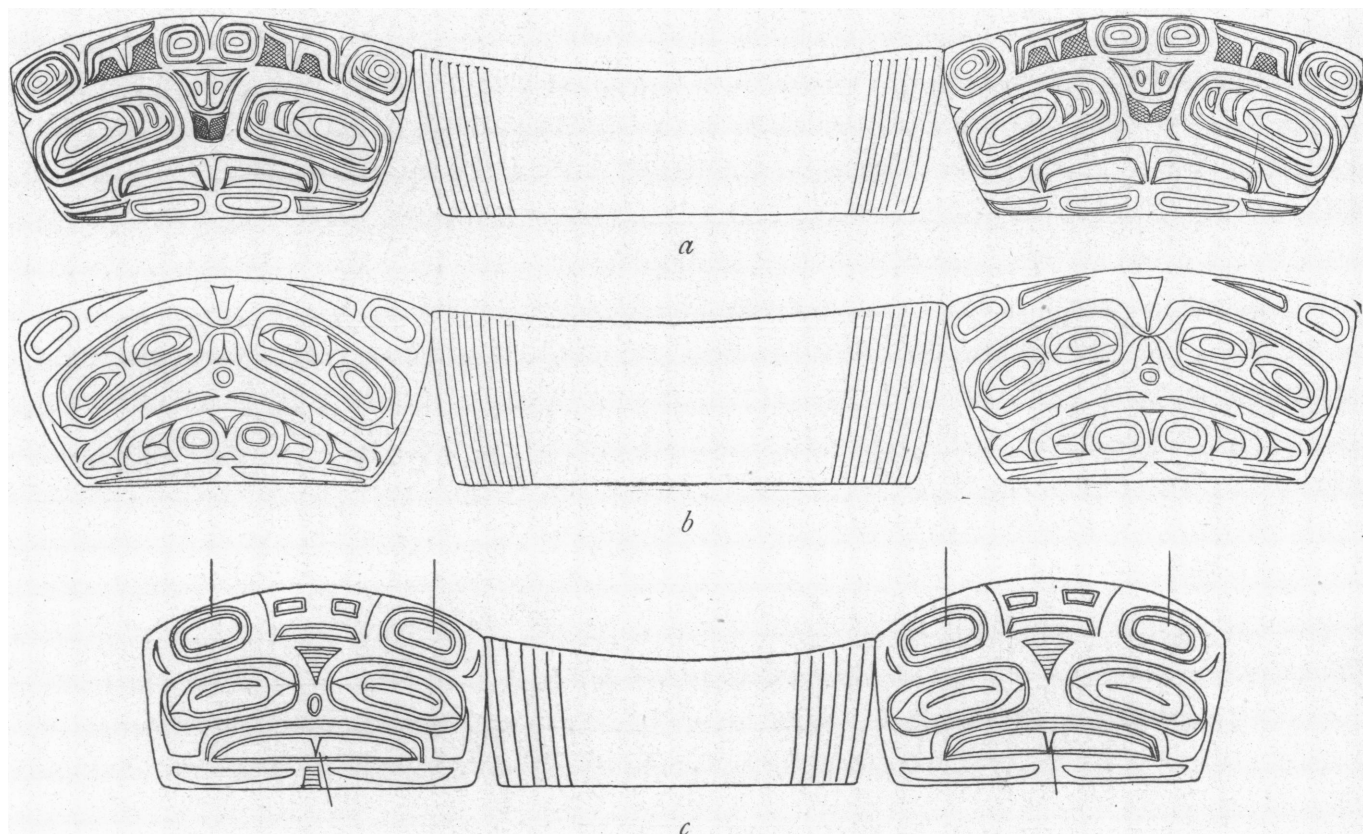


Fig. 555. Carved Trays. Length, *a* 53 cm., *b* 45 cm.; *c*, 17 cm. *a* ($\frac{E}{380}$), *b* ($\frac{E}{38}$), *c* ($\frac{E}{1748}$).

In judging the characteristic style of the blanket design, attention should be called also to the absence of curved chin-lines seen on many trays. Figs. 546, 548, and 560 show that the line forming the lower border of the mouth and lower jaw is almost always a straight line, and that the upper border of the head has a very slight curvature only. On the box designs Figs. 551 and 552, on the other hand, the chin-line is always considerably higher in the middle than at the sides. This tendency is even more marked on the narrow side of

¹ See Bulletin American Museum of Natural History, Vol. IX, Fig. 42, p. 147; Figs. 72-74, p. 169.

² Ibid., Fig. 71, p. 168.

the box shown in Fig. 552, *b*. On the other hand, the boxes shown in Figs. 553 *d* and 556 *a* and *b* show the same straight lower edge which is characteristic of the blanket designs. Taking this in connection with the tray designs shown in Figs 554 and 555, it becomes evident that the form of the head is not determined alone by the form of the decorative field. Both box and blanket have a straight upper edge, near which the head is placed. Nevertheless we often find in the boxes slanting eyes and curved lower rim of the mouth, while in the blanket not a single case of a markedly slanting eye and of a curved mouth-line has come to my notice. In the tray designs there seems to be a marked influence of the curvature of the upper rim, which has the effect of compressing the lateral portions of the design, while the inner corners of the eyes are drawn upward, thus giving it a more slanting position.

Attention may be called here to the peculiar application of the design consisting of the large head and small body in the two boxes shown at *a* and *b* in Fig. 556. In both these cases the box is made of a single board, and one head is placed on two adjoining sides, each pair of sides representing the design heretofore discussed, and corresponding, in proportions as well as in arrangement, to the front of the long box (Figs. 551 and 552).

I have added here illustrations of some other types of boxes which illustrate clearly certain definite types, the variations consisting in modifications of details. The three boxes shown in Fig. 556, *c-e*, represent animals, the face and tail ends being shown on the short sides, while the side of the body is shown on the long sides. In these three cases the shoulder-joints and hip-joints are indicated by inverted eyes. For this reason the long sides of the boxes assume the form of an inverted face, and all the details which are intended to represent the side of the body and the feet are modified so as to bring out clearly the idea of the inverted face. In Fig. 556, *c*, the two groups of concentric circles on the upper rim of the long side will readily be recognized as the nostril, which is placed in the middle of the mouth. The vertical lines in *d* on one of the long sides are the large teeth of an animal, while on the opposite side the peculiar beak design divides the mouth into two parts. In *e* both sides are represented as hawk-faces, which are characterized by the division of the mouth into two parts. It is interesting to note that in all these cases the two long sides exhibit slight differences. The box illustrated in Fig. 556, *d*, represents the beaver, which is symbolized by the hind-legs and the scaly tail, shown on one of the short ends. There is a certain contradiction to the sides in the hip and leg designs on the short end, which also shows the tail.

The boxes shown in Fig. 557 are decorated on a different plan. Here the front and the hind end of the body are shown on the short sides in the same manner as on the preceding group of boxes. The sides, however, show only the shoulder-joint and the arm, represented here in upright position as a profile. The form is particularly clear in Fig. 557, *c*, where the shoulder-joint may be recognized distinctly in the large eye near the middle short front. The smaller

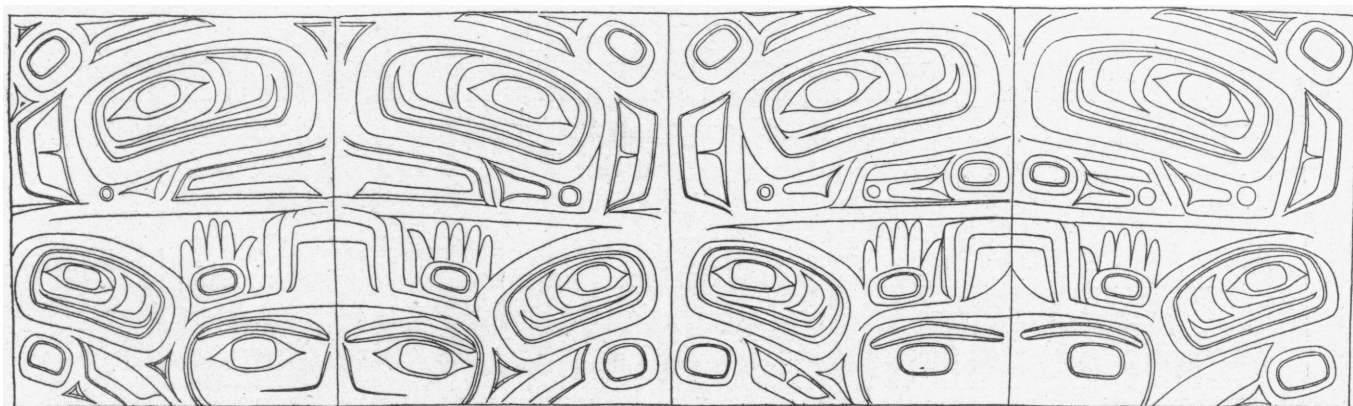
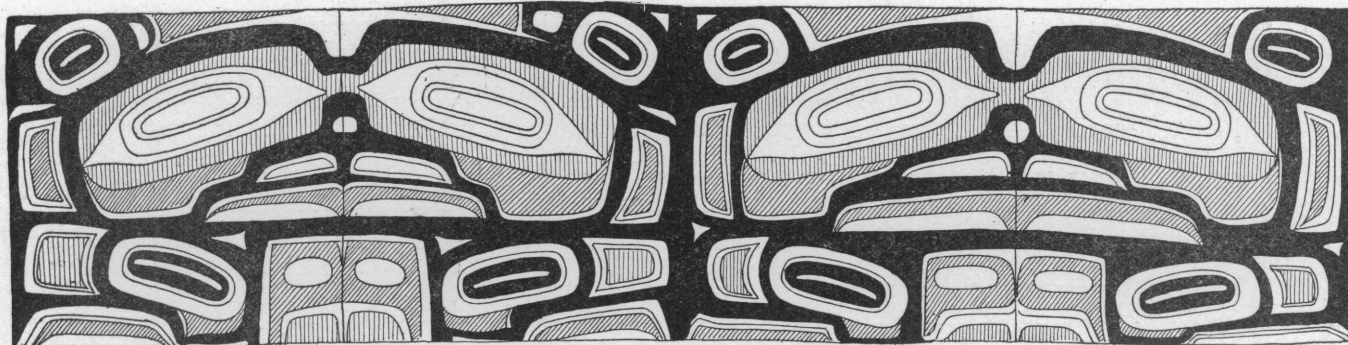
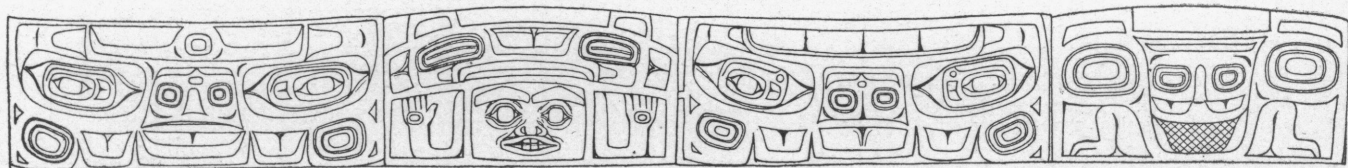
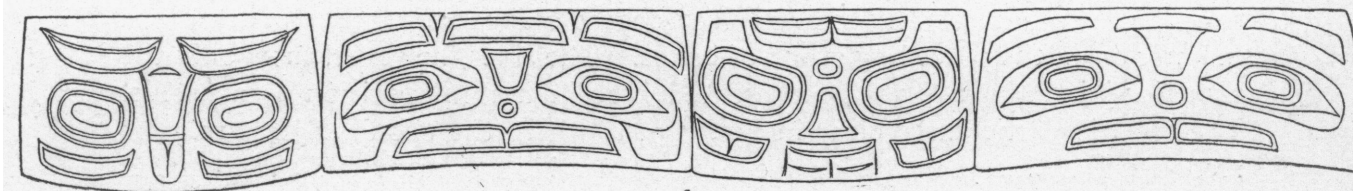
*a**b**c**d**e*

Fig. 556. Carved Boxes. Length, *a*, *b*, 23 cm., 18 cm.; *d*, *e*, 44 cm., 17cm. *a* ($\frac{E}{1728}$), *b* ($\frac{E}{1458}$), *d* ($\frac{E}{1551}$), *e* ($\frac{12}{945}$).



Fig. 557. Carved Boxes. Length, *a*, *b*, *d*, *f*, 43 cm., 14 cm., 23 cm., 24 cm. *a* ($\frac{11}{16}$), *b* ($\frac{11}{16}$), *d* ($\frac{11}{16}$), *f* ($\frac{11}{16}$).



Fig. 558. Carved and Painted Boxes. Length, 58 cm., 29 cm., 32 cm., 36 cm. *a* (187), *b* (188), *c* (189), *d* (190).

eye nearer the outer side is the foot-joint, while the paws are placed under this foot-joint. In Fig. 557, *b*, the details are not quite so distinct, but the wing-feathers attached to the shoulder-joint may readily be recognized. The small eye in each lower corner of the side of the box probably represents the foot-joint, while the talons are turned up between the foot-joint and the shoulder-joint. The principles of arrangement of Fig. 557, *a* and *d*, will be best understood by comparing these two figures with *e*, where the arrangement of shoulder-joint and arm is perfectly plain. It seems fairly clear that the ornaments placed along the lower rim of the box represent the forearm and the foot.

Fig. 557, *f*, takes a position intermediate between the two last groups. The sides show both shoulder and hip joint, but not in the inverted position characteristic of the boxes shown in Fig. 556.

The box designs shown in Fig. 558 are so intricate that I have not succeeded in analyzing the irregular grouping of eyes, arms, and feet. The box shown in Fig. 558, *a*, consists of four profile designs. I am not certain, however, which of these is intended to represent the face, and which ones the sides of the body. In *b* the leg designs on those two sides which are carved down to the bottom are quite distinct, but the rest of the figure is not clear. The same is true in regard to the significance of the leg and feet designs, which are quite distinct in Fig. 558, *d*.

The fixed character of the form of the head on the blanket, and its difference as compared to the heads on trays and boxes, suggest that the whole animal figure as such, in its general proportions, is a fundamental characteristic of the blanket design without any reference to its significance. We shall see presently that the various forms which have in common the traits heretofore discussed are interpreted as various animals; while the same animals, when represented on boxes and trays, have forms different from those on the blanket, but characteristic of the object on which they appear.

In order to illustrate more fully the arrangement of the designs, it seems desirable to discuss here the significance of the various design elements. The various parts of the patterns which enter into the composition of blanket designs are given definite names by the Tlingit. These have been collected by Lieutenant Emmons, and are illustrated in Fig. 559. In our further descriptions of designs, the pattern names here given, and their numbers, will be applied. It will appear, however, that many of these patterns, notwithstanding their definite names, are used merely as ornamental elements, without any reference to their signification. All the patterns are well-known elements in painted designs. Thus the eyes of figures found on painted and carved boxes have the same forms which we find here in designs 3, 6, and 8; and, although the third design is called the head of the salmon-trout, it is almost always used to indicate the eye of some creature.

Attention is also called to the similarity of the mouth design (10) and the eyebrow design (5). When viewed independently, the two are apparently

quite identical. The same is true in regard to the design "one within another" (15), the nostril (12), and some of the simpler forms of the eye design (7).

The ear (13) is identical with some of the designs called the wing-feather of the red flicker (20). It is also impossible to draw a definite line between the white part of the jaw design (11), the hair-ornament design (18), and the slit design (19).

It is important to note the significance of the simpler form of the eye design on the blanket patterns as well as in other designs. In Fig. 548 the eye design appears at the base of the foot near the lower edge of the blanket. In Fig. 546, two eyes appear in a similar way in the talons at the sides of the central body. The two characteristic eyes near the lower edge in the middle of the blanket are interpreted as a part of the tail of the animal here represented. Another good case of the application of the eye design in a similar connection is shown in Fig. 562, *a*, where it again appears near the base of the paws in the centre of the design. According to the statement of the natives, which is corroborated by the objective evidence of the designs, these eyes are intended throughout to indicate joints. According to a statement that Dr. Farrand received from some Bella Bella Indians, it is more particularly the ball-and-socket joint viewed in cross-section, the inner circle being

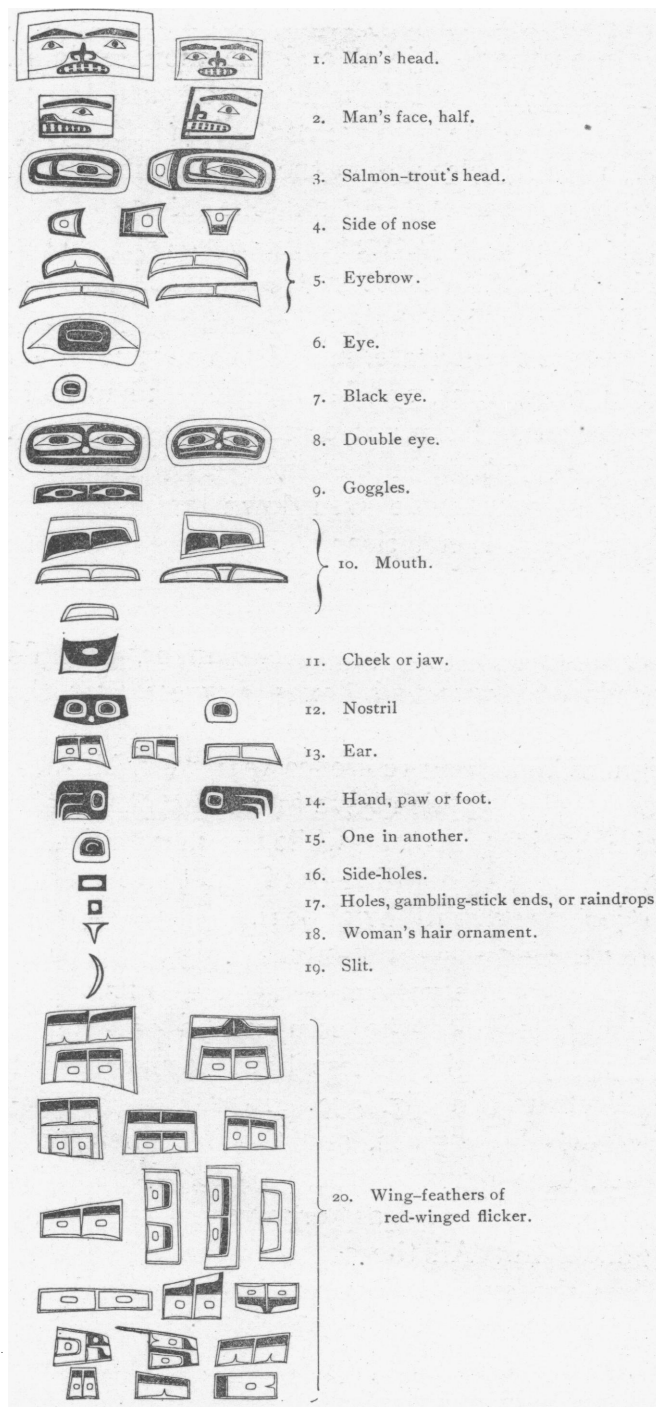


Fig. 559. Names of Elements of Patterns, according to G. T. Emmons.

the ball, the outer circle the socket. According to the Kwakiutl theory of art, the joint is applied in the same manner. Thus its significance in all the cases where it appears in the base of paws is perfectly evident. It is intended

to represent the wrist or ankle joint. In the same way the two eyes, which are characteristic of the first type of design under the body, must always be

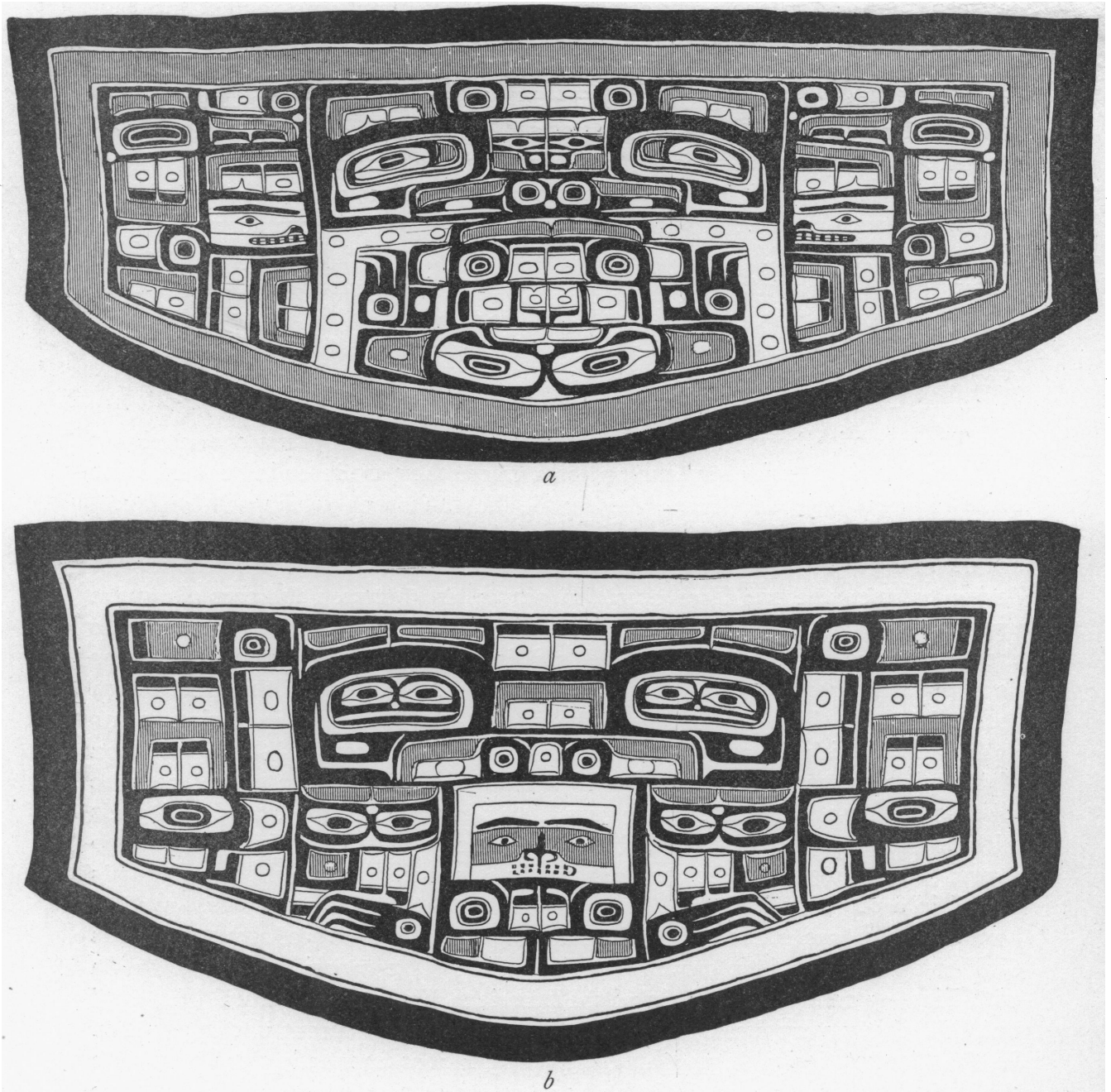


Fig. 560. Blankets. *a*, Field Museum of Natural History, Cat. No. 19586.

a. The design represents a bear sitting up. The eyes and the adjoining round wing designs represent the tail. The body is not decorated with the usual face design, but has instead the design of the mouth, two eyes, and wing designs. The lateral fields represent the bear's body and at the same time the raven in profile (Emmons).

b. The design represents a bear under water. The inverted faces under each jaw, with adjoining wing design, represent the forehead with attached flippers; the lateral fields, the raven sitting, the beak turned outward, the wing on the middle outer part; while the foot is represented by the inverted eye and the adjoining round wing design below, and the tail by the wing designs along the lower border (Emmons).

explained either as the joint of the tail or as the hip-joints, according to the forms constituting the rest of the figure. From this point of view, the face on the body also becomes intelligible. I called attention before to the relation between the face on the body as shown in the blankets, and on the box Fig. 551, *a*, and the designs shown on the body in Figs. 551 *b* and 552. Here it is quite apparent that the two dark eyes are thought of in the position of the shoulder-blades; and it does not seem unlikely that from this initial concept, which will result in two eyes placed in a somewhat square field, the face on the body has been developed by a natural elaboration of this design. It is, however, just as possible that the face may be simply intended to fill in a vacant space, as appears to be the case in a considerable number of instances. In accordance with this method of explanation, the two inverted eyes near the upper edge of the second type of blankets are explained almost throughout as the joints of a tail. It will be noticed that in this case the size of the tail-joints is entirely out of proportion as compared to the eye which is shown in the lower portion of the blanket. In the first type of blankets the eye is always much larger than any of the joint designs.

The wing-feathers of the red-winged flicker are used very commonly as decorative designs, evidently also in cases where they are intended to represent quite different objects. Thus, the double flicker-feather, which will be found as the third design from the end in the table of named patterns (Fig. 559), occurs in Fig. 548 as the beak of a bird, occupying the middle of the mouth design between the two large eyes. It occurs also between the ears along the upper border of the design as the single flicker-feather. Here, as well as over the beak of the bird, in the lateral fields, it is used only for filling in parts of the design which otherwise would remain undecorated. In Fig. 546 the same design occurs between the eyes, just over the nostril, and here also it obviously has nothing to do with the red-winged flicker. Many other cases of this application of the wing-feather design, simply for the purpose of filling in spaces, may be observed in practically all the blankets. A comparison of Figs. 560 *b* and 562 *a* with the box designs Fig. 551, shows that the wing-feather design serves to express the forearm and the upper arm. In Fig. 551, *a*, we have the two hands placed in a position similar to the paws in Figs. 546, 560 *a*, and 562 *a*. On the box the parts are connected with the body by a narrow red strip, which is divided by characteristic curves into two parts. A comparison of this design with Figs. 43 and 51, "Bulletin of the American Museum of Natural History," Vol. IX, shows very clearly that they are meant to represent the upper arm. In the blanket design Fig. 560, *a*, the two sections connecting the paw with the body may be recognized distinctly as upper arm and forearm, in the same way as in the blanket Fig. 584. In the blanket designs Figs. 546 and 562 *a*, the space that is available for the upper arm is still more condensed; but it is nevertheless quite obvious that the two wing-feather designs which lie on the outer sides of the paws must be interpreted here also as the forearm and upper

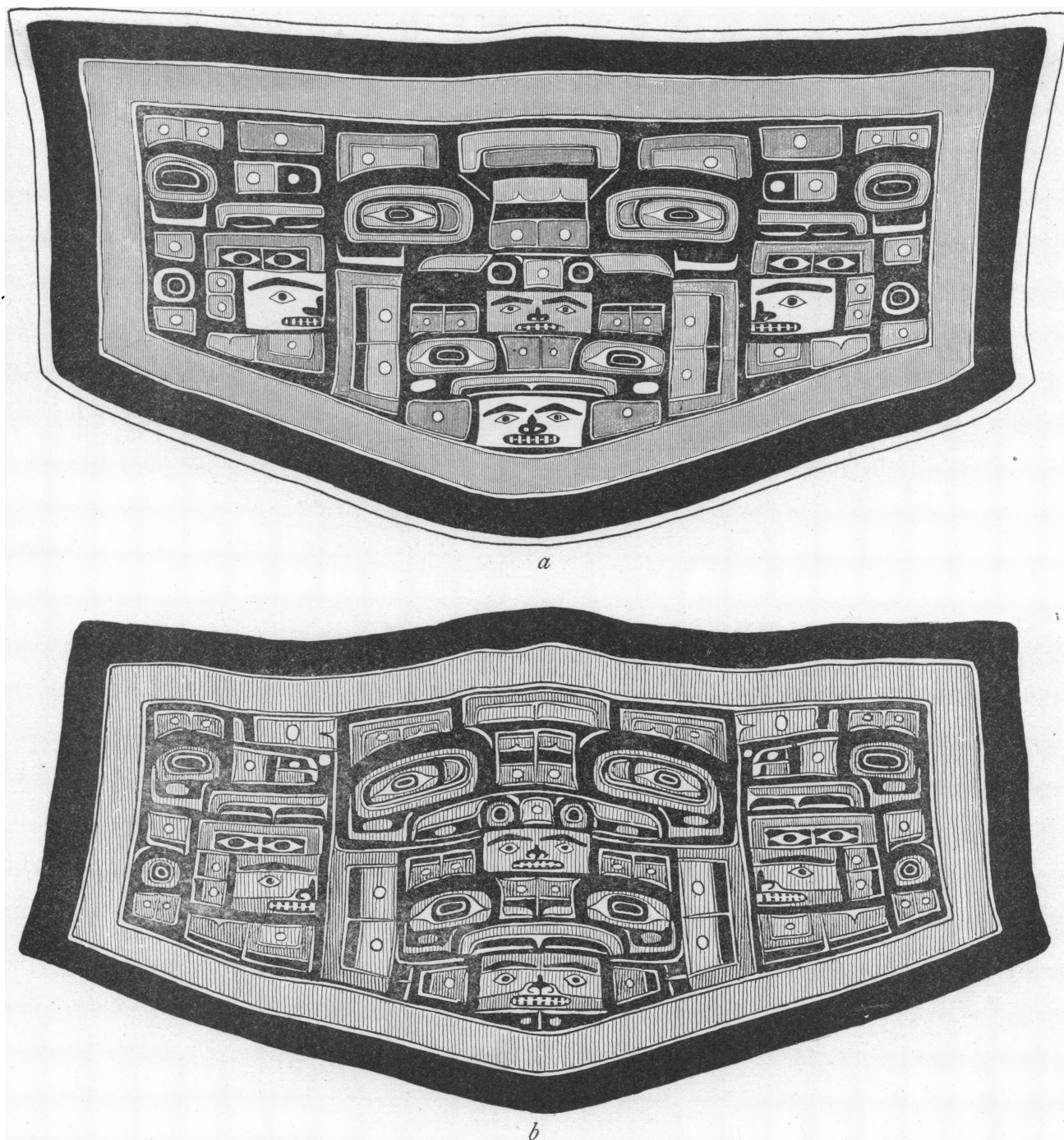


Fig. 561. Blankets. *a* ($\frac{R}{1501}$). Length, 168 cm.

According to Emmons, the design represents a female wolf and young one. The body of the wolf has the form of a hawk; the two eyes and the double wing design between them, near the lower border of the blanket, being the face of the hawk; the double feather design over these eyes, the hawk's ears; the lowest white face, the body of the hawk; the wing-feather designs extending downward under the jaw of the wolf, the wings of the hawk. The lateral fields represent the young wolf sitting up, probably at the same time the sides and back of the wolf's body.

According to Swanton, it shows a young raven. The body of the raven is occupied by two profiles of ravens. The face at the bottom is the raven's tail; the lateral wing designs extending downward from under the corners of the jaw are the wings of the raven. The lateral fields represent two young ravens in profile.

arm. Judging by this analogy, I think there can be very little doubt that the two wing-feathers placed by the sides of the body in Fig. 548 may be considered



Fig. 562. Blankets. *b*, Field Museum of Natural History, Cat. No. 19595.

a. According to Emmons, the design represents either a wolf sitting or a whale diving. When viewed as a wolf, the head is on top; the central face is the body, on each side of which are the fore paws. The two eyes below are the head; the central face, the back of the whale; the two eyes above, the fluke of the whale's tail; and the paws on each side, the whale's fins. The lateral fields are explained as a raven.

b. The design represents a whale diving, the head shown at the bottom, the tail on top. The face in the middle represents the body of the whale; the lateral fields, the sides and back of the body, at the same time a raven sitting; the lower eye in the side field, with attached wing designs, being the foot, the wing designs along the lower border, the tail of the raven (Emmons).

in the same way as the two parts of the arm of the animal here represented. Since the animal here shown is a bird, these feathers are in this way made to represent the bones of the wing.

Similar considerations have determined the distribution of ornaments in the design Fig. 560, *b*. Here the two feet will be recognized at the lower edge of the design. Adjoining it are two long white flicker-feather designs, which obviously represent the legs. Each of the two inverted double eyes under the jaws must be interpreted as a shoulder-joint, to which is attached the lower part of the arm in the form of a flicker-feather design.

The forms here discussed are interpreted as various kinds of animals,—birds, quadrupeds, sea-monsters,—but never as the red-winged flicker, nor can the parts be interpreted as ornaments made of flicker-feathers. It is obvious that we are dealing here with a fixed form, which has a conventional name, and which is used for a variety of purposes.

It will be noticed that this design occurs in three principal forms. In one of these the design is cut off square in the upper end. Most of those shown in Fig. 559 are of this type. Another characteristic form of this design has the pointed wing-feather, as the second one in the series. A third form, which is not given in the series of named designs, seems to be quite common. It has a rounded tip, and may be observed, for instance, in the beak part in front of the upper eye in the lateral fields of Fig. 548, also in front of the lower lateral eye in Fig. 546, *b*, and in the central field in Fig. 572.

The wing design is applied wherever a somewhat oval or rectangular field which is situated laterally has to be filled in, particularly when the field adjoins another design which is surrounded by heavy black lines, and which forms part of an animal body. For this reason the design appears very commonly in front of, over, or under the eye design. It is used to fill in the ears; it appears at the side of the body, as in Figs. 548 and 561; and it is used to fill in small fields which adjoin black lines, as, for instance, in the lowest section of the lateral fields in Fig. 548, *a*. The white circle on a yellowish background, black tip, and small white segment at the base, are almost ever-present. The white segment at the base is limited very often by a pointed double curve,—like a brace,—which divides the adjoining yellow field more or less distinctly into two halves. These may be observed, for instance, in one of the ear designs in Figs. 546 and 548, and also in the design over the nose in Fig. 561.

Judging from the general application of this design, it is quite obvious that it is not primarily a feather design, but that it is a decorative element used throughout in certain definite positions for the purpose of filling in.

Flat black curves seem to be used quite often for indicating the teeth. These may be observed in Figs. 546 *b*, 548, on the body of Fig. 562 *b*, in the lowest face in Fig. 563 *a*, in the lower face of Figs. 564 and 570 *a*. It will be noticed that in the design in the blankets of the second type the place of these teeth designs is very often taken by flicker-wing designs (see Fig. 566).

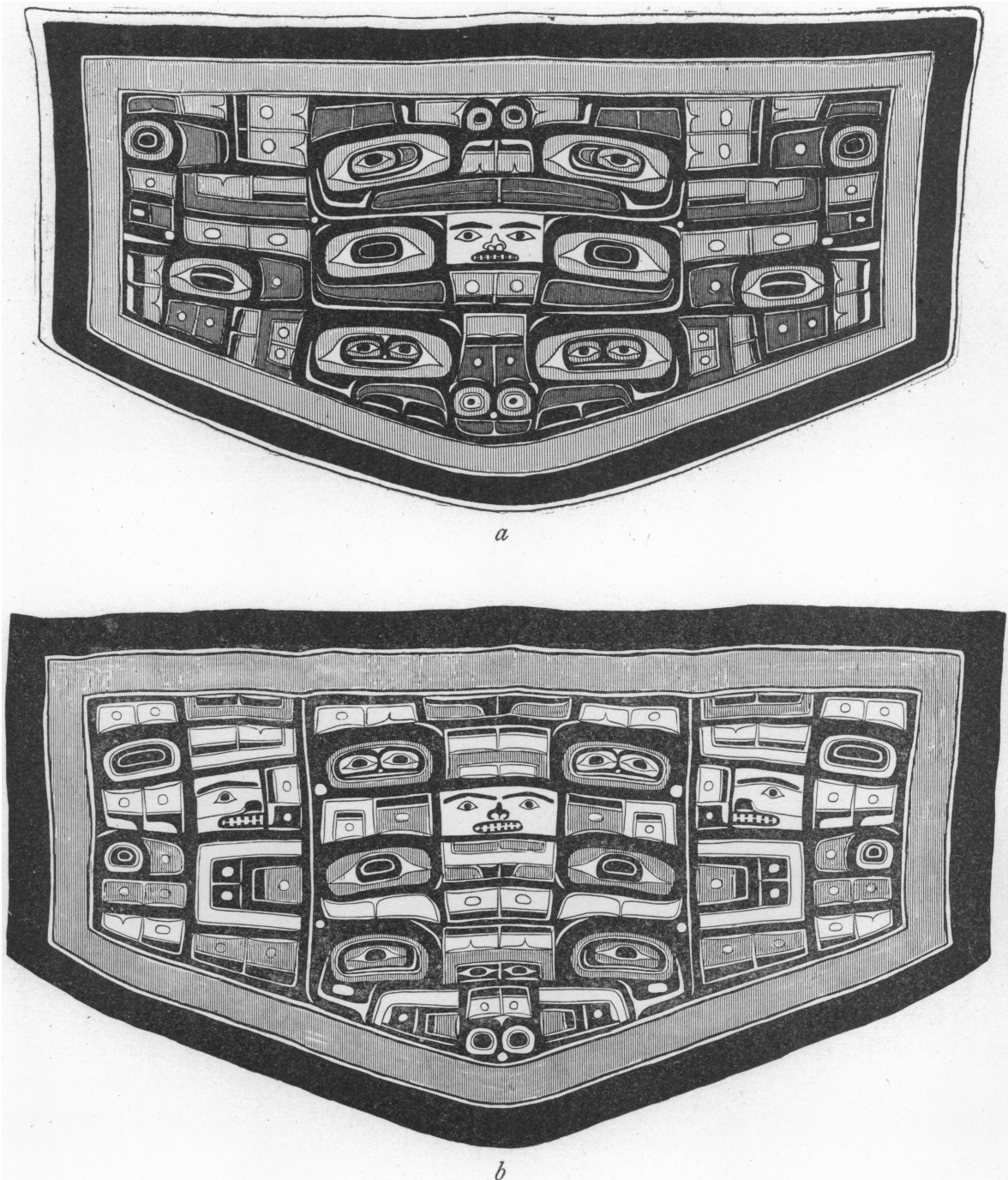


Fig. 563. Blankets. *a* ($\frac{1}{2}$). Length, 158 cm. *b*, U. S. National Museum, Cat. No. 168292.

a. According to Emmons, it represents on top a brown bear sitting up. On the body of the bear is a raven's head; the hind-quarters are treated as a whale's head, the eyes being the hip-joints, the mouth the feet, of the bear. The principal figure is also explained as a whale; the head is below. The body, which is turned up, is treated as a raven's head, and its tail as a bear's head. The side-panels are the sides and back of these animals, but also an eagle in profile on top, and a raven in profile below.

According to Swanton, the whole blanket represents a halibut; the head is below; the whole large middle face, the body; the face near the upper margin, the tail; the wing design next to the lowest head, the small pectoral fins; the rest of the lateral fields, the continuous border fin.

b. According to Emmons, the design represents a whale; the side-panels, a sitting raven in profile.

Attention has been called before to the fact that the face may be used simply for the purpose of filling in the field occupied by the body of the animal. The use of faces for the purpose of filling in appears much more clearly in those cases where the profile is used. In Fig. 572, *b*, for instance, where the distinct line between the central field and the lateral fields of the blanket is missing, it is obvious, even at first glance, that the profiles of faces found on both lateral wings are only intended to fill an empty space in the design. Commonly the space, which in this case is occupied by a face, is occupied by the wing-feather design, as may be seen by a comparison between the closely related patterns *a* and *b* of Fig. 572. The face is quite common in this position, but it is not always so distinctly marked as a design intended to fill in an empty space. It occurs in this position in Figs. 560 *a*, 561 *a* and *b*, 562 *a* and *b*, 564 *a* and *b*, 570 *b*, and 572 *b*.

According to the interpretation given by the Indians, it would seem that the essential concept of the lateral field is that of a sitting bird, the head stretching in profile across the whole upper part of the field, the central part of the field on the outer side being occupied by the body, while the tail and feet stretch along the lower border. Thus an empty field is always left between the beak and the tail, which is occupied either by the face design just discussed or by various forms of wing-feather designs. Even if this explanation of the lateral fields should be secondary, the fact remains that in every single case a somewhat rectangular middle field may be distinguished, which is occupied either by the face design or by wing-feather designs.

It would seem that these considerations make it quite clear that the blanket pattern is fixed in all its essential features without any particular reference to its interpretation, and that in any attempt to represent a definite animal the freedom in the arrangement of motives or of symbols of the animal is quite limited; and that, on the whole, the fundamental traits of the pattern remain the same, no matter what animal is to be represented.

We will now revert to the discussion of the blanket types. In the blankets shown in Fig. 560, *b*, and on Plate XXVI, the eye design under the jaw of the principal figure has been elaborated into a wing, the joint of which is indicated by a double eye. In the latter specimen there are important modifications of the lateral fields, into which the central figure cuts deeply, while the upper part is more distinctly used as a wing design belonging to the central figure than is the case in other blankets. Evidently the profile of the human face shown in the lower portion of the lateral fields is inserted here in imitation of the profile seen in a similar position in Fig. 560, *a*. The displacement of the goggle design under the profile is also peculiar. Figs. 561-563 must be classed with the first type, the fundamental pattern of which is shown in Fig. 549. The two blankets shown in Fig. 561 are evidently made from pattern-boards which were originally copies of the same original board. All the essential traits of the two designs are the same, but there are deviations

in the details. The mouth of the central animal figured, which is perfectly plain in *b*, is indistinct in *a*, on account of the great width of the black lines which form part of the body and of the head. There are also differences in the elabo-

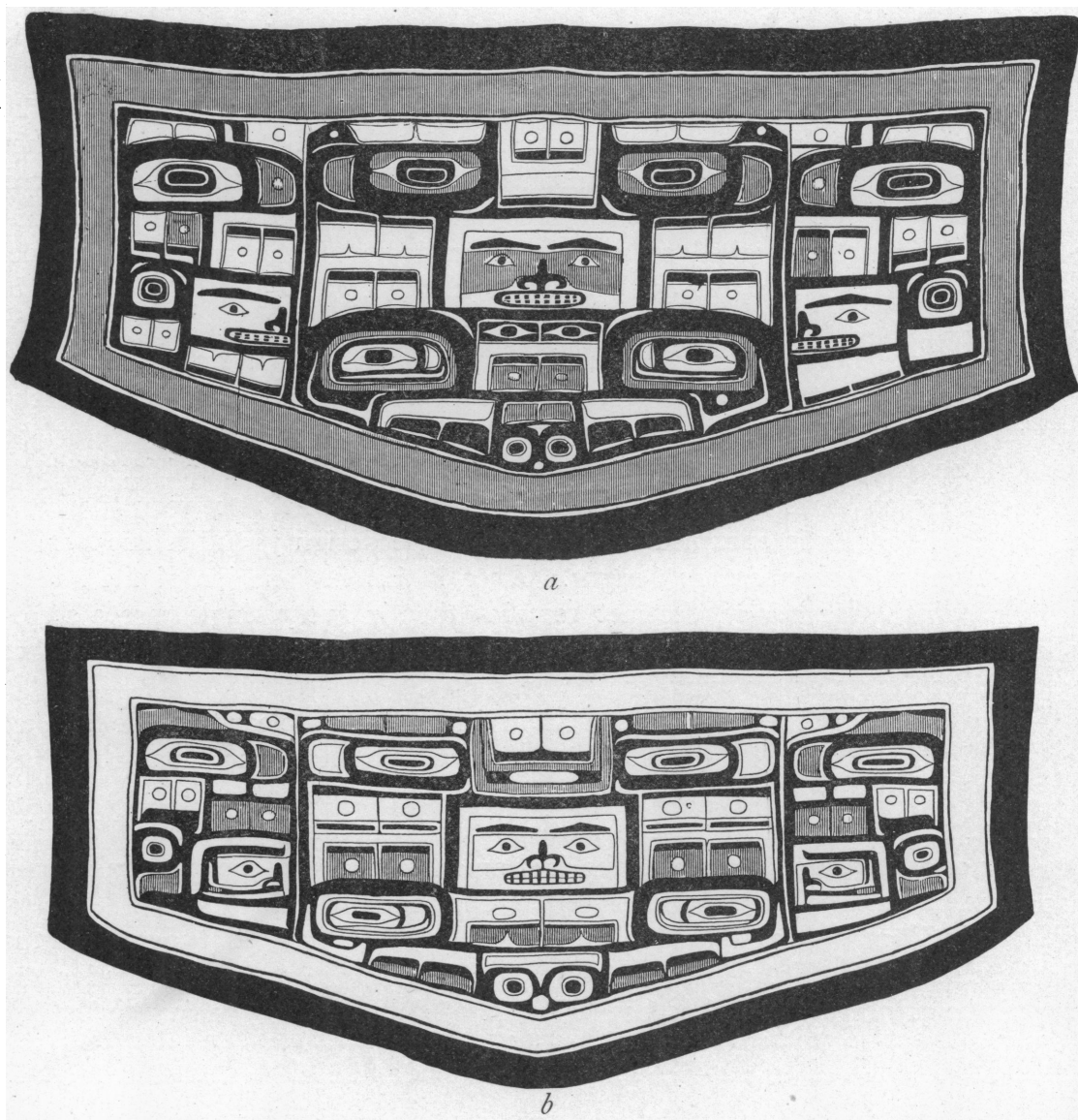


Fig. 564. Blankets. *a*, U. S. National Museum.

a. According to Emmons, the design represents a whale. The head, with nostrils and mouth, is shown below. The central face represents the body; the eyes near the upper border are the flukes of the tail; the large wing designs at the sides of the body, the fins. The lateral fields represent a young raven sitting, at the same time the sides and back of the whale.

b. According to Emmons, it represents a whale diving, the details of explanation being the same as in Fig. 564, *a*. The lateral fields represent a young raven sitting.

ration of the wing design, in the ears of the central figure, in the beak of the profile head in each upper lateral corner, and in the form of the wing design over the nostril of the central animal. This specimen differs from those pre-

viously described (Figs. 546, 548, 560) in that the two eyes near the lower border are not inverted, and are placed a little higher than usual and farther apart. It would seem that this change in position is related to the process by which the whole lower part of the central field has been combined into a single animal head, in which the human face which in the preceding specimens represents the body appears now simply as a forehead-ornament of the same character as the upper human face found in Fig. 548. In this manner the human face near the lower border may also be understood as the body of that animal which occupies the lower portion of the middle of the central field. If this explanation is correct, then the slight modification of the fundamental design must be considered as due to the endeavor to represent an additional animal in the lower part of the blanket design. The modification of the fundamental plan found in Figs. 562 and 563 is even more marked. Here the two lower eyes have been moved out towards the corners of the middle field, and are in size equal to the upper eyes. Owing to this process, the middle field becomes somewhat similar to the second type of blankets, with the exception that the upper two eyes are upright, not reversed. It does not seem improbable that in this case an assimilation with the more symmetrical second type has taken place. Hand in hand with this change goes the treatment of the central face as an animal head in place of the usual human head. The peculiarity of arrangement in

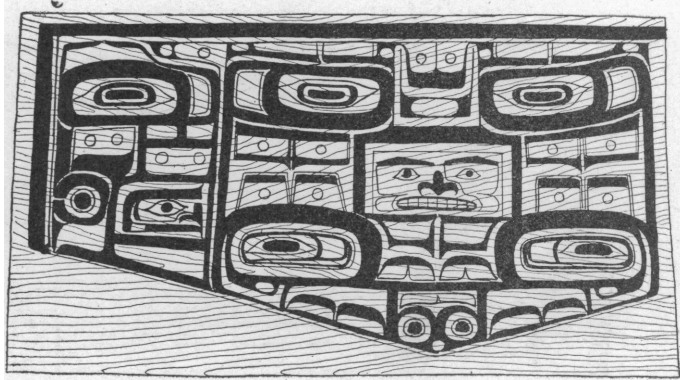


Fig. 565. Pattern-Board for Blanket shown in Fig. 564, *b*.

the two blankets represented in Fig. 563 lies particularly in the treatment of the field on each side of the central body, which is here developed as an eye almost equal in size to the two upper and lower eyes. It seems likely that this eye is related in its origin to the small central eye design on each side of the body in Fig. 548; but it has been so much enlarged that the whole central face has been reduced very much in size. There is a specimen in the Peabody Museum of American Archæology in Cambridge, Mass. (Cat. No. 56679), which is practically identical with the one shown in Fig. 563, *b*.

Turning from these blankets to those of the second type, we may recognize, on the whole, much greater uniformity of treatment. The two designs in Fig. 564 are so closely related, that we are probably not mistaken if we ascribe them to the same original pattern-board. The three designs in Figs. 566 and 567 are also so nearly alike that they must be ascribed to the same pattern-board; and the same is true of the designs in Fig. 568, *a* and *b*. Among these three sets, the two types shown in Figs. 566–568 seem to be particularly closely related.

The essential points of difference consist in the inversion of the wing design in the centre of the upper border, the lack of the goggle design under the central face in Fig. 568, and the different arrangement of the eye and wing design under

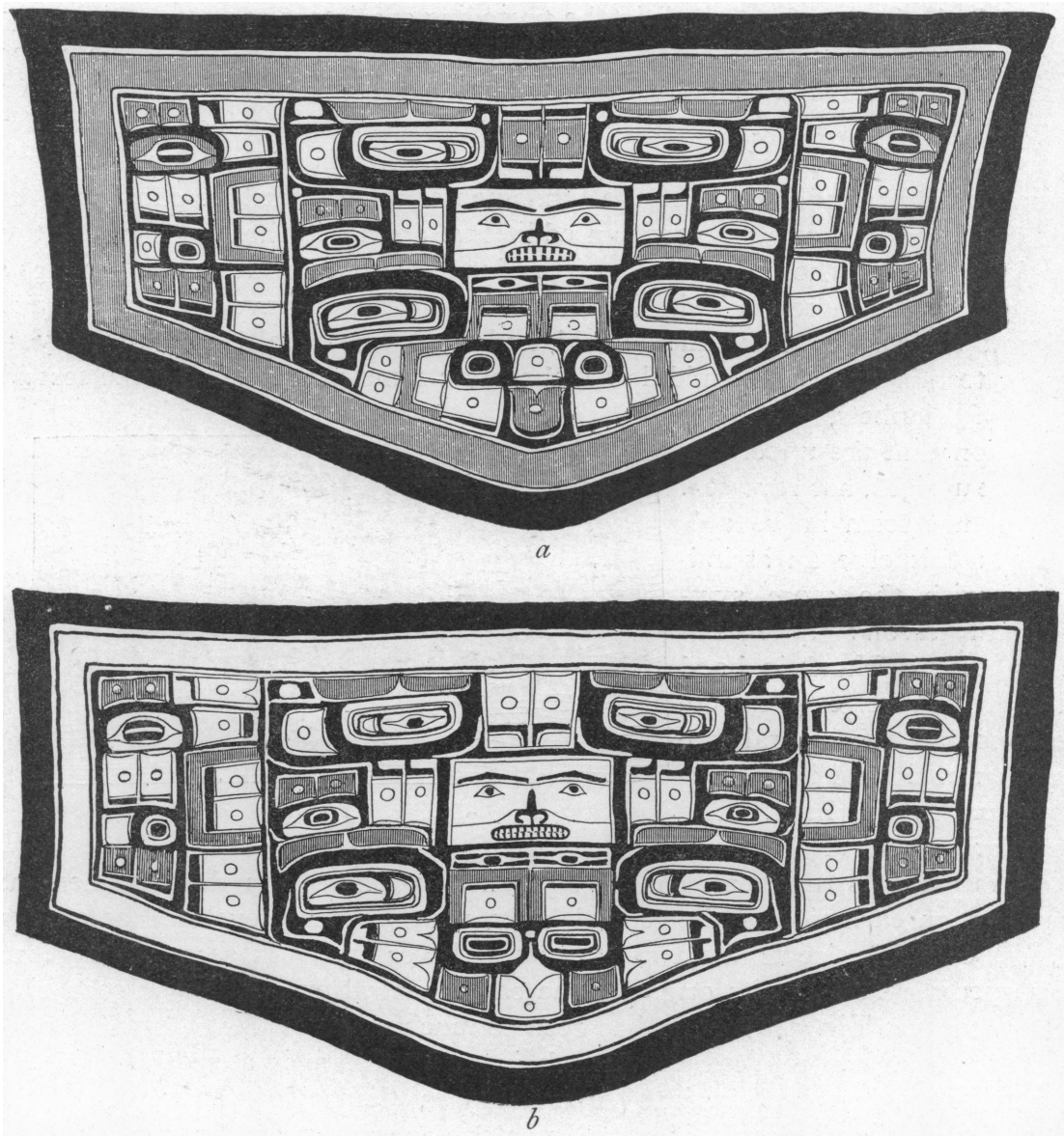


Fig. 566. Blankets.

According to Emmons, the design represents a whale diving, the explanation being the same as that of Fig. 564, *a*. The lateral fields represent the sides and back of the whale, at the same time a young raven sitting.

the central face. The adjoining wing patterns are also slightly different. The lateral fields in the two styles are very much alike, except for a few minor differences in wing patterns. The six blankets (Fig. 567 representing two specimens), probably go back to the same original pattern-board. While the two blankets

shown in Fig. 570 are not so readily reducible to the two patterns of this type so far discussed, they are evidently closely related to them. It would appear that Fig. 570, *a*, is related to the pattern Fig. 564. It has in common with it the tooth pattern and the central nostril pattern along the middle part of the lower border and the peculiar position of the lower eye in the lateral field close to the outer border. The wing designs above and below this eye are also the same in the two types. The essential difference consists in the occurrence of the eye and nose of moderately large size at the sides of the body, where in the pattern shown in Fig. 564 only wing designs occur, and in the absence of the face design in the lateral fields. It is worth remarking that the eye design at the sides of the body agrees with the form in Fig. 568. On the other hand, the blanket shown in Fig. 570, *b*, seems to be closely related to the type shown in Figs. 566-568, particularly in

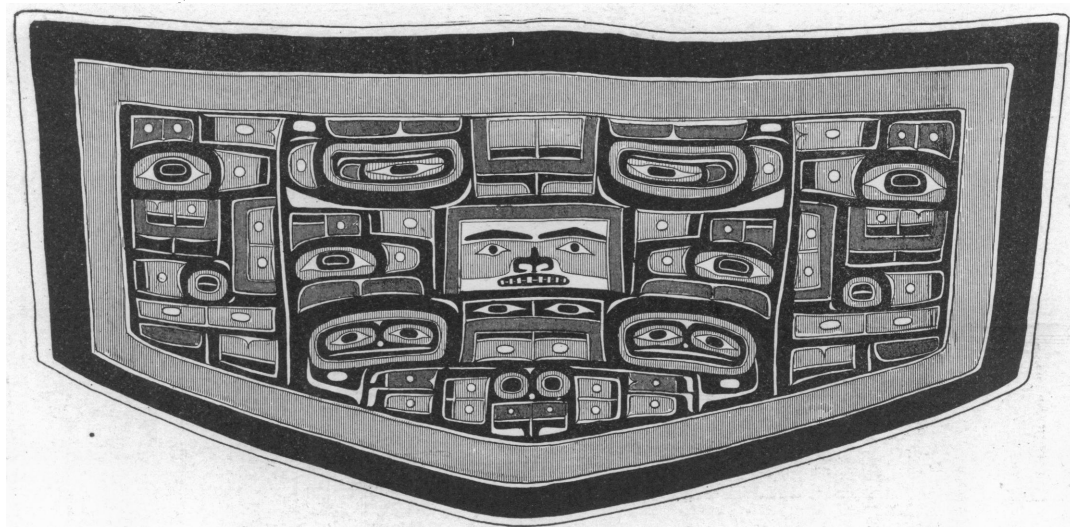


Fig. 567. Blanket. ($\frac{1}{2}$ and $\frac{1}{4}$). Width, 166 cm.

According to Emmons, it represents a whale diving, and in the lateral fields a raven sitting. The details of the explanation are the same as given before.

According to Swanton, it represents a wolf with young. The head is shown below. The hind legs and hip-joints are represented by the two large eyes and the adjoining ornaments along the upper border, the two dark segments just over the eye being the feet. The face in the middle of the design represents, as usual, the body of the animal. The small eye design, with adjoining ear and wing-feather designs, in the middle on each side of the body, are interpreted as front, leg, and foot. The lateral designs are explained as a young wolf sitting.

regard to the treatment of the central part of the lower border. The field at the sides of the body, between the lower and upper eyes, is treated in a way similar to the type Fig. 564.

Lieutenant Emmons has found one more blanket of this type which is closely related to the type shown in Fig. 570, *b*. The whole lower portion of the central field agrees in the two specimens, the only exception being, that, in the blanket which is not illustrated, the two eyes on the upper border of the blanket are drawn apart, and resemble most closely, in their arrangement, Fig. 567. They differ, however, in that the outer portion of the eye is considerably extended, and encroaches upon the lateral fields, thus condensing the two birds' heads in

each upper corner. Thus it will be seen that the lateral fields are not clearly defined in this specimen. In place of the angular wing design which occupies the region under the beak in the lateral field in Fig. 567, we have here a raised paw

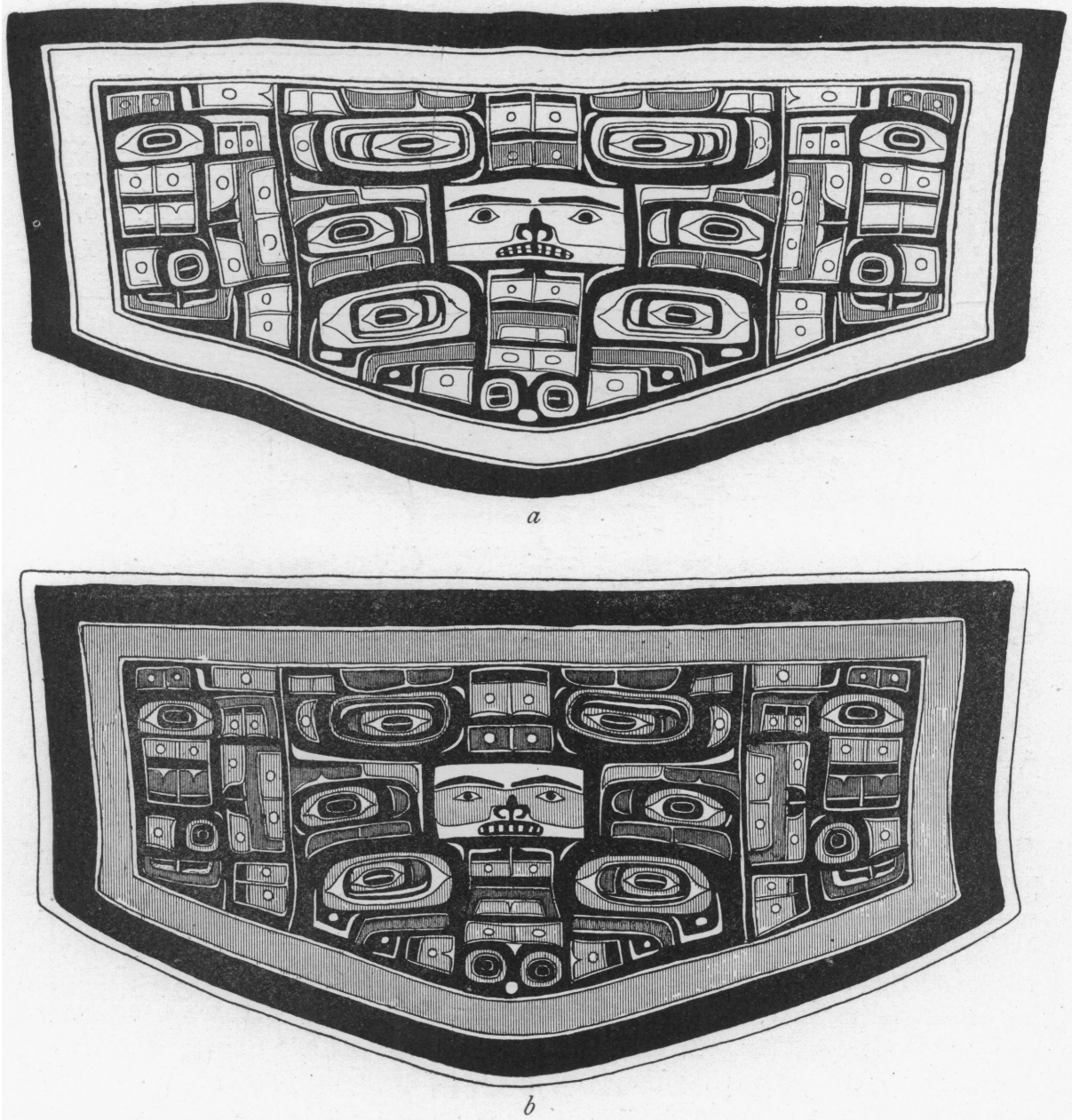


Fig. 568. Blankets. *a* ($\frac{1}{2}$). Width, 168 cm.

a. According to Emmons, the design represents a whale, and in the lateral fields the side and back of the whale, at the same time an eagle sitting. The details of the explanation are the same as those given before.

According to Swanton, this blanket represents a killer-whale; the central design on each side of the body, each one-half of the dorsal fin; the small wing designs in the lateral fields on each side of the lower face, the side-fins; the rest of the lateral fields, the ribs and other inner parts of the body.

b. According to Emmons, the design represents a whale diving, and in the lateral fields a raven. The details of the explanation are the same as those given before.

in the same position as the raised paw in Fig. 560, *a*, which occupies the corresponding position just under the outer extension of the middle eyes on the upper margin. This is the only blanket of this type in which paw designs are found, and it is obviously a modification of the group of designs just described.

The following group of blankets (Figs. 571 and 572) still belong to the same type. They differ, however, in that the sharp division between the central field and the lateral fields is broken. Owing, however, to the prominence of the large eye designs in the middle field and the smallness of the designs in the lateral fields, the central field stands out fairly prominently. In Fig. 572, *a*, the same change of arrangement has occurred that may be observed in Fig.

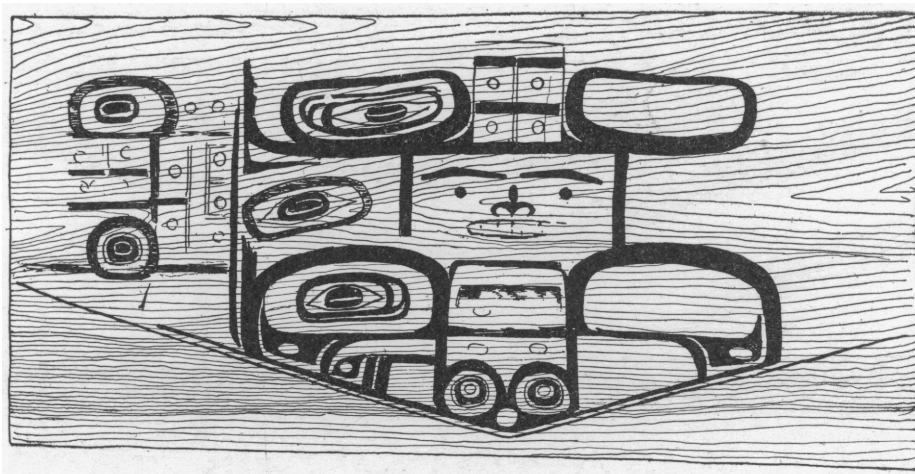


Fig. 569. Pattern-Board for Blanket shown in Fig. 568, *b*.

570, *b*. The inverted eyes near the upper border have been moved together, so that they come in contact in the middle.

Fig 571 shows a blanket in which a modification of the type of design here discussed has taken place, which is somewhat similar to the modification of the first type shown in Figs. 561 and 562. The fundamental difference consists in the substitution of an animal head for the human face in the middle of the central field. Thus the human face, which still persists, is much reduced in size, and may be compared to the human face in Fig. 548, over the nostril of the central figure. The enlargement of this head has reduced the size of the space at the side of the body and between the upper and lower eye, which is here filled with an eye design, with adjoining wing designs. The lateral field is also considerably modified. The upper eye, to which, in almost all the preceding blankets, an ear design was attached, touches the upper border; and the lower eye is placed in the same way, upside down. The line setting off the central field from the lateral fields is not quite so sharp as in the blankets previously described.

In the two blankets shown in Fig. 572 the field at the side of the body,

between the upper and lower eyes, is treated in a peculiar manner, being occupied by a single rounded wing design, which is interpreted as the dorsal fin of a whale. There is little doubt that this characteristic symbol is used here to replace the designs previously described, on account of the endeavor on the

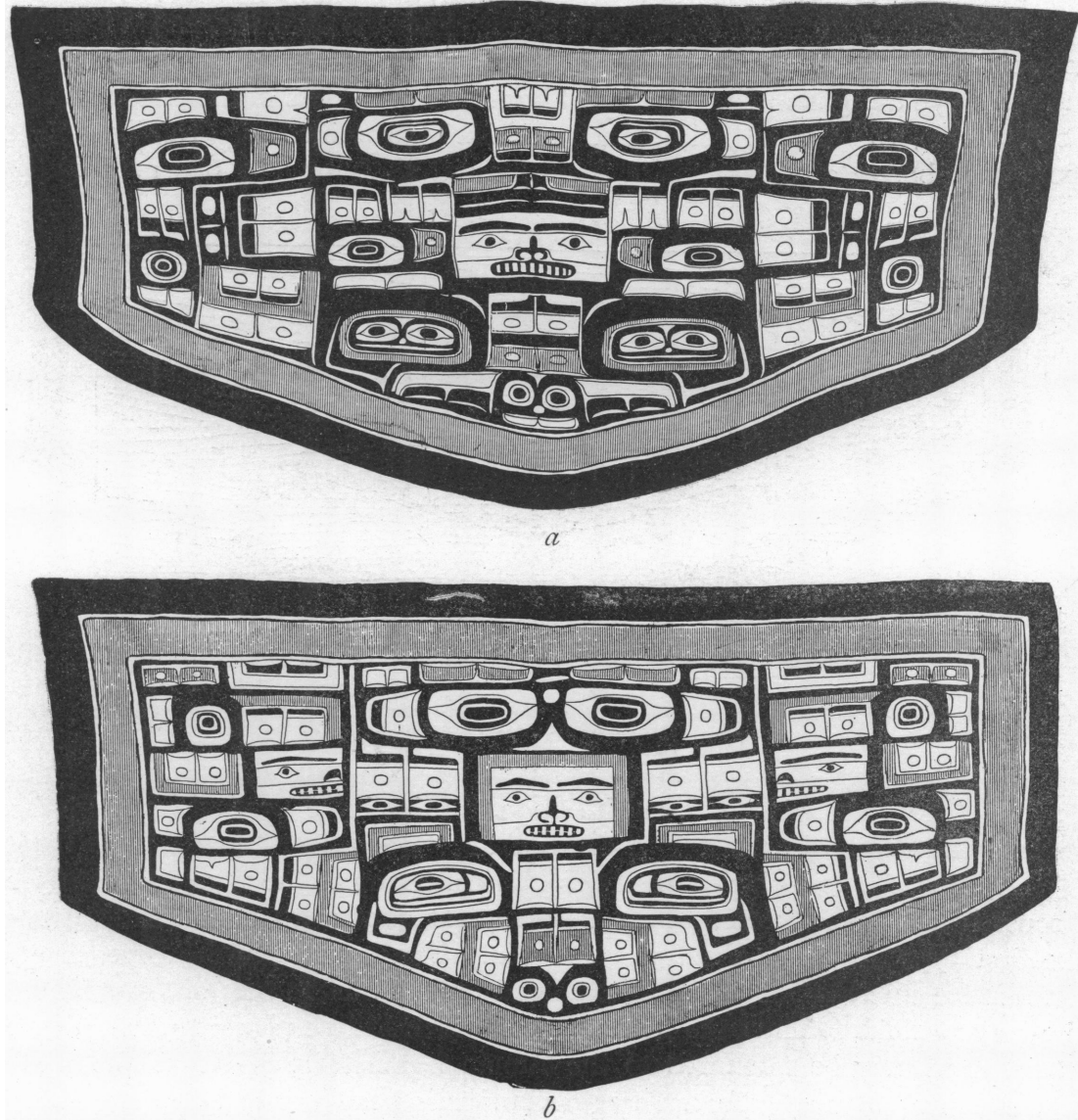


Fig. 570. Blankets. *a*, U.S. National Museum, Cat. No. 20804.

According to Emmons, the design represents a whale diving, the explanation being the same as that of Fig. 564, *a*. The lateral fields represent the sides and back of the whale, at the same time a young raven sitting.

part of the artist to represent the killer-whale. Attention may also be called to the difference in form of the upper attachments to the outer corners of the eye designs at the middle of the upper border, which are here circular in form, while in all previous cases they resemble the jaw design.

In Fig. 572, *b*, a radical re-arrangement of the designs along the lower border in the lateral field has been made, by means of which the lateral field is connected entirely with the middle field. In Fig. 572, *a*, the fundamental traits of the lateral fields, as heretofore described, persist more clearly.

The following series of blankets have been separated because certain of the fundamental traits of the patterns heretofore described are not found in them. A few of them only are old blankets representing peculiar designs, while most of them are evidently modern products which show the gradual

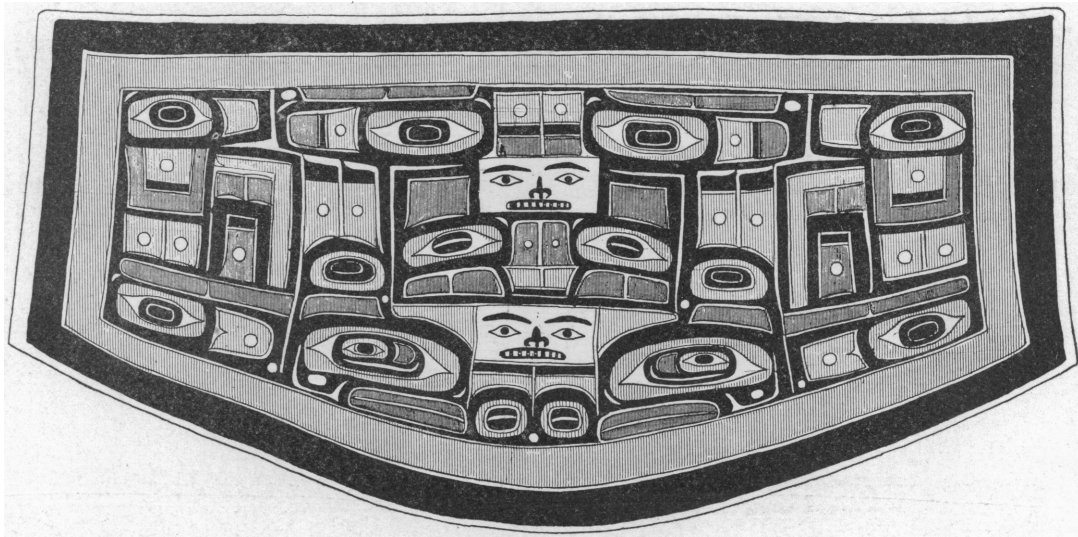


Fig. 571. Blanket (A88). Width, 152 cm.

According to Emmons, the design represents a whale. The explanation is the same as given before, except that the body is indicated here by a larger face, which in its details represents a raven. The lateral fins are indicated by the eye design over the lower head, with the attached wing designs. The lateral fields represent a raven sitting, the eye and adjoining wing design along the lower border representing the tail.

According to Swanton, it represents a whale. The two fins on the side of the body and over the lower eyes are explained as two fins on the back of the whale; the eyes with adjoining wing design in each upper corner of the blanket, as the side-fins; the inverted eye in the lateral fields at the lower border, as whale-bone; the rectangular space in the lateral fields between the upper and lower eyes, as the ribs of the whale.

degeneration of the old blanket patterns. The blanket and blanket-board shown in Figs. 573 and 574 are closely related to the blanket shown in Fig. 560, *b*, and belong to the first type. A comparison of the two illustrates clearly their relationship. The essential difference between the two patterns consists, however, in the fact that the design of the blanket Fig. 573 is not divided into the three fields, as all old blankets are, and that the whole figure is much more realistic, and resembles much more closely the modern paintings of the Indians of the Northwest coast than do older blankets. The apparent realism of this figure is perhaps brought about most strongly by the reduction of the size of the head as compared to the spread wings, the better definition of the tail, and the clearness with which the legs are set off from the wing-feathers. The realism of the figure is much helped also by a yellow band with white circles setting off the whole central figure from the lateral fields. The upper part of the lateral field is also much more strongly subordinated to the central figure than is the case

in the blankets previously described. The upper corners contain no heads, but simply wings,—designs which appropriately represent the feathers on the back of the bird.

To the same type belongs Fig. 575, which is closely related to the blanket shown in Fig. 546. The essential difference in the central design is found in

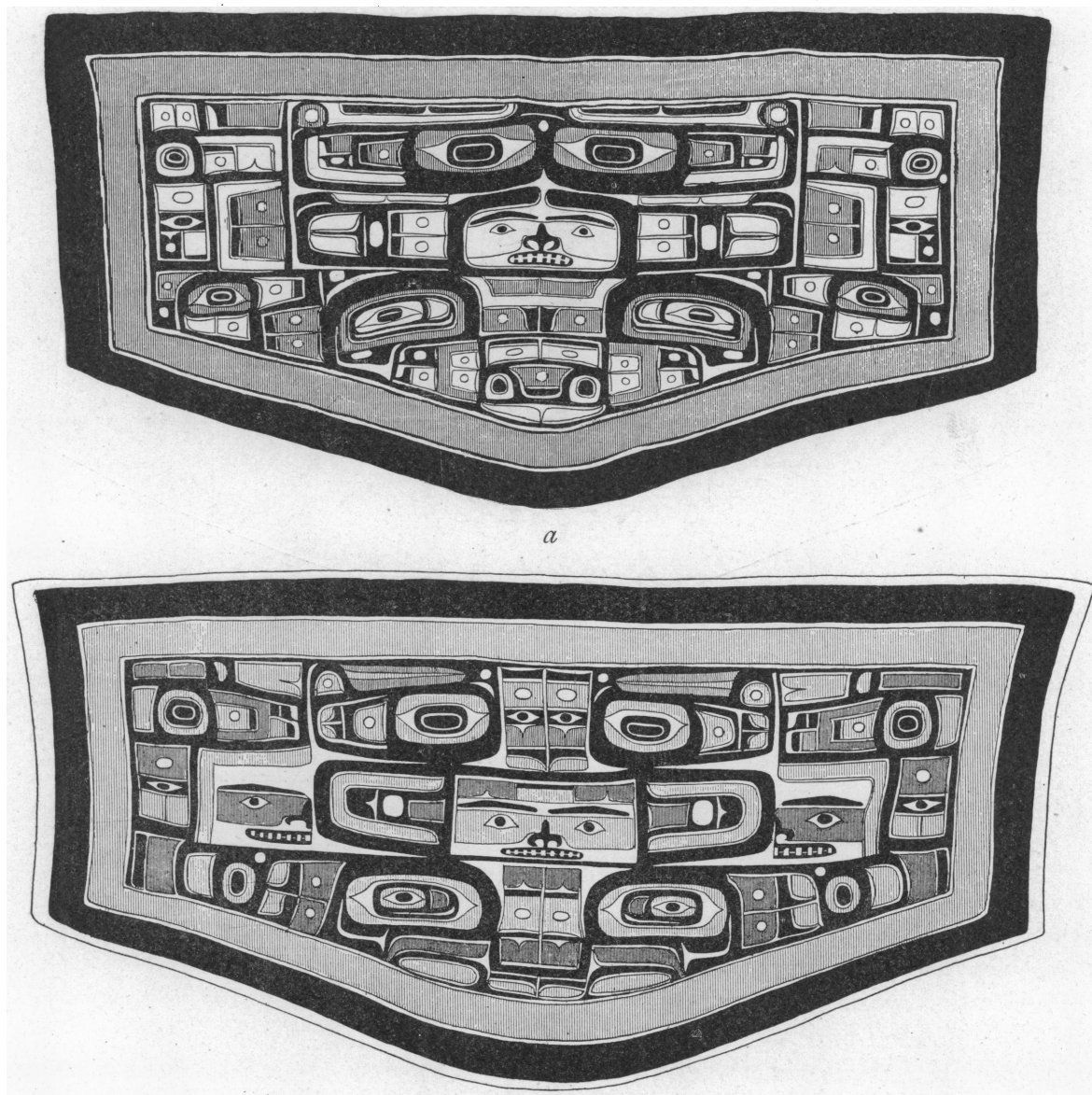


Fig. 572. Blankets. *a*, U.S. National Museum, *b* ($\frac{1}{2}$). Width, 156 cm.

a. The design represents a killer-whale. Below, the head is shown. The face in the middle represents the body, while the flukes of the tail are shown along the upper border. The two lateral rounded wing designs represent the two halves of the dorsal fin; the lateral fields, the sides and back of the whale, and at the same time an eagle sitting, the wing being placed in front of the body towards the middle field (Emmons).

b Same explanation.

According to Swanton, this figure represents a killer-whale, but some of the details are differently explained. The large rounded wing designs extending from the eyes along the lower border of the blanket are explained as the side-fin of the killer-whale; the two faces on each side of the dorsal fin, as the blow-hole. The rest of the lateral design represents the intestines.

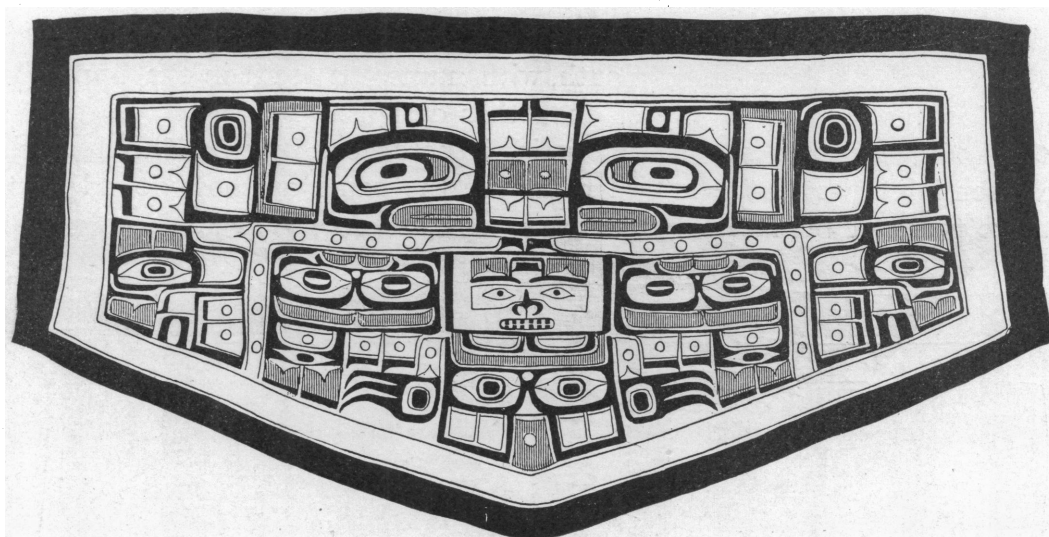


Fig. 573. Blanket.

According to Emmons, it was originally the property of Chartrich, and represents a sea-bear; the upper central part being the head of the bear; the wing designs between the eyes, the rings on his hat; the space below, enclosed by a white line with rings, the body of the bear; the field in each upper corner, the side-fins; the field in each lower corner, the back, which is ornamented as a wolf's head.

The figure represents at the same time an eagle standing with outspread wings; the human face in the middle being the eagle's body; the inverted double eyes on each side, with adjoining feather ornaments, the wings. The ornament in each upper corner is then interpreted as an eagle; the eye design, and the asymmetrical wing design under it, being the head of the eagle; the feather design on the outer border being the eagle's wing.

the position of the feet and in the occurrence of wing designs in place of feet at the sides of the body. The tail is also a little more realistic than usual. The lateral fields in this blanket differ entirely from all those in the first two groups. The two characteristic eyes still occur in their relative positions, but they are used in entirely new combinations. The lower part of each of the lateral fields is worked out as a whale's head with open mouth. The characteristic rectangular field which cuts into the middle part of the lateral field from the central field, and which is found in all the designs previously described, does not occur here; and instead of it, we find two vertical fields side by side rising over the whale's head. These are taken up entirely by eye and wing-feather designs.



Fig. 574. Pattern-Board for Blanket shown in Fig. 573.

To the same type belongs the blanket shown in Fig. 577, which, however, cannot readily be associated with any of the blankets of the first series. On the whole, the impression given by this design is that of an old blanket. The difference between the design and the first groups lies largely in the absence

of clearly defined lateral fields and in the development of the two lower eyes into the form of a large open mouth, with numerous teeth in the upper jaw, which does not occur in any of the other designs. The space at the sides of the body, which is so characteristic, is here very much reduced in size. The essential traits of the lateral fields are the same as those found in the first two types of blankets.

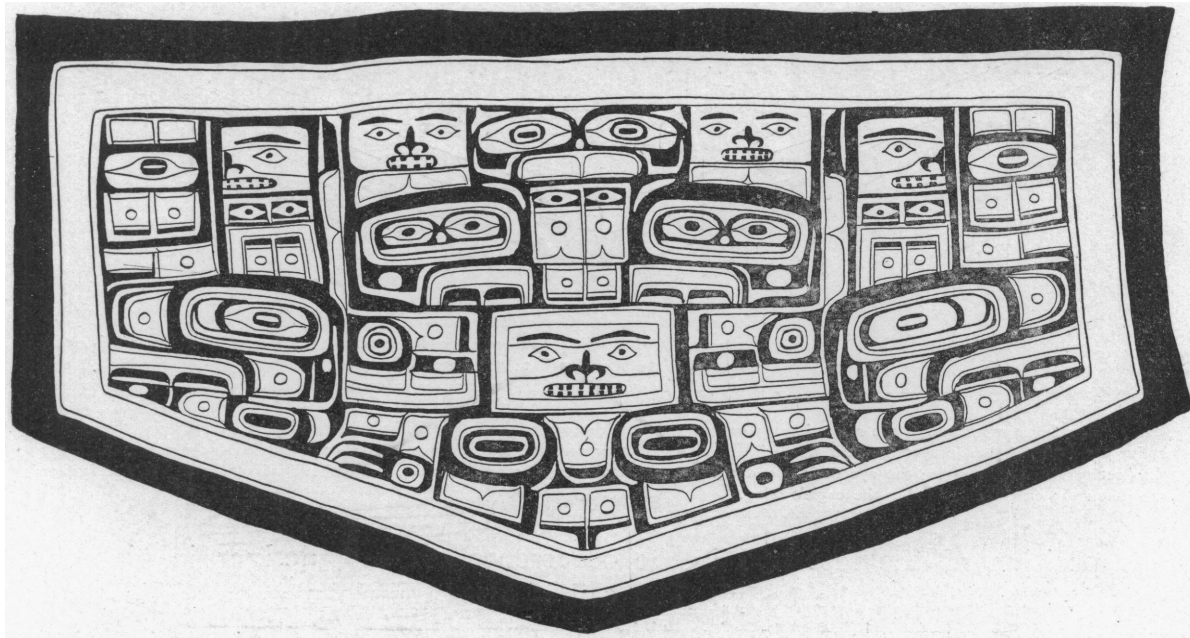


Fig. 575. Blanket.

According to Emmons, the design represents a thunder-bird catching two whales. The central figure is explained in the same way as Fig. 546, to which it is closely related. The difference in the two designs consists in the different elaboration of the lateral fields, which are occupied in the present specimen by the whale-head below, while the upper part represents the whale's body, but at the same time the back of the bird.

Quite a unique form is shown in the blanket Fig. 578 and in the apparently related form Fig. 579. Both of these seem to be good old blanket designs. Although both are distantly related to the second type of blankets, they show so many peculiarities that they cannot readily be grouped with them. The line setting off the lower part of the middle field from the two inverted eyes on top recalls the similar line in Fig. 560. Attention may be called to the occurrence of numerous wing designs with central circles in a similar arrangement on the pattern-board in Fig. 579, which suggests that perhaps the rectangular figure with white dots may have originated by an amalgamation of many wing designs which happen to be placed in a rectangular order surrounding the double head designs. The

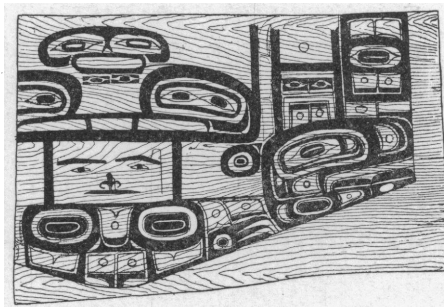


Fig. 576. Pattern-Board for Blanket shown in Fig. 575.



Fig. 577. Blanket. Field Museum of Natural History, Cat. No. 19570.

According to Emmons, it represents a killer-whale. The head with open mouth and teeth is shown below, while the two large eye designs on top represent the fluke of the tail. The small face in the middle is the body, in each side of which is one-half of the dorsal fin. The lateral fields represent the back of the body, at the same time ravens. The wing of the raven is shown by the eather design in the space under the beak. The lower eye, with the adjoining white field towards the border, is the foot, while the tail is shown at the lower border.

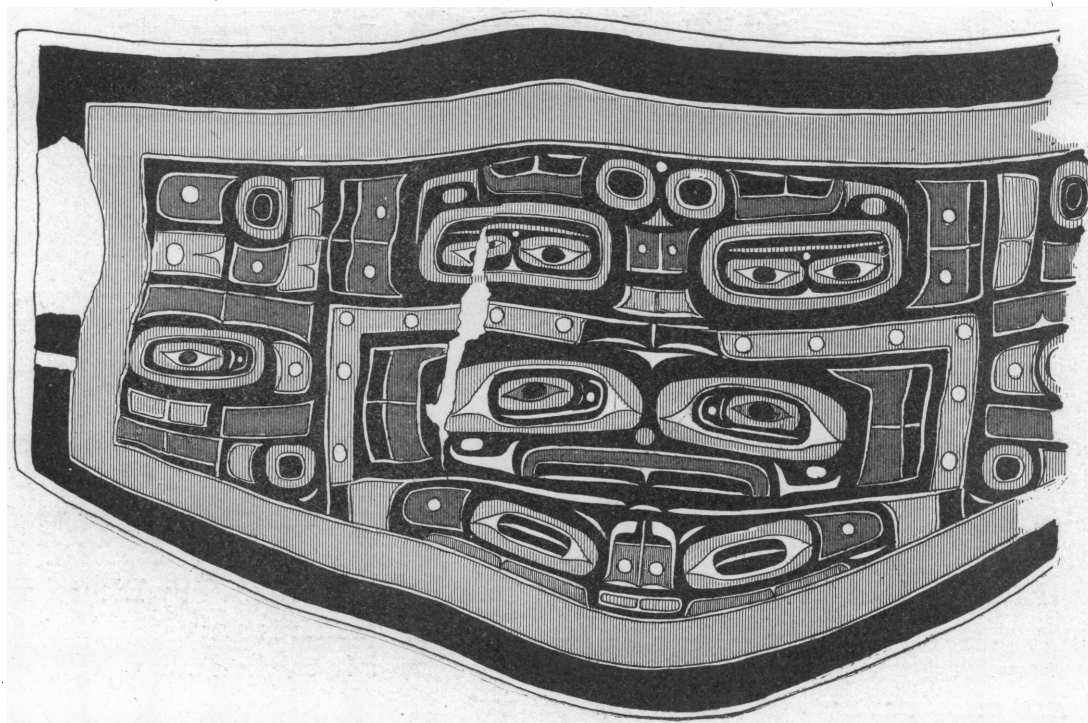


Fig. 578. Blanket ($\frac{3}{8}$). Width, 121 cm.

According to Emmons, the design is that of an inverted whale, the head on the upper border, the side-fins on either side of the head in the lateral field, the tail below the fins. Below, in the space surrounded by a yellow stripe with white circles, is the dragon-fly,—the large head in the middle, and the wings on each side of the head. Below is the body bisected. Its head is like that of the hawk without ears.

According to Swanton, this blanket represents a killer-whale. The head is shown inverted on the upper border. The wing design between the two eyes represents the back-bone. On either side of the head, extending into the lateral field along the upper border of the blanket, is the dorsal fin. The large head in the middle of the blanket is the body of the killer-whale, on each side of which the side-fin is shown. The two eyes at the bottom represent the tail. The lower spaces in the lateral fields, occupied by an inverted eye, and the adjoining wing designs, are interpreted as the ribs of the animal.

lateral field in Fig. 578 shows the regular arrangement; while the lateral field in Fig. 579 is entirely broken up, although the two eyes still persist in their old position.

The three following specimens, shown in Figs. 580 and 581, bear apparently hardly any relation to the more common blanket types, although all of them are apparently good old specimens, which are treated with unusual freedom. The realism of Fig. 581, *a*, is particularly remarkable. The specimen shown in Fig. 581, *b*, consists of repetitions of a conventional face design.

In the remaining blankets the patterns are so much broken up that they

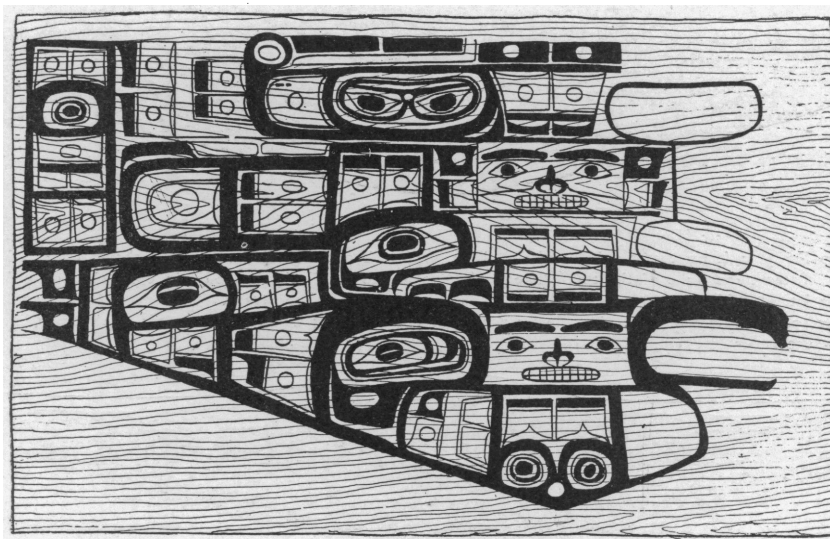


Fig. 579. Pattern-Board for Blankets.

According to Emmons, the design represents a killer-whale catching a hair-seal. The head of the killer-whale is shown in the middle of the design. Between its eyes, and just over them, is a human face representing the blow-hole. Extending sideways into the lateral fields, which are not well set off from the middle field, is the dorsal fin. The two eyes along the upper border are the tail of the killer-whale. The vertical field extending along the upper part of the side border is the fluke of the tail. The whole lower part of the design represents the seal; the two large eyes being in the middle, under the eyes of the killer-whale; the large mouth, in the lowest part of the blanket. Adjoining the eyes is a double wing design representing the flipper of the seal. The hind-flippers are represented by the eye design near the outer lower corners, with the adjoining wing designs.

can be explained only by considering the design in relation to the animal that it is intended to represent. Before taking up these modern designs, it may be well to add a few remarks relating to the interpretation of the whole series of designs here given.

In the legends to our illustrations the explanations obtained by Lieutenant Emmons are given. A number of additional explanations were obtained by Dr. John R. Swanton, who had the kindness to submit to the Indians of Sitka a number of photographs which I gave him. It will be noticed that some of the explanations obtained by both authorities agree, while others show characteristic differences.

On the whole, the central field of the blanket is considered as the principal design. It represents a single animal or a combination of animals; while the lateral fields are conceived of as the sides and back of the animal, which is

imagined to be split in two along its back. At the same time, however, the sides are regularly explained either as small animals, or, in some cases, as the den of the animal shown in the middle. The contradictions in the explanations given to Lieutenant Emmons and to Dr. Swanton are so great, that it is quite obvious that no fixed type of conventionalization exists, but that rather the design is inferred in accordance with the position of the various parts of the body and certain symbolic traits. These, however, are often ambiguous. It is very characteristic, for instance, that the very distinct figure shown in Fig. 548 should be explained to Lieutenant Emmons as an osprey, to Dr. Swanton as

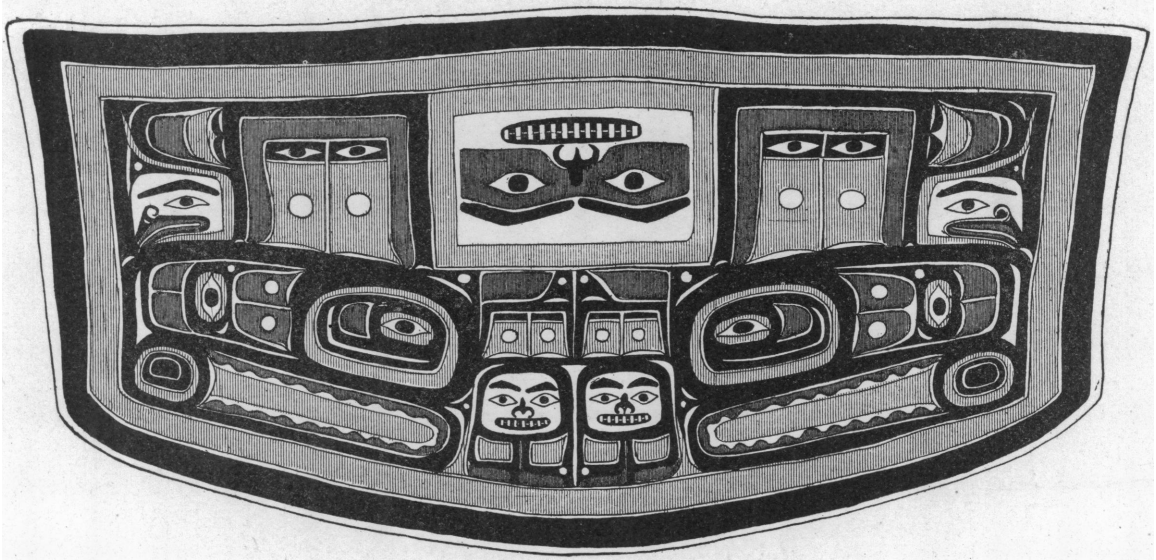


Fig. 580. Blanket ($\frac{8}{7}$). Width, 154 cm.

According to Emmons, the design represents a killer-whale. In each lower corner is one-half of the head, with the teeth; right in front of the teeth, the nostril; between the two halves of the head, at the lower border of the blanket, the tail. The inverted face in the middle above represents the body. The large square designs containing the goggle design on each side are interpreted as the water blown out from the blow-hole. One-half of the dorsal fin is indicated by the small round wing-feather design in each upper corner, the human face in profile under it representing one-half of the blow-hole.

According to Swanton, the *Gonaqade't* is represented. One-half of the head is shown in each lower corner, the eye design in front of the tongue being interpreted as the chin. The two faces in the middle of the lower border are interpreted as the young ones of the *Gonaqade't*; the flicker-feather designs over them, as the inner part of the body of the old animal. The inverted large face in the middle, at the upper border, is interpreted as its hat; the large square design on each side of this face, containing the goggle design, as the dorsal fin. The two human faces in profile near the upper corners are young ones, the body shown by the round feather design over the face.

Another interpretation of this design, obtained by Franz Boas, is a killer-whale in the two halves of the head in each lower corner; the food of the killer-whale represented by the eye design in front of the mouth; the tail below, in the middle; the two halves of the dorsal fin just over the tail. The chest is represented by the inverted face in the middle of the upper border; the flippers, by the adjoining square designs and the attached round feather designs. According to this description, the profile faces near the upper corners should be the blow-holes (see *Bulletin American Museum of Natural History*, Vol. IX, p. 174).

a beaver. The reason for this discrepancy is quite obvious. The informant of Lieutenant Emmons had in mind particularly the typical front views of the eagle which are found on trays (see Figs. 554 and 555). One of the characteristic traits of the osprey is the hooked beak, which in front view — or, perhaps better, in the representation of the animal by two profiles in contact at the point of the beak — appears like a point separating the long mouth into two parts. In this beak the nostrils are marked. The animal shown in Fig. 548 may be

considered in this manner. The two wing-feather designs which separate the wide mouth would in this case be considered as the beak with its nostrils. On

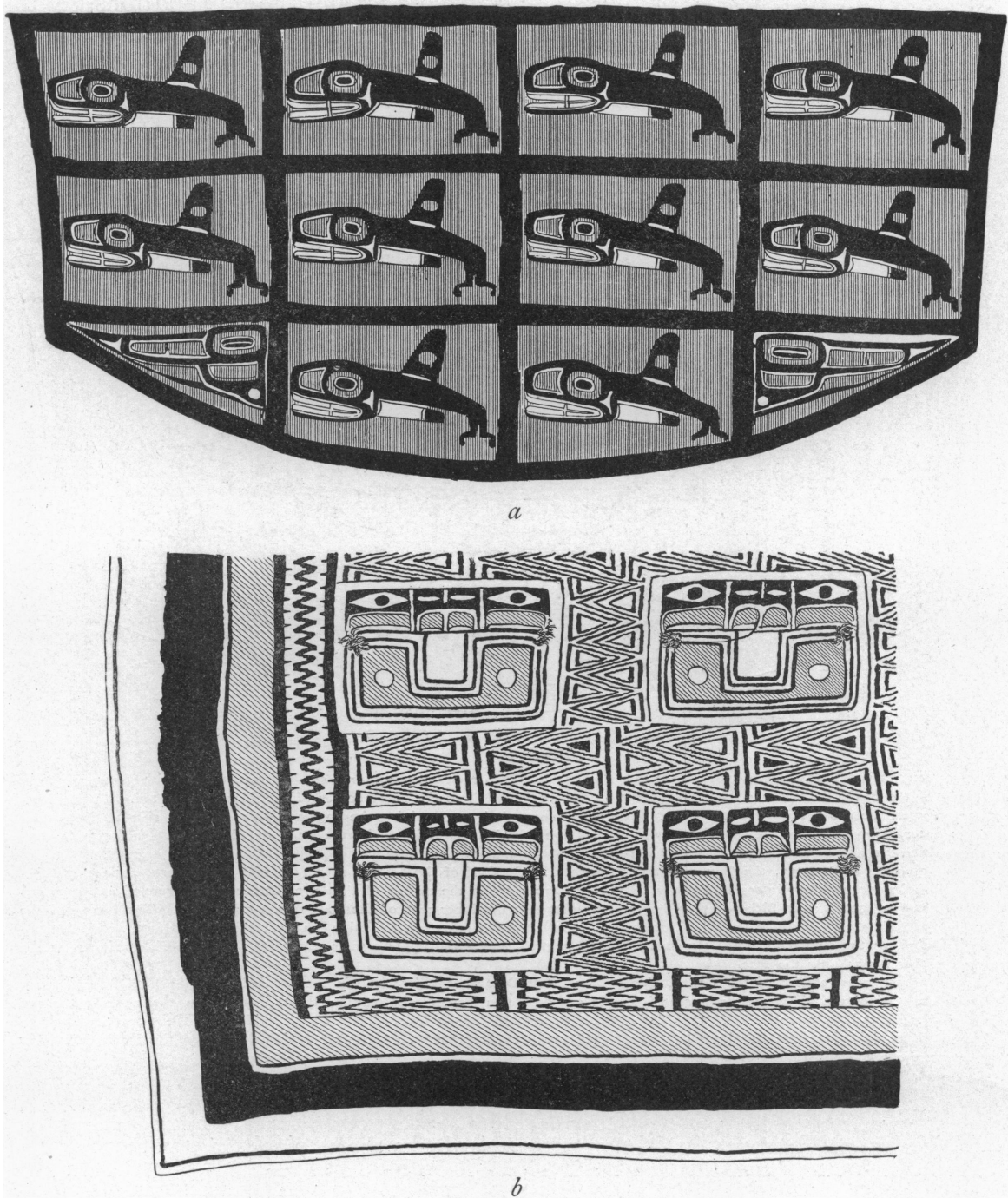


Fig. 58r. Blanket. *a*, Field Museum of Natural History, Cat. No. 19571. The design represents a school of killer-whales. *b*, Part of Shirt with Face Designs. Museum of the Geological Survey of Canada.

the other hand, they may be considered as the large incisors of the beaver which are represented in the same manner, and in which the circular eye design is

merely inserted for decorative purposes. The conception of this animal as the beaver would be helped by the curved black lines in the mouth, which are interpreted as tooth designs, which do not properly belong to the osprey. On the other hand, the absence of the fore-paws would rather favor the conception of the whole form as a bird. Dr. Swanton's informant, however, did not see the connection of the shoulder-joint under the corners of the jaw with the wings, and for this reason interpreted this part as the stick which the beaver is gnawing.

The ambiguity of the explanation of Fig. 561 is also easily intelligible. The figure which was explained to Lieutenant Emmons as a female wolf, to Dr. Swanton as a raven, lacks all the traits which would definitely symbolize any particular animal; and the uncertainty due to this fact is expressed also



Fig. 582. Pattern-Board for Blanket. The design represents a young brown bear below, in the middle; on each side, an old female brown bear. The face above, in the middle, with adjoining designs, is interpreted as the bear's den.

by the statement made to Lieutenant Emmons, that the lower portion of the animal represents a hawk. The same vagueness is brought out in the two explanations of Fig. 563, *a*, given to Lieutenant Emmons, and to the entirely different one given to Dr. Swanton. In these cases the essential cause of ambiguity lies in the selection of the various eye designs, all of which are of a size equal to the principal head of the figure represented. When the two upper eye designs are taken as the principal head, the whole design may be looked at as one certain kind of an animal. If the middle or lower eye designs are taken as the principal head, an entirely different animal results. Another characteristic discrepancy in explanation is that of Fig. 567, which was explained to Lieutenant Emmons as a whale diving, while Dr. Swanton was told that it was intended to represent a wolf.

While we have seen that most of the old designs may be classed in two principal styles, and that the number of old designs is very small,

attention should be called to the fact that a few independent types seem to belong to the oldest specimens of woven blanket designs with which we are familiar. For instance, Fig. 580 represents a blanket which, according to Lieutenant Emmons, was at one time the property of Chartrich, chief of the Qagontan family and the principal chief of the Chilkat tribe. Lieutenant Emmons



Fig. 583. Blankets.

a. The design represents, in the lower portion of the middle field, two killer-whales catching two hair-seals (represented by the profile faces under the whales). The human face separating these two seals is interpreted as a rock in the ocean on which the seals bask. The large head on top, in the middle, is that of a raven, while no particular explanation is given for the rest of the design.

b. From Klukwan, the design representing two killer-whales. The rest of the design is said to be purely ornamental.

states that this was the first blanket ever woven by the Chilkat people, and that it was copied from the original blanket obtained from the Tsimshian more than a century and a half ago. The peculiar blanket shown in Fig. 581, *a*,

which is also quite different in type from all the others, was collected by me, through Mrs. Morison, among the Tsimshian Indians. It might seem, therefore, that the old styles of blankets, which differ from the ordinary two types, were perhaps originally Tsimshian patterns, and that the development of the peculiar Chilkat types took place after the introduction of the blanket industry among the Tlingit.

In more modern blankets the indefiniteness of the old conventionalism is breaking down entirely. The pattern-board Fig. 582, for instance, reminds us only very slightly of the typical blanket designs. The small animals figured



a



b

Fig. 584. Blanket and Pattern-Board, from Klukwan, representing a bear and two killer-whales.

in the middle near the lower edge are like the tattooed designs of the Haida.¹ The large bear on each side is analogous to the slightly conventionalized

¹ See Swanton, Contributions to the Ethnology of the Haida (Publications of the Jesup North Pacific Expedition, Vol. V, Plate XX, Nos. 13, 14; and F. Boas, Decorative Art of the Indians of the North Pacific Coast (Bulletin American Museum of Natural History, 1897, Vol. IX, p. 151).

paintings of the Northwest coast Indians, while the upper border may be compared to the apron-borders, Figs. 587 and 588, which will be described later on.

In some of the blankets there is a peculiar adherence to the old style, while the breaking-up of the conventionalization takes place only in parts of the blanket. For instance, the blanket Fig. 583, *a*, belongs undoubtedly to the

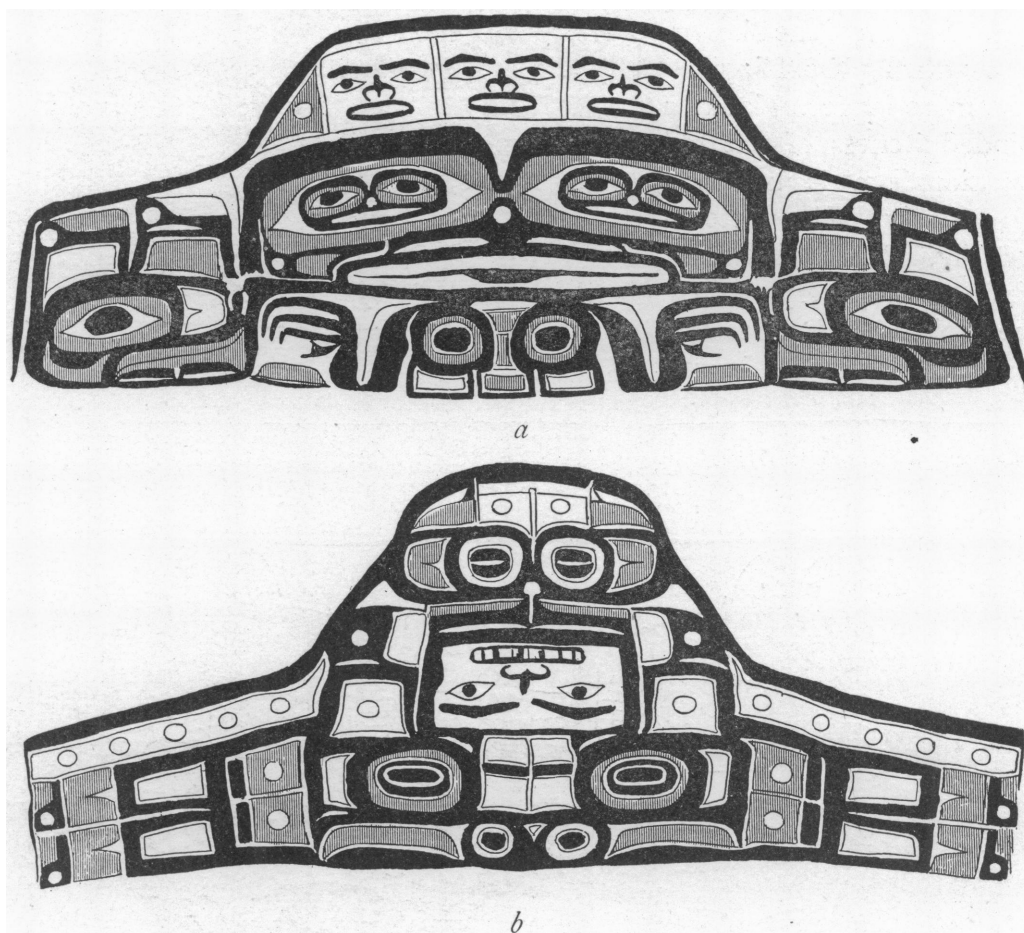


Fig. 585. Dancing-Aprons (inverted). *a* ($\frac{1}{2}$). Width, 99 cm. *b*, Field Museum of Natural History.

a. According to Emmons, the design represents Gonaqadé't rising out of the sea, and is so applied that when the apron is worn, the head of the animal turns downward. The centre of the apron is occupied by the large head with protruding tongue, under which are the arms and the shoulder-joints. The three small designs near the lower border represent the body. In each lateral field is shown one-half of the beak, the two wing designs on the top representing the double dorsal fin. Over the head of the central figure are three human heads.

According to Swanton, the explanation is the same, except that the lateral fields are interpreted as the inner part of the body, showing two ribs above. The human faces are interpreted as small people who surround Gonaqadé't.

b. The design represents two profile views of killer-whales, which meet in the middle line of the apron. The design is again shown inverted, as in Fig. 585, *a*. That portion under the inverted human face in the middle, and extending on either side to the end of the middle field, is the head of the killer-whale; the part extending outward from here to the border of the apron, the side-fin; while the dorsal fin is indicated by the portion between the outer edge of the blanket and the inverted face in the middle. The inverted face represents the lower side of the body, while the tail is shown in the narrow field on top.

first type of Chilkat blankets. The central figure may still be readily recognized, and the position of the eyes in the lateral fields remains the same

as that previously described. Instead of the body of the central animal, we have, however, the same realistic representation of a double killer-whale with adjoining flukes, probably a killer-whale cut in two lengthwise, which breaks



Fig. 586. Dancing-Apron (inverted). Width, 107 cm. Museum of Natural History.

According to Emmons, the design represents a killer-whale. It is here also placed on the blanket in an inverted position. The half-eyes on the lower border of the illustration represent the eyes of the killer-whale. Over them rises the side-fin, and over this, on each side, is one-half of the dorsal fin. The inverted face in the middle represents the under side of the body; and the inverted eyes on top, the fluke of the tail. The lateral fields are each one-half of the body of the whale.

According to Swanton, the half-eyes have the same interpretation. The portion outside of the eyes, along the lower edge of the illustration, is the mouth. The double feather design over the eyes is interpreted as the blow-hole; the inverted eyes at the upper border of the illustration, as the tail. The double feather design between these eyes is interpreted as the dorsal fin, while the side-fins are between the blow-hole and the tail. The large eye design in the lateral field is interpreted as the inner parts of the body.

into the blanket design, making it impossible to connect the rest of the designs in any way with these small representations of animals. It may perhaps be justifiable to compare the use of these small animal forms on the large conventionalized face with the small animal carvings of northern Tlingit tribes, which they are in the habit of attaching to their masks. While it is impossible to say that the idea expressed in this case and expressed in the mask is the same, the similarity of these two processes seems striking. The breaking-up of the first design has proceeded

even farther in the blanket shown in Fig. 583, *b*. Here practically the whole central field is broken up, with the exception of the two lower eyes. The



Fig. 587. Dancing-Apron. From Klukwan.

The design represents a raven; the two large eyes in the middle, and the whole portion of the design underneath, being the raven's head; the two eye designs near the lower part of the design, the nostrils; the human face on top, the tail; the field on each side of the tail, the wing, which represents at the same time a raven's head in profile. Under the wings are the feet of the raven.

whole upper portion is occupied by semi-realistic representations of killer-whales. It is noticeable that the upper part of the lateral field of this specimen agrees in all details with the corresponding portion of Fig.

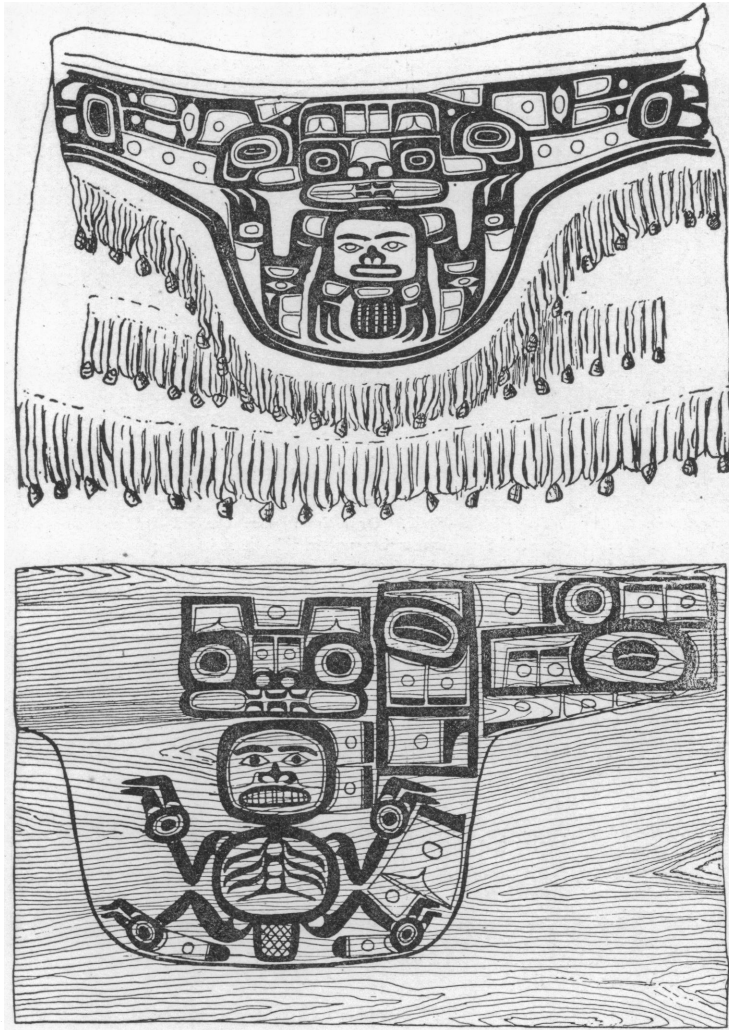


Fig. 588. Dancing-Apron and Pattern. *a*, ($\frac{1}{2}$). Width, 93 cm.

a. According to Emmons, the design represents a beaver sitting up. The eye ornament on each side of the beaver's head represents the beaver's house; the lateral extension of this ornament, the beaver-dam and water.

According to Swanton, the eye ornament next to the head, and the adjoining leather ornaments, represent the trees that are the beaver's food, while the eye ornaments at each end of the upper edge represent its house.

b. The design represents a beaver sitting up. At each side of the beaver's head are the beaver's house and the beaver-dam.

583, *a*. In the design shown in Fig. 584 all the elements of the old blanket design have disappeared, and we have simply a painting such as is found frequently on modern house-fronts and planks. It is peculiar to note that even these blankets have their pattern-boards (Fig. 584, *a*), which shows that the designs as applied by the women are never more than an accurate copy of men's paintings.

Lieutenant Emmons has called attention to the tendency of Tlingit carvings to be more realistic than those of the Haida and Tsimshian (see p. 346). I quite agree with him in the opinion that many of the carvings of the Tlingit, like their bird-rattles and the masks with attached animals and helmets, have a tendency to be realistic in form. There is also quite a large number of paintings on leather that have a fairly

strong realism, although their style conforms strictly to the characteristic style of the Northwest coast art. I think the preceding discussion shows clearly, however, that the realistic forms of the blankets shown on the last few pages cannot be considered as more typically Tlingit in character than the strictly conventional blankets discussed on the earlier pages. The persistency with

which characteristic features of the conventional types re-appear in these more realistic blankets seems to me satisfactory proof of the theory that all the more realistic blankets that conform in their general plan to the conventional blanket designs originated later, when the conventional type began to lose its hold upon the minds of the people.

In Figs. 585-588 a number of dancing-aprons are represented which are woven in the same technique as the dancing-blankets. A characteristic feature of many of these aprons is, that the design is put on so that it is upside down when the apron is worn. A consideration of the designs shows that the woven blanket is a modification of the older painted skin apron, in which the conventionalism of the blanket design has been used to modify the old and more realistic painted designs.

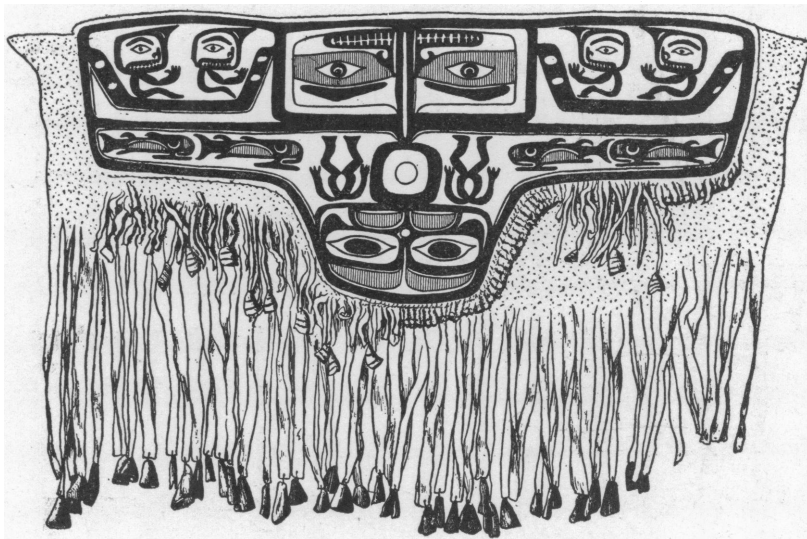


Fig. 589 ($\frac{E}{18012}$). Dancing-Apron.

I am inclined to believe that in this case the probability is in favor of the assumption that the aprons which resemble the style of the blankets most are not older forms, but are due to the strong influence of the whole group of ornamental ideas connected with the blanket technique, which were applied to the apron design. My principal reason for this opinion is the lack of fixity of design in the most conventionalized forms of woven aprons, and the comparatively great frequency of excellent old pieces which are highly realistic. The inverted position of the conventional design in the woven apron is evidently borrowed from the manner of painting the skin aprons.

The woven aprons shown in Figs. 588 and 589 resemble in their general style more closely the painted aprons, while the specimens Figs. 585-587 resemble in many respects the blanket designs, particularly in that the more decorative field is filled in with wing designs and the like, wherever an open space

remains. Among the conventional apron designs, Fig. 585 shows a strong resemblance to the painted carved box designs, although in other respects features of the blankets may also be recognized in this specimen. The flatness of the mouth and the three small heads over the forehead belong to the features which it has in common with the blankets. The manner in which the middle field is set off from the two lateral fields is also evidently due to the influence of the blanket design. In the apron shown in Fig. 585, *b*, the middle field is also laid out somewhat like the blankets of the

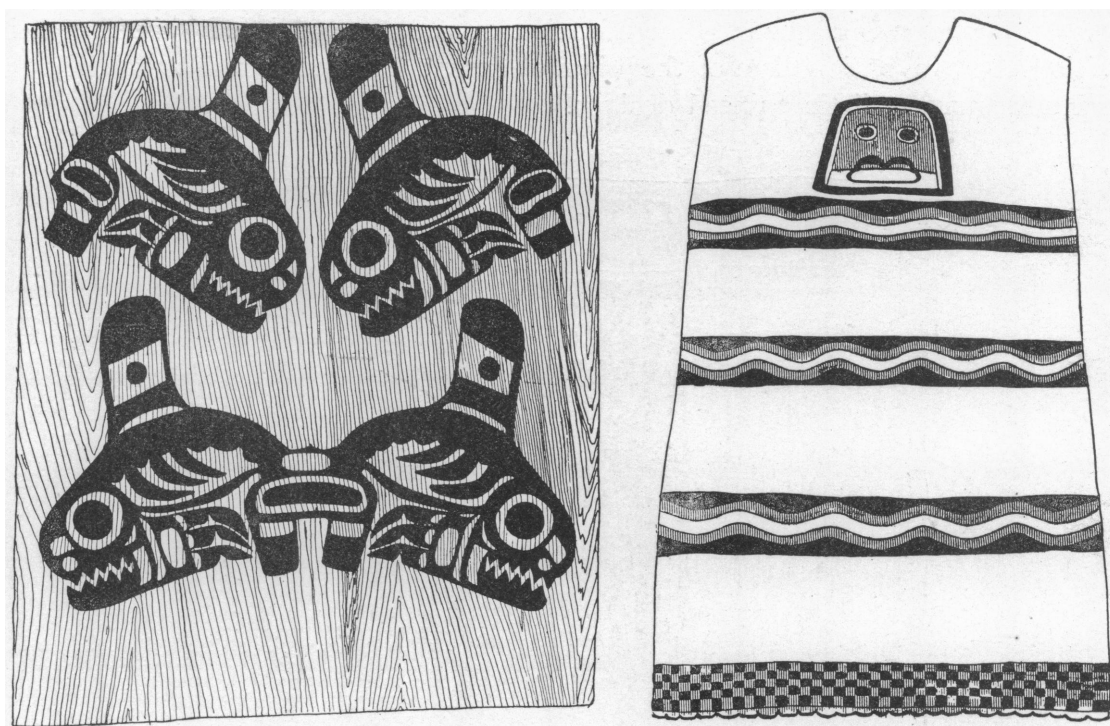


Fig. 590. Pattern-Board for Dancing-Shirt and Back of Dancing-Shirt.

a. From Klukwan. The design represents killer-whales.

b (Fig. 590). According to Emmons, the face on the back represents a shark's head.

According to Swanton, the zigzag lines on the back of the shirt are called the spinal column. The face on the back is interpreted as Gonaqadé's face.

second type, although in detail it resembles much more strongly the arrangements of eye and body designs which are interpreted as the sculpin or other fish, and which are used as dancing-leggings;¹ but the treatment of the details, particularly the arrangement of white circles and of wing designs, conforms to features of the Chilkat blanket. Special attention may be called to the similarity of Fig. 586 and of the blanket design Fig. 578, on the one hand, and the second type of blanket designs on the other. The double

¹ See Boas, *Decorative Art of the Indians of the North Pacific Coast* (Bulletin of the American Museum of Natural History, Vol. IX, Fig. 50, p. 152).

eye on top and the peculiar form of the eye design below, as well as the arrangement of the lateral field, are very much like Fig. 578; while the central face, in its relative position to the surrounding eye designs, agrees with the forms found in the second type. The apron shown in Fig. 587 is also highly conventionalized, but differs from the others in that the figure is upright; and no very close relation between the apron design and the blanket design can be traced, except in the elements and composition of the smaller parts of the whole design.

Fig. 591 *b*.

b. The design represents a brown bear, its face being shown on top; the two human faces near the neck representing the ears of the bear; the row of five human faces across the shirt-front, the mouth of the bear; the series of three faces under the mouth, the body of the bear, at the side of which the fore-legs are shown turned upward, while the hind-legs are turned downward, the eyes under the lower face being the hip-joints of the bear. At the same time the whole lower portion of the shirt-front is interpreted as the frog; the hip-joints of the bear being the head of the frog, the body of the bear being the back of the frog, and the legs of the bear being at the same time the legs of the frog.

The two realistic designs shown in Fig. 588 are very closely related. Both represent the beaver, and in both cases the outer borders are treated somewhat apart from the middle portion of the design. It is curious to note that in the pattern-board the body of the beaver is represented as a man with head and body, while, according to the analogy in all other similar cases, the human face would be expected to represent the body of the beaver. While in the pattern-board the lateral fields are set off sharply from the middle field, this is not the case in the woven apron. I have indicated before that the designs stretching

along the upper border outward are not a feature that belongs to the blanket alone; but these may be compared also to the position of similar designs on painted boxes and on painted borders of blankets.¹ The closest resemblance between woven and painted designs may be seen in the apron shown in Fig. 589, which in all its details resembles the painted skin aprons. The realistic manner in which the two pairs of fishes are shown, the manner of representing the men in their canoes in the right and left hand upper corners, and the peculiar position and form of the face in the lower part of the middle, with the two small bodies under it, are characteristic of painted designs of the Tlingit.

The same type of blanket design is also used on a number of shirts, two of which are represented on Plate XXVII and in Fig. 591. Owing to the

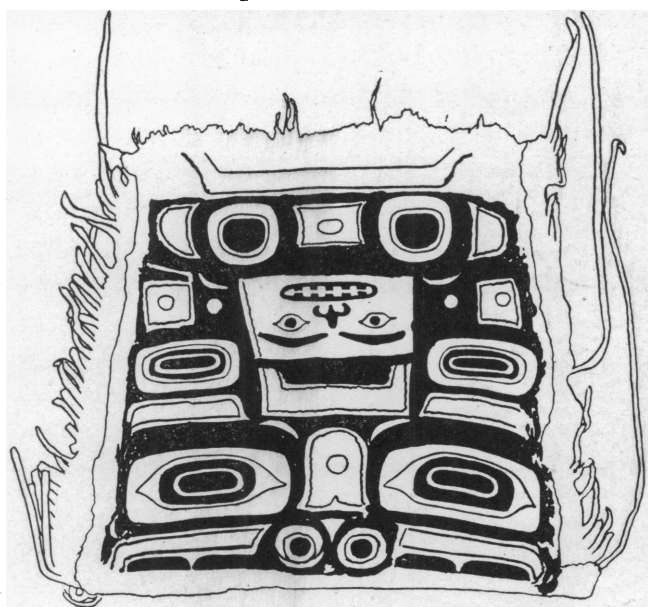


Fig. 592. Dancing-Legging (inverted). Field Museum of Natural History.

According to Emmons, the design represents a whale. In the illustration the head is shown below. The inverted human face represents the back; the eye designs with adjoining feather designs on each side are the fins; and the two eyes near the upper border, the tail.

difference in shape of the decorative field, the details of arrangement of the figures differ considerably from those found in the blankets, but the sameness of general principle will readily be recognized. According to Lieutenant Emmons, the shirt made in this weave and decorated in this manner is, comparatively speaking, a new invention. It has evidently not flourished for a long time, for modern shirts are degenerating even more than the blanket designs, and realistic forms are quite commonly found on them. A pattern-board for a shirt is shown in Fig. 590.

The same kind of weave is also used for making leggings,

and the same style of conventionalism prevails in these specimens (Fig. 592).

The following observations on the colors of the blankets are based only on the specimens preserved in the American Museum of Natural History. In the photographs from which most of the illustrations have been drawn, the distinction between white, yellow, and blue, is often not clear, which is largely due to the fact that in older blankets these three colors tend to become a brownish yellow, and are difficult to distinguish. Most of the blankets contain, besides black and white, yellow and blue, but a few are woven only in white, black, and yellow. As Lieutenant Emmons has remarked, red is rare, and seems to be

¹ See p. 357; also Boas, *Decorative Art of the Indians of the North Pacific Coast* (Bulletin of the American Museum of Natural History, Vol. IX, Fig. 71, p. 168).

used only in more recent blankets. Lieutenant Emmons has stated before, that white must be considered as the background of the blanket-design, and that the wide outer border is always black and yellow.

The pupil and the white of the eye are always white. When the eye is framed by a black border, forming an oval, the inner portion around the white of the eye is always filled in in yellow. When the eye is elaborated so that there is a small semicircular design at the inner corner of the eye, this is done in blue. In one case (Fig. 571) this semicircular design is developed into a wing design, which is yellow at the base and blue at the tip. In other cases, where the semicircular design is larger, being developed into a wing design or beak design, these are generally yellow. In many cases, wing designs are enclosed in rectangular framework, which occurs with particular frequency in the middle part of the lateral fields, as in Figs. 546 *a*, 561 *a*, and Fig. 567, but also in other positions, as in the ears in Figs. 561 *a* and 548 *b*, also setting off the profile beak in the lateral field of Figs. 548 *b* and 546 *b*, surrounding the goggle design in Fig. 561, *a*, and in various places surrounding wing designs, as in Fig. 580 and under the human faces in Fig. 561, *a*. All these are done in blue, while the inner field is yellow. There are a few exceptions in which the frame appears yellow, while the wing design in the frame is done in blue, as in the lateral fields of Fig. 571, where perhaps the contrast with the adjoining blue rectangular frame has led to the peculiar arrangements of colors. This inversion, however, has not taken place in the similar juxtaposition of wing designs of rectangular frames in the lateral field of Fig. 567. A similar contrast may have led to the adoption of a yellow square frame in the middle of the upper border of Fig. 561, *a* and in the middle of the lateral borders of Fig. 546, *a*.

The circles in all the wing designs are done in white.

Almost without exception, the color design representing the mouth and the ear of any head is done in blue. This accounts often for the occurrence of blue designs over and under inverted eyes, which must be interpreted as mouths and ears.

In almost all blankets there is a tendency to color the wing designs in the extreme upper and lower corners blue. Exceptions may be observed in the lower corners of Fig. 546, *b* and in all the corners of Fig. 561, *a*. In this latter specimen there are so many exceptional traits that it seems justifiable to consider it as a new and inferior product. Apparently in the better specimen of the same type (Fig. 561, *b*) the corners were blue. Since, however, this specimen was drawn from a photograph, the colors cannot be determined with certainty.

Many of the human faces have the part around the eyes colored. This coloring is always done in yellow, except in Fig. 580, where it is blue. The forehead designs of these faces, when colored, are either yellow or blue, or, if consisting of three parts, blue in the middle and yellow at the sides, or vice versa.

I have observed only one case in which blue is apparently used for filling in a background. This is in the wing designs of the lower middle part of Fig. 580,

and in the left and right hand upper corner of Plate XXVI. The jaw slits and the round spots in the jaw design are always white. Wherever a yellow, blue, and white field adjoin, the outlines are marked by a narrow black line. Yellow and blue fields are generally set off from adjoining black fields by a narrow white strip, from which the yellow or blue is again divided by a narrow black band. Exceptions to this rule are the yellow fields in eyes and some of the blue rectangular frames surrounding wing designs. The intervening black and white occur regularly in wing designs.

The same color-scheme may be observed on the woven shirt shown on Plate XXVII. On the whole, the wing designs are treated in yellow, while the semicircular spaces in the eyes, ears, and rectangular frames of wing designs, are all done in blue. The lower human face, around the eyes, is also blue.

EDITOR'S NOTE.

All the illustrations and explanations in the preceding paper, unless otherwise stated, have been collected by Lieut. G. T. Emmons, who obtained the material through the courtesy of the several museums noted, or from original photographs taken in Alaska during the past twenty years. It seems desirable to express here appreciation of the valuable services rendered by Lieutenant Emmons in collecting photographs of all the accessible blankets, whether in the possession of museums or in that of Indians. Particularly interesting is also the collection of photographs of pattern-boards, almost all of which are the property of the Chilkat weavers. The patient collection of information and interpretation among the natives, such as is presented in Lieutenant Emmons's memoir on the basketry designs of Alaska and in the present memoir, will be highly valued by all ethnologists.

FRANZ BOAS.

EXPLANATION OF PLATE XXIV.

FIG. 1.—Cedar-bark blanket, with border-design woven in mountain-goat wool. British Museum.

FIG. 2.—Cedar-bark blanket with painted designs and woven ornamental border. From the west coast of Vancouver Island. British Museum.

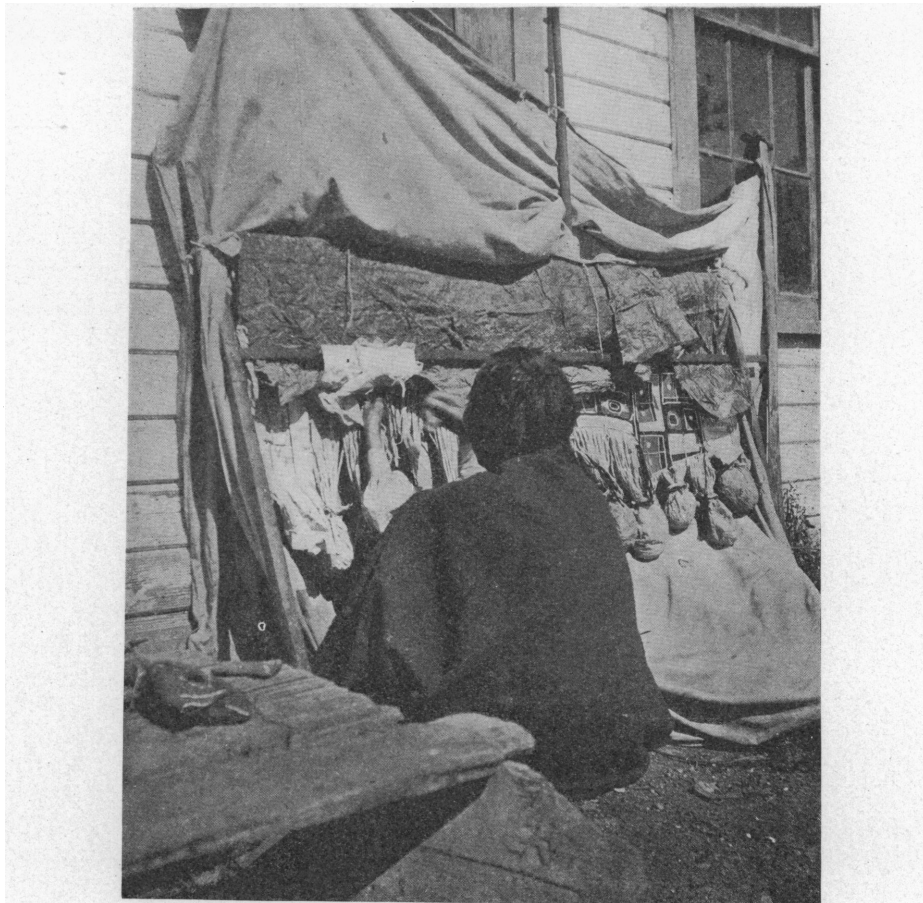


The Chilkat Blanket.

EXPLANATION OF PLATE XXV.



Tlingit woman weaving blanket.



1

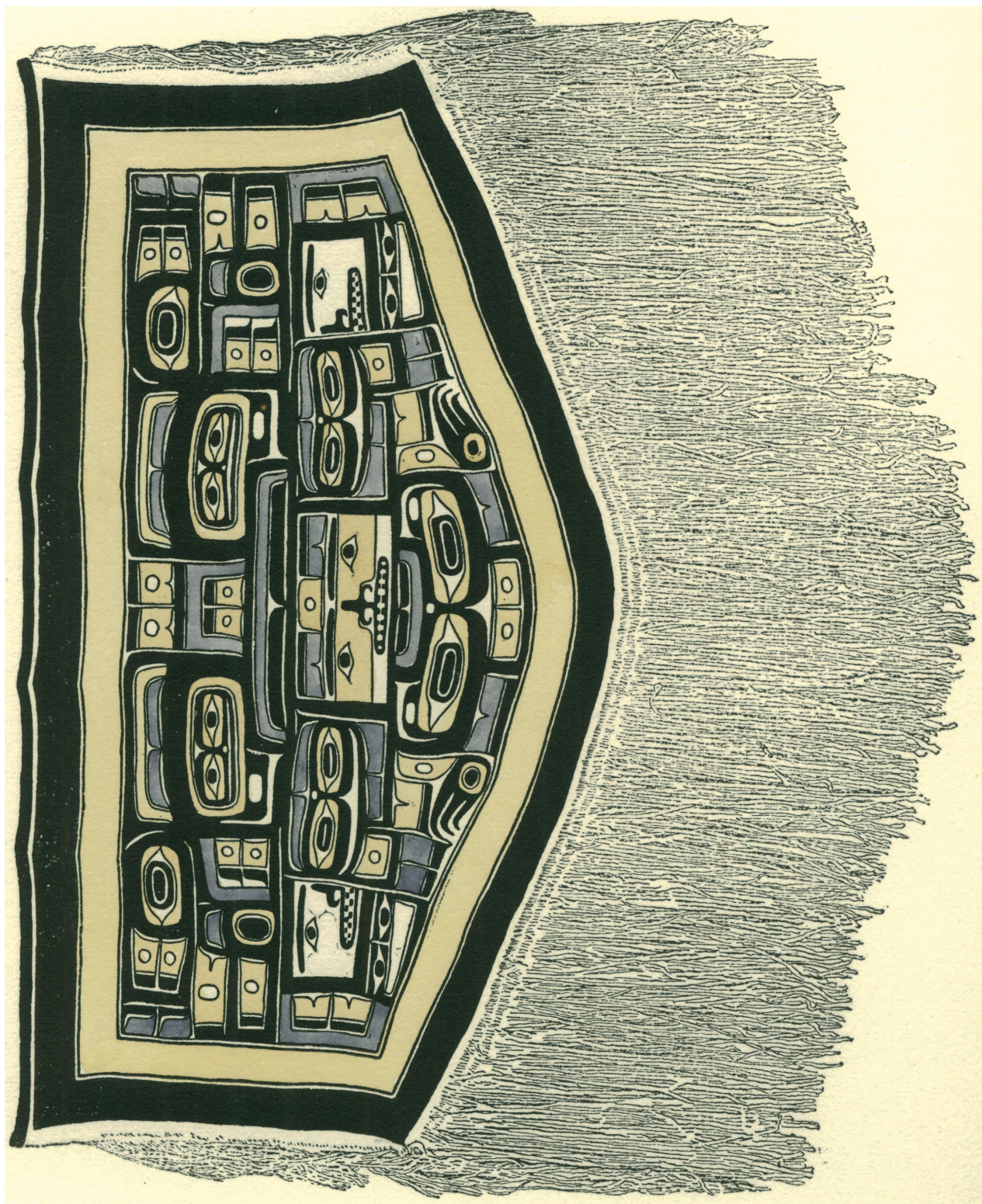


2

The Chilkat Blanket.

EXPLANATION OF PLATE XXVI.

Chilkat blanket. American Museum of Natural History. The design represents a bird. The two double eyes in the middle, near the upper border, are the eyes of the bird; the human face in the middle is the body; the two inverted eyes in the middle at the bottom are the hip-joints, to which are joined the thighs and the feet; the two inverted double eyes at the sides of the body with adjoining wing designs are the wings of the bird; the tail seems to be represented by the eye design with adjoining wing designs in the upper corners; under these an elaboration of the bird's wings is shown; the human faces in profile near the lower corners are analogous to the human faces in similar position occurring in the lateral fields of other blankets.



The Chilkat Blanket.

EXPLANATION OF PLATE XXVII.

Dancing-shirt. Cat. No. $\frac{19}{1048}$. According to Emmons, the design represents a killer-whale.

Its head is shown by the two large eye ornaments in the lower part of the blanket, under which the mouth with its teeth extends right across the front of the shirt, the nostrils being in the middle of the mouth; the blow-hole, by the human face in the middle of the shirt-front, over the eyes; water spouted out from the blow-hole, by the feather designs under this face; the body, by the face above the central human face. At each side of the blow-hole is one eye representing the joint of the side-fin, which extends upward along the sides as a feather ornament. The feather ornament between the side-fin and the upper face (the body) represents one-half of the dorsal fin. The two eyes on top are the tail of the whale. Under the mouth of the killer-whale two young kites are shown in profile, the head turned outward, the tail turned down under the body, and represented by two black tooth designs just behind the mouth. The single rounded feather design in the centre, between the two tails, is the dorsal fin.

According to Swanton, the shirt-front represents Gonaqadē't; the design under the mouth being interpreted as the fore-legs; the claw-like designs in the middle being the fore-feet. The two human faces with adjoining designs are interpreted as the belly; the designs on the sides of this, as the side-fins; the two eyes and adjoining designs on top, as the hind-legs. The monster is here shown swimming.



The Chilkat Blanket.

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