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II.—The Basketry of the Tlingit.

BY G. T. EMMONS.

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II. — The Basketry of the Tlingit.

By G. T. Emmons.

Plates V—XVIII.

Introduction.

The Tlingit occupy southeastern Alaska, a narrow strip of mountainous coast extending northward from Dixon Entrance (latitude 54° 40' north) to the Copper River Delta (latitude 60° 20' north). Within these limits are embraced the Alexander Archipelago and the Kayak group, but exclusive of the lower portion of Prince of Wales and Annette Islands, of which they have been dispossessed of late years. The Tlingit consist of sixteen tribes,—purely geographical divisions,—which form one homogeneous people, speaking the same tongue, following similar customs, and treasuring like traditions, but distinguishable one from another by just such differences as would naturally be induced by surroundings and occupation, together with intercourse and intermarriage with stranger people; and in no particular is this more noticeable than in basketry. To the southward of Frederick Sound,—a deep waterway penetrating the mainland about midway in the Tlingit country,—the simple plaiting in cedar-bark prevails, while throughout the northern area the elaborately decorated spruce-root basket is found. It is of the latter type that this paper treats.

Origin and Antiquity of Basketry.

Basketry-making is one of the oldest arts, and possibly the most important one, in the economy of Tlingit life. Legendary lore treats it as a divine gift from Yehlh, the raven creator and benefactor. Tradition says that in the early days of the world, when spirits were seen of men, there lived in the clouds a woman whose only daughter possessed such beauty that she was the desire of all mortals. Their wooing, however, was in vain, until one day the Sun looked into her eyes, and kissed her with his soft breath; and when his day's labor was ended, he sought her in the form of a man, and took her to wife. For long years they lived happily together, and many children came to them; but these were of the earth, and their future filled the mother's mind with anxiety. One day, sitting idly thinking, she picked up some strands of a root, and carelessly plaited them together, twisting them in and out until a small basket was formed. The Sun increased its size until it was large enough to contain the mother and her eight children, and in it they were lowered to the earth near Yakutat. This was the first basket, and from it was learned the art of weaving.
While the origin of basketry must ever remain a myth, its birthplace is clearly conceded to have been in the vicinity of Bering Bay, under the shadow of Mount St. Elias, among the Thlar-har-yeek-qwan, more commonly known as the Yakutat people, to whose ingenuity its development is due. The isolated position of this tribe along an inhospitable shore, storm-swept throughout the greater portion of the year, and almost destitute of harbors and landing-places, would render necessary primitive industries, and tend greatly to develop all such branches of work along original lines; while their extensive otter and sealing grounds, and the monopoly of trade in native copper, attracted many visitors during the short summer season of comparative calm, who not only carried away with them many baskets obtained by barter, but themselves learned to weave, until the art was spread coastwise among the neighboring tribes. The first visitors to the Northwest coast — explorers and traders, who arrived early in the latter half of the eighteenth century — have expressed in their descriptions admiration of the beauty and excellence of the baskets which were seen in general use from Bering Bay to Sitka Sound. Unfortunately, few or no specimens of this age have come down to us. The destructibility of the spruce-root gives to the basket but a short lease of life; and in rare instances would the æsthetic nature of the savage be sufficiently developed to preserve a piece of beautiful weave after it had passed its period of usefulness, although I have known of instances where even fragments of exceptionally fine work had descended through several generations. These older baskets, treasured in families as heirlooms, found in the grave-houses of the shaman, or resurrected from the accumulated rubbish of ages in old houses, certainly reach well back into the eighteenth century, and show a great fineness of weave and a high elaboration of ornamentation.

The uses to which baskets were put in former days were manifold; indeed, they might be said to constitute the furniture of the house. No evidence of pottery exists in this region. The basket fulfilled all the requirements of the kettle and the water-jar. Cooking was accomplished by dropping hot stones on the food placed in the basket, and covered with water, until steam was generated, when the top was covered over and it was allowed to stand. The close weave produced a perfectly water-tight vessel, which served as a bucket and likewise as a drinking-cup. It constituted the family trunk, both at home and when traveling in canoe, and was much used for the storage of food. In gathering berries, roots, and shell-fish, in trying out fish-oil, and as fish-traps, basketry is still in general use. The typical hat of the coast, as well as several more ornamental varieties of head-dress, were of spruce-root. Food-dishes, shot-pouches, work-baskets, rattles, ornaments, and numerous odd pieces, were of like weave; and as the first home of the babe was the basket-craddle, so, when life's course was run, the bark mat served as the winding-sheet.

Most of the spruce-root baskets are decorated with geometrical designs. It is difficult to determine the age of these designs. In some cases it is possible
to conclude that their introduction is recent, because certain designs are found on comparatively new baskets. It would seem that most of the designs are intended to represent familiar objects, such as parts of plants, animals, waves, etc. These, however, are strongly conventionalized. The designs are used by the weaver on account of their decorative value alone; while in the painting and carving of the Tlingit, where realistic forms prevail, the totemic significance of the design is all-important.

Character of Basketry of Different Tribes.

Within the past few years, since the invasion of Alaska by tourists, it has become the fashion to speak of a Sitka, a Yakutat, a Hoonah basket, implying some typical difference with reference to the tribe or the locality of construction. This is an error that leads to much confusion. The occurrence of a basket in a settlement, or even its possession by a native, does not imply that it was made there. The Tlingit is a constant traveller and a keen trader, and he may carry his own wares to distant parts, or purchase those of others, to be disposed of in more favorable markets. Very few persons, even those who deal in baskets, know with any certainty where they were made. The people themselves recognize no tribal difference in basketry,—except in the case of the Chilkat ornamentation,—although they readily distinguish local characteristics, that are wholly lost upon strangers. Weave, form, and design are common to all sections alike; and this is most apparent when we consider the continual intertribal marriages and consequent change of residence, where the woman carries to her new home the teachings of her childhood. The greatest differences are wholly individual, and show in the fineness of weave, arrangement and choice of color, and combination of designs.

The Yakutat have always held the first place in basketry. With them the industry has ever been of commercial importance. Specimens of their craft can be found scattered along the coast from Puget Sound to the Aleutian Islands, and the inhabitants of Kodiak have depended upon their supply of spruce-root baskets from this source for many generations. They produce the largest baskets, and they excel all others in the careful selection and treatment of the material and in the regularity of the weave. The older work is distinctive in the beauty and the wealth of embroidery which oftentimes covered the entire outer surface of the walls; but of late years this has greatly changed. Since the establishment of a trading-post in their midst, about 1890, the increased demand for their labor, together with the introduction of aniline dyes, have combined to produce many more baskets, smaller in size, and ornamented in the narrowest lines of vivid greens and glaring yellows. Extending west from Cape Yaktag, through Controller Bay, and including Kayak Island, the Guth-le-uk-qwan are found. The same totemic families occur here as with the Yakutat, and from generations of intercourse the two people resemble each other in all essential features. Their basket-
work differs only in the coarser strands of root employed in the woof by the latter tribe.

Beyond the confines of Tlingit territory, occupying the eastern shores of Prince William Sound, are several poor miserable communities (together numbering less than a hundred souls) of Eskimo origin, who call themselves Eeak tella. They are dominated by the neighboring Tlingit, and from them they have learned to weave with roots. They work on a very limited scale, producing but a few small, coarse baskets, ornamented in color, but seldom embroidered with grass-stems.

Overlapping the Yakutat country to the southward, and stretching coastwise to Lituya Bay, is the Gun-nah-ho country, practically deserted to-day, except by a few families scattered around the shores of Dry Bay. They come little in contact with strangers, and incline to the old customs, which accounts for the beauty of their basket-work, both in weave and decoration.

Next in order is the Hoonah Kow, settled about Cross Sound and Icy Strait. They form a considerable tribe; and aside from their annual trading-trips to Juneau, and their summer work about the canneries, they live more to themselves than most other tribes. They have long been noted weavers, excelling rather in the delicacy and artistic finish of their work. They confine themselves more to smaller baskets; and in some of these the root is drawn out to the finest thread, while in the embroidery they have ever been partial to the stem of the maiden-hair fern and the root-stock of the Equisetum palustre.

The Sitka-qwan living about Sitka, having an ever-ready market at hand, are among the greatest producers to-day, and their work compares most favorably with that of any other people. It shows no peculiarity, as the community is cosmopolitan in character, the original families forming but a small proportion of the present population.

The Hootz-ah-tar-qwan of Admiralty Island, centred about Killisnook, are possibly the most indifferent of weavers. Their production is more for personal use than for sale, and consists of plain rather than of decorative work: in fact, those who should know say that the use of grass-stems in embroidery is of rather recent origin among these people; but even here one occasionally sees an exceptional piece of work, proving that the difference is individual.

The Chilkat-qwan, inhabiting the head of Lynn Canal and the river-valleys reaching inland, form the single exception where tribal characteristics prevail, and here these are shown only in the ornamentation. They weave as do others; but, instead of colored filaments in recognized designs, they use only the natural root in combinations of weave to produce several geometric figures, generally confined to a narrow border around the upper edge of the open basket. They make many baskets, both of cylindrical and basin-like type, for use in the berry-fields; but I have never seen a covered basket in their possession. Their work is characterized by the fineness of the strands, which makes the basket so pliable that it is difficult to appreciate that only the root of the spruce enters into its con-
struction; and when the berry season is over, the larger baskets are flattened and folded without injury, and packed away until again required. While the Chilkat did not use colors, they appreciated greatly the ornamental work of others; for a few years back every family of standing possessed many beautiful old baskets which had been procured on trading-trips with the Yakutat, back in the old Russian days. Since the establishment of Skagway, the demand for embroidered basketry has induced a number to take up this kind of work for profit. It differs in no wise from that of other divisions of the tribe.

The Auke-qwan, now collected about Juneau, originally used only the plain root; but with the establishment of a ready market at hand, they, too, have taken up the work in colors.

At several points on Gastineau Channel, Stephens Passage, and Taku Inlet are found the Taku-qwan. They are not basket-makers in any sense, although they weave and plait in root and bark such structures as they require. From Frederick Sound southward through Alaska, and well into British Columbia, plaiting in cedar-bark prevails, although many other types of baskets are found. Among the Haida of Queen Charlotte Islands the ordinary Tlingit weave in spruce-root obtains, although they depend mainly upon the bark basket for general household use. The ornamentation of their basket, however, differs wholly from that of the Tlingit, consisting of narrow colored bands of root encircling the walls. To illustrate the cosmopolitan character of this coast, however, and to show how one has borrowed from another, I may mention that only last year four large old spruce-root baskets were found at Bella Bella, credited to a Haida woman. They were elaborately embroidered in plant-stems, after the Tlingit style, and in well-recognized designs. Some years back I remember also to have seen a perfect specimen of like work, which had come from the hands of an Athapascan woman living along the head waters of the Yukon River, who had learned the art from frequent visits to the coast people.

**Material for Basketry, and its Preparation.**

The basket is constructed wholly of the younger and tougher root of the spruce (*Picea Sitchensis*), while several varieties of grasses and plants enter into its ornamentation.

The spruce, generally termed set by the Tlingit, is subdivided into three species, distinguishable through size, growth, and external appearance of the trunk. Sha'-ghee (from sha, "blood," owing to the reddish color of the bark) is a mature tree from a foot to two feet in diameter, and is preferred as giving the most desirable root in pliability, toughness, color, uniformity of texture, and length of section, as well as freedom from shoots and corrugations.

Shisk ("raw," that is, "not yet ripe") is a younger growth of tree, not exceeding one foot in diameter of trunk, the root of which gives fairly good results. It is much more easily torn from the ground than that of the larger
tree, which is a consideration tending largely to its use, in these days of commercialism.

Tuckle ("cartilage," referring to the immature character of the wood) is a young tree, six inches or less in diameter. The root is porous, brittle, and in short lengths, and is in no wise desirable; but even this is drawn upon in the coarser work. Unhealthy trees, showing dark mottled bark covered with a fungous growth or twisted in the growth, are avoided.

The root (khart) is gathered in the spring and early summer (dependent upon the season and the locality), as soon as the snow and frost permit the digging of the soil, and again towards the close of the fall. The principal season, however, is the spring, the second season often being cut short by frost and snow. The root obtained at these periods is of a uniform, pale-straw color; and its thin bark can be stripped off readily without injury to the smooth exterior. The root procured in the summer becomes mottled and yellow when dry; and the removal of the bark, which adheres in patches, damages the outer surface of the root.

The gathering of the root, its treatment and working, come wholly within the province of woman's work. In families and companies the women go out into the woods, armed with the digging-stick (kart), which generally consists of the limb of an alder or hemlock tree, from two to four feet in length, round or oval in cross-section, straight or bow-shaped, sharpened at one or both ends, and frequently fire-hardened. The leader, an elderly woman of experience, selects the tree, and all commence to prod the ground at right angles to the divergent line of roots. When a favorable lead is secured, with a reasonable diameter (not exceeding two centimetres), it is carefully followed up with the digging-stick and the hands to its end. The sections of root thus obtained, from three to twenty feet in length, are done up into small coils, tied around the middle with their own ends, and the coils strung together for convenience in carrying. They are called khart shuc-kar-tdu'ke ("to coil up and tie around"). Upon reaching home,—certainly within one day,—the crude root is prepared for barking, else the bark dries to the surface, and is removed with difficulty and with injury to the root. A small fire of coals is prepared, and allowed to die down, when the separate coils of root, just as they have been brought in, are laid on the embers or held over them, first one side and then the other, until the bark is slightly charred. It requires much skill to prevent the root from burning, and therefore the operation is generally performed by an elderly woman. The coils of root are now straightened out and passed through
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the eena (Fig. 292). This consists of a rough stick, split through the greater part of its length, which is placed upright in the ground to a sufficient depth to hold it securely. The root is doubled at the middle and placed between the jaws of the split stick, just above a wrapping of hide or bark. Then the left hand grasps the stick and regulates the pressure on the root, while with the right hand it is steadily drawn through the split. The loosening of the bark by the heat and moisture from the sap allows the root to slip through with little resistance. If, after roasting, the bark is not to be removed at once, the coils of root are thrown into water and allowed to remain until required for use, when the same process is gone through with.

The barked root is done up and tied loosely in a coil, and allowed to dry with the sap on the surface. Within a few days it is ready for splitting, although it is considered best to allow it to season for several months; and this was the universal practice in the past, as the summer season was the time of food-gathering, and winter was devoted to weaving and household industries. In the case of very large roots, they are often divided into sections before being packed away in bags of intestine, baskets, or chests, Fig. 292 (a). Woman's Knife. Length, 9.5 cm. since, if allowed to hang on the walls of the house, exposed to the smoke of the open fire, they would soon become discolored. Whenever the root is handled, it is soaked or moistened to render it pliable, as in a dried state it is very brittle and cannot be worked. Before splitting, it is laid in water, weighted down, and allowed to remain until softened, when it is split down the middle, or, in the case of the larger roots, the sections are again divided until the desired size of strand is obtained. Each strand is known as khul katst ("split"). Each half or section of split root furnishes three distinct parts. The outside layer, which includes the smooth polished surface next to the bark, called khart ku'h-khe ("root outside"), is the most highly valued, and supplies the woof-strand which gives the basket its polished ornamental exterior; the next layer, called khart thla'r-tu ("root inside"), shows a fibrous, uneven surface, but is of good color and strength, and constitutes the warp or body of the basket; while the inner section, including the heart of the root, is discarded, as its name implies, — khart tu-qwu't-see ("root thrown away"). The sections split from larger roots often give two or more warp-strands, and the rougher baskets are woven wholly of material of this quality.

Through the several stages of preparation and work in basketry, the woman's knife is ever at hand (Fig. 293). It takes its name (yees) from the natural object, the medium-sized blue mussel-shell (Mytilus edulis), which is rubbed down to a keen edge along the broader, rounded end. Since the introduction of metals, blades have been made of iron, copper, and brass, conforming as nearly as possible to the shell; but still the latter is found in general use. In early days, when ceremony born of superstition marked every action of the
Tlingit, a shell for use was not picked up carelessly on the shore. It must come from the sea, and its taking must not be witnessed by the Sun. A robe was spread over the water to throw a shadow on the bottom, while it was dislodged, brought to the surface, and hidden away from sight; else its sharp edge would crumble in the hand, and misfortune would overtake the worker.

The division of the root into sections, and its subsequent separation into working-strands, are performed in much the same manner. In the first instance, the larger end is split with the knife; in the latter case the end is taken between the thumb and forefinger of the left hand, and the root, with the outer surface uppermost, is drawn taut over the nail of the forefinger, and bent around. The knife, which is held in the right hand between the thumb and middle finger, with the edge down, is drawn across the root over the forefinger-nail, and then pressed in toward the body until the desired thickness of strand is obtained. The root is taken between the front teeth just at the place where the split has been made, and is held taut; while the separation of the strand is accomplished by means of the thumb and forefinger of the right hand, which grasp the root just below the split, the thumb-nail underneath, and bending the root over at a sharp angle. This forces the separation and regulates the movement, while the thumb and forefinger of the left hand continually draw away the strand being worked off, and keep the whole taut. As the splitting continues, and the hands work down along the root, the part held between the teeth is shifted to keep all parts taut. As the strands are worked off, the rougher surfaces are scraped down with the knife to smooth them and remove the adhering fibres. The woof-threads are coiled separately, and done up into skeins; the warp-strands are coiled together in bundles; while the heart of the root is just as carefully wound in a small close coil, to be thrown away. This is done to avoid mistakes, as the newly-split strands look very much alike, and in a morning's work the accumulated parts would be very confusing if scattered around in disorder. Should the strand break during the separation, as is frequently the case, the splitting is recommenced.

The skeins of woof and the bundles of warp, when dry, are wrapped up, and carefully packed away until required for use. The more characteristic ornamentation of baskets is accomplished by the use of several grass and plant stems and root-stocks, which are embroidered over the woof-strands, and show only on the outer surface.

The following grasses are used for this purpose, — *Panicularia nervata, Calamagrostis Langsdorfii, Deschampsia caspita, Cinna latifolia, Bromus Sitchensis, Elymus mollis,* — and when these were not available, I have reason to believe that such other varieties were substituted as were at hand.

Growing grass is known generally as tchu kun, while the dried stem or straw is termed shark; but each variety has its specific name, which may vary somewhat in different localities.

All grasses are treated alike. They are gathered in the early summer before reaching maturity, while the stalks are thin and tender, as the later woody
growth greatly increases their brittleness. The stems are pinched off with the thumb-nail well above the ground, in lengths of single sections just beyond the joints, and are carried to camp in loose bundles. Then they are immediately stripped of leaves, and plunged into a vessel of boiling water to a depth of three-quarters of their length. They are allowed to remain until the bright color fades to a greenish-yellow, when they are inverted. When the color is uniform throughout, they are removed, and spread out to dry on the canoe-sail or on a slab of cedar-bark.

Another and older method of bleaching and curing was to make a fire on a pile of sand. When the sand was thoroughly heated, the fire was scraped away, and the straw was half-buried in the hot sand, and bleached as in the water-vessel. In either case, however, much care must be exercised, as beyond a certain point brittleness ensues, and the only guide is the recognized shade in the graded change of color.

After this preliminary drying, which may last for an hour or two, the stems are done up into strings of one or two feet in length, arranged in parallel rows, bound together by a double intertwining of grass or root (or, in later years, strung together with needle and thread through the joint), and festooned along the house-front, hung from a spear-shaft, or laid out on the canoe-cover, to bleach and cure until the muddy color gives place to the clear tint of pale straw so desirable. This process lasts only two or three days, as a lengthened exposure produces a deeper shade of yellow. The straw is now ready to be used or to be dyed; and, on account of its fragile nature, it is done up into bundles and carefully packed away with the prepared root. Neither the undyed nor the dyed straw is split until it is required for use. It is split by taking between the lips the hollow stem from which the joints have been pinched off, and sucking water through from a small basket kept close at hand. The water so softens the walls that they are readily split along their length with the thumb-nail of the right hand, which all basket-makers allow to grow, and keep in condition for use in their work. The split straw is immediately flattened out by coiling it tightly around the forefinger of the left hand, the glossy outside surface underneath.

It is so held for an instant, which stretches all parts equally. It is then split into working-sections, about two millimetres wide or even finer, with the pointed thumb-nail, a fish-bone, or nowadays more often with a needle, which is pushed through the outer surface from the middle to either end. These delicate strips, for protection, are kept in the shallow groove of a flat stick slightly longer than themselves (shark kus-see-a khars-see, “the straw’s foot-sole”), and wrapped around with root.

Of the several grasses used, Panicularia nervata, known as kha’kar shark (“true straw”), is most esteemed on account of its uniform pale-straw color, its delicacy of texture, and its glossy exterior. It is seldom, if ever, artificially colored. Indeed, it forms the most ornamental feature in the decoration, and as a
commercial article has an excessive value, as it occurs abundantly in certain localities only.

The other grasses of larger growth and coarser fibre are dyed before using, except in cases where the "true straw" cannot be obtained, when they may be substituted with some loss of effect. The coloring of the straw is always done before splitting, while the root is dyed after it is prepared for use. In both cases the process is identical. In the primitive days of basketry, colors were few in number and of vegetable and mineral origin. The prevailing ones were black, purple, and red in varying shades, although the older people claim to have had yellow and a greenish-blue. In the oldest work these last have so faded that they cannot be identified with any certainty. With the coming of Europeans, and the introduction of many colored fabrics, other shades were produced by boiling out the colors and steeping the material in the decoction. Of later years aniline dyes, so cheap and so easily procured, have come into general use, so that the preparation of the native colors is almost forgotten. This is greatly to be deplored, as the discordant diamond dyes detract greatly from the beauty of the work, and contrast sadly with the modest blending of the vegetable colors.

Black (kut-tooch) was produced by soaking the material in the black mud and water of sulphur-springs, which occur at different points, or by boiling the mud with salt water and hemlock-bark, and later, when iron was introduced, by adding scrapings and pieces to the liquid, and allowing it to stand. In the case of all dyes, the depth of color obtained was proportional to the strength of the bath and the time of immersion. Another black of a purplish shade, known as nan-na'r con-nah-ta'r-ee (from the large, dark-blue huckleberry, Vaccinium membranaceum), was obtained by boiling the berry, mashed with a little water, for a long time, and while still hot placing the material in it, and weighting it down with a flat stone to keep it immersed. Purple (kut-thla'h) was obtained, both from this berry and from the Vaccinium ovalifolium, by the same process.

Red has always been the dominant color in basketry, and few old pieces of work can be found in which it does not occur. It was obtained by steeping the material in the urine of children which had been left standing in a vessel dug out of the trunk of the alder (Alnus Oregona). Pieces of the bark of the alder might be added to increase the color; and sometimes the watery substance of the sea-urchin (Strongylocentrotus) was squeezed into it, while in olden days the vessel was half-buried in the hot sand close to the fire. The alder tub used for this purpose, which in old houses was always found in the passageway by the door, was known as qwus. It gave its name to the color so produced, and even to the basket so colored. The lighter shade of red was called qwus kus-su'ck-ho ("red like the sky at sunset"); and the deeper color, kha-gho'n kus-su'ck-ho ("fire-red"). Other reds are said to have been made by boiling the leaves and stems of the nettle (Urtica Lyallii) in urine, and from the bark of the hemlock (Tsuga heterophylla).

Yellow (kut-thlark, from the color of the wild canary, Astragalinus tristis)
was obtained from the yellow lichen (*Evernia vulpina*) in the same manner, by boiling in water.

The greenish shade of blue (kuh khashk, named from the crested jay, *Cyano-citta stelleri*) was produced by boiling hemlock-bark with oxide of copper scraped from old pieces of metal or from the rock.

Other recognized colors of more recent date are known as "green" (kut tsu), "orange" (kush shaok, from the breast of the robin), "purple-red" (kush kah-har-kee).

In addition to the grasses, the stem of the maiden-hair fern (*Adiantum*), called by the Tlingit shar-ah-thlee-tee ("on the side of the mountain") from its locality of growth, has always been a great favorite. Like the grasses, it is gathered in the early summer, and is subjected to the same treatment, being boiled, dried, and split; and old weavers have told me that it was often steeped in blue-berry-juice for uniformity of color, as in its natural condition no two stems are of exactly the same shade, ranging from a reddish to a blackish purple. Much of the old embroidery was done with this plant-stem, which has retained its glossy purple when the artificial colors have faded to indistinguishable browns and yellows.

The root-stock of *Equisetum palustre* — named "heene money" ("at the edge of the fresh water") from its occurrence as a trailing black root along the edge of freshwater streams — is also applied. The plant seems to occur only in certain localities, and its use is more confined to the Yakutat and the Hoonah tribes. Only the root-stock is used: it shows a blackish purple when dried. In its preparation it is dried, then soaked in fresh water, split, and scraped on the inside, and then split into the desired size of section for weaving.

Weaves.¹

Basketry, from the gathering of the material, through all the stages of its preparation, coloring, and weave, is alone the woman's work. Children are early instructed in the art. It is a common sight to see little girls of five or six sitting on the edge of the mother's blanket, struggling with the intricacies of warp and woof, and interrupting her every moment to unravel the tangled strands. Every woman can weave; and one who could not furnish what might be required for domestic purposes would be held in low esteem as a housewife. Individuals as well as families excel in this art, however, and follow it for a livelihood, particularly at the present time, when the demand for baskets is so great. In more primitive times, when the people looked to nature for their food-supply, the summer and autumn were busy seasons of gathering and preparation, and no thought was given to weaving until towards spring; but with the changed conditions of to-day this industry is carried on the same throughout the year. Except in the use of aniline dyes, and experiments in designs, basketry has undergone

¹ Grateful acknowledgment is due to Professor Otis T. Mason of the United States National Museum, who has very kindly revised the technological sections of the present memoir.
but little change. New shapes are occasionally met with, and old forms have been abandoned; but the underlying constructive features and the conventionalized forms still remain.

The Tlingit recognized six styles of weave, not including the fish-trap, the embroidery in grasses and plant-stems, and several plaited border-edges. These are all twined weaving, in which a regular series of warp-strands are enclosed by a cross-twining of the weft. In all weaving, the progress of the work is from left to right, and the outer woof-thread crosses from up, down, and around.

Weave 1. — Wush tookh a'r-kee ("close-together work," from the compactness of the texture, which is perfectly water-tight) is the standard weave of fully three-quarters of all baskets made. It consists of the simple twining of two woof-strands around each successive thickness of warp-splints (Fig. 294, a). The regular weave produces the ridge-like appearance in the line of the warp, the polished exterior surface of the root forming the outside or ornamental face of the work.

An open-work basket in this plain twined weaving (Fig. 294, b), which is not recognized as a type of weave, is known as khart ("a strainer;" literally, "will not hold water"). It is formed in the ordinary twining weave of two woof-strands enclosing the warp-splints successively in a wider spiral of weave. This character of basket is used as a strainer in trying out fish-oil, and in cooking and straining berries.

Weave 2. — Khark-ghee-su't ("between," "in the middle of," from the introduction of a single woof-strand passed over and under each alternate warp-splint — wicker weaving — between the lines of the regular twined stitch described in Weave 1) gives a broken, irregular effect, from the exposure of the warp along the line of the single weft, as well as from the dull fibrous surface of both of these strands, which are of the coarser inner sections of the root; while the regular twining on either side shows the natural polished exterior of the root (Fig. 295). This weave is of a later origin: the plain weaving has been borrowed from the mainland and from the more southern people. It is characteristic of the cedar-bark work from Frederick Sound to the Straits of Fuca. It is wanting on the oldest specimens of Yakutat baskets. Its use is confined to the coarser work, such as the plaque-like berry, sewing, and work baskets of the woman, the bottoms of baskets, and the unexposed tops of the covered baskets. It is in great favor among the Chilkat, who make many large baskets. It is used for economy, both in the quantity
and the quality of the material, as one woof-strand is saved in every three, and in the more valued exterior root-section the saving is one-half. But its disadvantages are loss of strength, rigidity, and closeness of texture; and it does not admit of the embroidery in grasses and plant-stems which is the characteristic feature of Tlingit basketry.

**Weave 3.** — Hiktch hee-ha'r-see ("rough or uneven," like the skin of the frog's back, from its mottled character) is formed by the simple twining of two woof-threads about pairs of warp-splints (Fig. 296). The regularity of weave separates the pairs in each superimposed line of woof, and breaks joints in the units of weave, giving the surface a diagonal appearance. This weave was never extensively used, except as a skip-stitch in conjunction with the ordinary twining (No. 1), whereby a number of geometric figures are produced which form the ornamentation of the hat-rim and the Chilkat basket-border. As a weave, it seems to have been confined to the double basket. I have never seen it employed on the larger, open type, and to-day it is never met with.

**Weave 4.** — Wark kus-ka'rt ("eye-holes," from the polygonal meshes of the open-work weave, resembling in outline an eye) is a type of weave called "crossed-warp," in which the warp-splints are drawn aside from the perpendicular ones at a fixed angle, the odd numbers trending one way, and the even numbers the other (Fig. 297). These cross each other successively in parallel series, just after which they are enclosed and held in place by the ordinary twining of two woof-strands. The size of the meshes is regulated by the distance apart of the spirals of the weave. This type of weave was used for rather long, flat cases or bags, but more particularly for spoon-baskets, which were fitted with a twisted root handle to hang them to hooks or pegs in the wall. Of late years ornamental baskets of an impracticable shape, with flaring sides, but attractive in appearance, are often made in this weave.

**Weave 5.** — Uh ta'kh-ka ("twisted") is more of a braided twining, in which three woof elements are employed, each one of which makes part of a turn over the preceding two, enclosing two warp-splints on the outside, and then passes around one warp-splint on the under side (Fig. 298). This gives a longer, winding, rope-like appearance to the weave.
outside; while on the inside the regular twining-stitch, in its ridge-like regularity, is seen. This is a strengthening as well as a decorative weave, and is often met with in concentric circles at intervals near the bottoms of the larger, older baskets, which were required for the heavier work. It is in general use to-day as a single line of woof around the outer circumference of the cylindrical basket, where the warp-splints are bent upwards to form the sides; but, as a weave proper, its more important use has always been in the construction of the crown of the hat as well as of the cylindrical ornaments surmounting it, and other ceremonial head-dresses.

Weave 6. — Shuck kuhk ("strawberry-basket") is erroneously classed as a type of weave; but it is simply a variation of the regular twined weave (No. 1), in which the woof-strands are of different colors; so that in the line of both warp and weft there is produced a variety of effects supposed to resemble the seed-covered surface of the wild-strawberry (Fig. 299). This character of ornamentation is more commonly found in bands on the woman's work-basket, and on mats and basket-covers.

The characteristic ornamentation of Tlingit basketry is executed on the weave rather than in the weave, and is thus considered by the people themselves as an embroidery. If the overlying strand is of root, and continuous in character in one or more successive circles of woof, or as a spiral weave separated by one or more lines of the regular weave, it is given the general name of tahk ("twist"), and is considered more as a strengthener than as an ornament; but if this extra filament is of grass-stem or root-stock, either natural or artificially colored, its working is known as uh-tah yark tu-twage ("outside lifted up and put around"). In either case the process is the same. The embroidery element is introduced from the outside. The ornamental strip is wrapped around the outer strands of the woof only. It does not pass back of the warp (see Fig. 304). The regular weave is covered on the outside, but is not affected on the inner surface of the basket. The slope of this apparent stitch is in the line of the woof from left to right. Occasionally the embroidered stitch is elongated by passing over every other unit of woof. This occurs more often on mats, the covers of baskets, or as a border ornamentation on larger baskets.

The fish-basket (Fig. 300) used in connection with the fence-like sections blocking streams, or weighted or wedged in streams, is constructed of spruce slats, which are held in place by a lashing or a twining of split spruce-root that secures them to a spiral of spruce-root or rings of root on the inside. The lower end is formed by a network of finer root-strands. The larger traps are cylindrical in shape, with or without a bell-shaped mouth. The smaller ones form a cylinder tapering to the closed end. In either case a funnel-shaped mouthpiece is secured in the open end. The larger traps are used for taking
salmon and trout; and the smaller ones, in the capture of the stickleback, a favorite article of food with the more northern people.

In all types of weave the conditions remain the same. The working-strands are constantly dampened by dipping the fingers into a basket or cup of water close at hand, or, in the case of embroidery, by drawing the section of grass-stem through the lips. The material is kept in a plaque-like work-basket called tarlth ("spread out," from its flat bottom and low, flaring sides). Besides the shell or metal knife, there is generally a rude awl, consisting of a spike of goat or deer horn, a bear's claw, or a piece of bone rubbed down to a tapering point, and a large incisor of the brown bear or the tooth of the killer-whale. These constitute all of the tools and accessories used in basketry.

The position of the woman in weaving is characteristic. She sits with the knees drawn up to the chin, the feet close to the body, the shoulders bent over, the arms around the knees, the hands in front. Sometimes one knee is dropped a little to the side, and, in the case of old women, they often recline on one hip, with the legs drawn up, the elbows resting on a pillow or blanket doubled up.

All baskets, regardless of type or character of weave, are commenced the same,—with the simple two-ply twine of the weft enclosing the initial warp-splints in succession; and a general description of the constructive methods employed in this character of weave throughout will answer for all of the others. In the beginning, half a dozen warp-sections or so are selected, evened up, and bent over at the middle, at which point a single woof-thread is carried around the bundle, pulled taut, and crossed or secured with a half-hitch. In the twining of this double strand the warp-splints are separated and drawn out as radii. Upon the completion of two or three spirals of weave, extra warp-pieces are introduced between the original splints and enclosed in the twining, and the initial warp-sections are backed by like strands. This backing of the warp is commenced immediately, and continued throughout, to give strength and rigidity to the structure. The constant increase of the warp is carried on with great care and regularity to preserve uniformity of shape; and after the establishment of the weave in the first half-dozen lines of woof, when extra strands are entered continually, their introduction is in concentric circles of weave at gradually increasing intervals. The new warp is doubled in the middle, bent over, and introduced on
the bight; each part overlapping an older line of warp, or going to form a new
strand in combination with the third overlaid backing of the next splint. Single
sections may be let in as extra or backing strands at any time when required, and
by this means the circumference may be increased indefinitely. The introduction
of the warp may be from either side of the bottom, according to the will of the
weaver. The opposite side will of course be the more ornamental. In the
larger, older baskets, particularly those where strengthening-lines of twisted
weave are shown, the splints are let in on the inside surface; while the more
general custom of to-day is to preserve the smooth surface of the inside, and work
on the under side of the bottom. Colored lines of root are very often seen
around the bottom. These serve as guides to the weaver, to test the accuracy of
the circle, and the proportion of diameter in the number of warp radiants and
spirals of woof twining. The oldest baskets of the better character show the
same excellence of workmanship and quality of material in the weave of the
bottom as is seen on the sides, although the bottom woof-strand is often of greater
weight; while later work shows a falling-off in both directions. At the periphery
of the bottom, where the warp-splints are bent upwards to form the walls of the
basket, owing to the finer texture of the side through the increase in number and
decrease in size of the units of weave, a proportional increase in the number of
warp-splints is required. This is provided for by an extra backing of the warp
before this point is reached. These and the underlying splints that go to form
new warp-sections, or, as is found in older and finer pieces of work, the broader
warp-splints, are split, and combined with adjacent warp-threads to produce the
required increase; and at this point the three-ply twine of woof is generally used
as a strengthening circle, and frequently just above this are found several circum-
ferential lines of the embroidered twist. The different styles of bottom-weaving
can be readily followed by an inspection of the rougher surface.

The weaving of the sides of the basket is carried on just like that of the
bottom. If the cylindrical shape is desired, no further increase of warp is neces-
sary; but if a flare or increase in diameter is required at any stage, the same
system of extra warp-splints entered on the inside is carried out, as previously
described. With a contraction of the sides, the reverse obtains in the elimination
of the warp and a drawing-together of the remaining splints. The process of
weaving is carried on with the thumb and first two fingers of the right hand, which
manipulate the woof-strands, crossing and twining them around the warp, while
the thumb and fore and middle fingers of the left hand separate the warp and
keep taut the weave. With a greater length of woof, the splints are done up
into little bundles for convenience of handling, as the strands are crossed over
and under each other at each twining of the warp; but more often the woof con-
sists of one longer part so wound about, and one shorter strand free. Some
weavers take the bight of the alternate woof-splint between the lips at each cross-
ing of the woof, which requires a constant shifting; and in the case of a skilful
weaver this is done with clock-like regularity, while the parts are separated,
twisted, and tightened with such rapidity that the eye cannot follow the motion. With long practice, the movement of the fingers becomes mechanical. They perform their separate duties without any apparent effort on the part of the worker. The woof-splint may be renewed at any time by letting it in under its companion, on the inside, or by half-hitching the ends of the expended and the new thread together on the inside. In weaving, all parts are kept moistened, to render them pliable; and with each small area of work the bear's tooth is brought into requisition, to stretch equally and smoothly all parts by rubbing down the inner surface. As the walls of the larger, higher basket are built up to the decorated zone, the clean root surface is protected by a covering of intestine or cotton sail-cloth sewed over the outside.

That the border is the life of the basket, and that this is fully appreciated by the weaver, are clearly shown in the finish of the edge. Fully nine-tenths of all baskets used are of the open, cylindrical type, in which the border is called upon to sustain much more than its proportion of the wear in use; and while a tear in the side or bottom can be securely sewed with fresh root, the fraying of the edge suggests the speedy gathering of material for a new basket.

To-day the character of the border is largely individual, owing to the more extended intercourse between distant people, and their consequent interchange of ideas; but in the past it would seem to have been dependent upon locality and period of manufacture, the type of the basket always being a factor. Some tribes have always used certain twinnings or braidings to the exclusion of others, and the work of different periods within tribal limits shows marked preferences.

Two principal methods are employed in the finish of the border-edge: (1) by trimming off the warp-ends flush with the last spiral of weave; and (2) by turning the warp over and twining it down along the standing part. The first system is always used with covered baskets, and generally with double baskets, where the two borders give protection to each other, with hats and mats, and also with all types of baskets made for the tourist trade, for in this last case the weaver has learned that the decorative value is alone considered, and thereby saves herself in time, labor, and material. The second method is employed in all open baskets made for use, and in the finer double varieties. When extreme nicety is required, the inner member or layer of the double warp-strand is cut off two lines of weave below the top; so that when the outer section is turned down on the standing half, the thickness of the border is not increased beyond that of the regular walls; but whether the warp is cut off flush or turned over, the last few spirals of weave are generally strengthened by additional twining, sennit, or embroidery.

Border 1.—The crudest finish, or really want of finish, consists in cutting off the ends of the warp even with the last spiral of two-strand woof (Fig. 301). This is universally practised with the covered work-basket, and is often the finish of the smaller double basket.
Border 2. — With the warp-ends cut off, the three-strand woof twined stitch around the edge adds strength to this part (Fig. 302).

Border 3. — In this border is represented a vertical twining of two extra strands around or through the outer of the two-strand woof twine, and not showing on the inside (Fig. 303), which is of rare occurrence. The shaded elements are the added twine.

Border 4. — Fig. 304 shows the most common system employed to give additional strength, when the last few spirals of the common two-strand twining are overlaid with straw or root in the same manner as the ornamentation in straw is embroidered on the basket.

Border 5. — The truncated cone-like hat of root is finished at the border by cutting off the warp-ends and introducing a common three-strand braiding around the outer woof-strand of the plain twined weave, in which one part goes under, and the other two parts cross on top (Fig. 305). This shows a ridge on the outside, around the edge.

Border 6. — Another style (Fig. 306) consists of a four-strand braid passing under and over the outer strand of the plain two-strand twined weave. These two hat-border finishes are in common use by the Haida in basketry, and may have been borrowed from them.
Border 7. — In all open baskets made for use, where strength is of primary importance, the warp-ends are doubled over on the standing part of the next warp-splint in the direction of weave, — that is, to the right, — and twined down to it with the warp (Fig. 307). This finish is found on the oldest pieces of Yakutat work. It is often strengthened by the overlaid embroidery in straw or root around the last few spirals of weave. This corresponds to Border 1, with ends turned down. In most examples the warp-ends are bent down inside.

Border 8. — With the turning-down of the warp-strands, the three-strand woof twining (Fig. 308) is sometimes used in place of the two-strand. This corresponds to Border 2, with ends turned down.

Border 9. — Fig. 309 represents the turning-down of the warp-strands combined with the twining of two extra strands around or through the outer of the two-strand woof-twine, and not showing on the inside. This corresponds to Border 3, with ends turned down.

Border 10. — A later finish, and one generally found on the shallow, basin-like basket, used as a work-basket in weaving, and as a berry-screener except among the Chilkat, consists of a turning-down of the warp-ends as described, and in addition a two-ply twining over the bights, and passing through each alternate woof-strand, forming a rope-like twist over the edge, and thoroughly protecting the more exposed parts of the warp (Fig. 310). I find that this character of
finish occurs more among the Sitka, Hoonah, and Hootz-ah-tar tribes. The Chilkat never used it, and the Yakutat only in the case of the basket-worker’s basket. It is certainly of more recent date, although not of to-day.

**Border II.**—The most elaborate finish peculiar to the Chilkat, used to a degree by the Hoonah, seldom found among the Sitka and Hootz-ah-tar, and practically unknown to the Yakutat, consists of the introduction of two extra woof-strands, which, with the original two, go to form a regular flat sennit (Fig. 311). This finish is also found on the finest and most elaborate ceremonial hats.

**Fig. 311.** Border II: a, outside; b, inside.

**Fig. 312.** Border II: a, outside; b, inside.

**Border I2.**—Fig. 312 represents a four-strand twine overlying the turned-down warp. It is held in place by a two-strand twine passing through horizontally.

**Border I3.**—The border of the oval covered basket differs radically from that of all others. Here the top of the wall is rolled over on the outside, and twined down to the side all around; and sometimes this roll encloses a good-sized spruce-twig, which adds considerably to the strength and stiffness of the border.

In all instances where the warp-ends are turned over, the ends of the woof are twisted, and run through the bights of the last two or three warp-strands, which are turned directly over and twined down to their own standing parts for several spirals of weave.

Practically all open baskets made for use are fitted with a handle or handles of two-strand twisted root or of hide. The larger baskets and those used in berry-picking, which are carried suspended around the neck, have two loop-like handles opposite each other (Fig. 313, a); while the drinking-basket and the spoon-case, which are hung on wall-peg, have single handles, as well as the open-work strainer, which is fitted with a small woven loop in the bottom, by means of which the contents may be emptied.

In the larger baskets the handles are doubled by letting them in through the walls on the bight, and knotting the two ends separately or to each other (Fig. 313, b). Single handles are secured by a knot at either end, after pass-
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ing through the side two or three times (Fig. 313, c). The knotting of the handle is always done on the inside. The handles are introduced by means of the horn awl, which is used much as a sailor uses a marline-splice in knotting and splicing. The dull point is gently worked in between the weave, and the hole is enlarged sufficiently to take the handle without injury to the threads, which are first dampened.

Weaving in root is particularly trying on the thumb and forefinger; and even among those who follow this industry for a living, these parts never seem to become callous, as might be expected. Possibly the constant wetting of the fingers accounts for this in part, as well as the fibrous surface of the root.

A medium-sized basket, from the preparation of the material through the process of the weave, will consume from one to two months; and many complain of the tax on the muscles of the wrists, which will not permit of continuous labor.

**Forms of Baskets.**

Form, in Tlingit basketry, is suggested by use, but determined by the material and constructive methods. The fine strand employed both in the warp and the woof, and the simple twining weave, combine to give great strength with a minimum weight. The pliable, yielding walls require a broad, substantial base, which restricts the weaver to the more simple cylindrical forms, except in the case of the open plaque-like type, which have a limited capacity, and are used for lighter articles. Contact with civilization has had but little influence upon form. Baskets still serve many of the purposes for which they were originally designed, and so those made for sale are constructed on similar lines. Occasionally a cup, a kettle, or some odd shape, will take the fancy of a weaver, and it will be truthfully reproduced in root and straw,—when bottles were a novelty, they were most ingeniously covered in weave,—but such departures are purely experimental; and a comparison between the oldest baskets and those of to-day shows little or no difference in this respect.

The most important use of the basket in former days was as a food-receptacle; and through the several operations of gathering, preparation, and storage, the cylindrical form was equally convenient. I believe that the earliest basket was a true cylinder, and that the flare of the sides was a later idea. Of course, old baskets with hard usage lose their shape, but a careful following of the warp-strands shows what was intended.
The basket-forms took their names from either their use or their shape, the
two being intimately connected.

In berry-picking three different sizes of the open cylindrical basket (Types
1–3) were used.

Type 1. — Sahk-kah to'n-nar (compounded of two words, meaning "to hang
from around the neck in front of the body," and "the noise made by throwing
the berry into the basket as it bounds from side to side") or Su-yet. It is a
small basket with a capacity of from one to two quarts, and proportionately
smaller when carried by children (Plate V, Figs. 1–3). The height is about
equal to the diameter of the bottom. Sometimes the walls are slightly expanded
towards the top, which increases the capacity accordingly. It is always fitted
with two loop handles secured to or through the rim on opposite sides. Through
these passes a strip of hide or line, by means of which it is carried suspended
around the neck, and hangs down in front at about the height of the breast. As
the berries are picked, they are thrown into this basket; and when it is filled, it
is emptied into a basket of the next larger size, which is

Type 2. — Dsu-na or yan-nah ("to pack on back") or kah-tihk ka't-r-r ("on
top of the back"). It is so named from being carried well up on the back by
means of several turns of a line, which is run through the loop-like handles and
brought around the shoulders and secured over the breast. This basket (Plate
V, Figs. 4–6) has a capacity of from one-quarter to three-quarters of a bushel.
The proportion of height to diameter is the same as in the preceding basket. As
this basket is filled, it is emptied into

Type 3. — Kah date tu-see-ar ("to empty into from the back basket") or
kluckt tar-tu'n ("to sit up in one place," "stationary"). This is the largest of
the series, and is named from the custom of placing this basket at some central
point in the berry-tract, so that many pickers may help to fill it (Plate VI, Figs.
3, 4). This is much the largest spruce-root basket made or used, and in its vary-
ing sizes would be capable of holding from one to two bushels. Its proportions
are similar to those of the two described, but it appears lower as it increases in
size. It is fitted with stout double-loop handles for transportation. This is a
rare type of basket, only seen in old specimens and among the Chilkat, with
whom berry-picking ranks as an important industry. The most ornamental
baskets of this character, wherever found, are attributed to the Yakutat. Gener-
ally their decoration differs from that of other, larger baskets in the narrow,
finely embroidered zones of straw and color, below which, on the body of the
root, are what might be termed "conventionalized pictures" in vertical rows at
intervals. Such baskets were used on festive occasions, filled with native foods,
which were distributed among the guests, or the basket was placed before them
to eat from.

1 The most remarkable basket of this type is preserved as an heirloom in the Con-nah-ta-tee clan of the Chilkat
tribe, at Klukwan. It is known as kuhk claw ("basket-mother") from its great size. It is cylindrical in form, and
measures thirty-three inches both in diameter and in height of walls. The weave is in khark-ghee-su't (No. 2), that gen-
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**Type 4.** — Tchook-ate ("a vessel between," referring to its size between the largest and the second size of berry-baskets), sometimes called kuhk kish-shar ("basket-bucket"), a cylindrical basket of medium size, used as a water-bucket. This has long since disappeared with the introduction of the more serviceable metal vessel. It was probably undecorated, as constant wetting would cause the colors to run. In size it might rank between the smaller and the medium-sized berry-basket, but I do not believe that any special size was woven for this purpose.

Tchu-qwelth was any kind of open cylindrical basket which might be utilized to pack clothing and household articles in for storage or when travelling. The name generally implied a larger size; and very often in use they were lined with cotton cloth, which was brought over the top as a cover, and fitted with a draw-string.

**Type 5.** — Kuhk ku'hk-ee (the diminutive of kuhk, "a basket") is the smallest size of the cylindrical type, with possibly more flaring sides (Plate XIII, Fig. 6). It is used as an eating-dish for children, and also as a plaything. Often these little baskets are very carefully woven and tastefully embroidered by the mother for the child; for the Tlingit is an affectionate parent, and takes a conscious pride in everything pertaining to the offspring.

Son-nay is a general name applied to any medium-sized, cylindrical, plain root basket, to distinguish it from the ornamented or embroidered one. The term is in more common use among the Chilkat, and means "rough," from the character of weave (khark-ghee-su't), which gives the uneven appearance to the surface.

**Type 6.** — Kuhk tar-yee ("half-basket") is the primitive cooking-vessel, long since obsolete. The illustration (Plate X, Fig. 5) is from an original specimen — smoke-begrimed, and showing the effect of long usage — which was found hidden away among some old forgotten rubbish in a deserted house at Klukwan, the principal Chilkat village. As its name implies, it is a half-basket, the height of the sides being about one-half of the diameter. The outward flare of the walls is somewhat greater than in the ordinary type. It is well woven of a heavy root-strand; and this is particularly noticeable on the bottom, which is still further strengthened by a number of circles of twisted root in series, at intervals. It is embroidered around the walls in much the same way as other baskets. Cooking was done by putting heated stones on masses of food and water until steam was generated, when the whole was covered with seaweed or skin; and so it is also named ta yet ("stone vessel," referring to the method of cooking). This basket is particularly interesting, as I know of no other original specimen extant.

...
Type 7. — Kish-shar yu’t-kee ("a small bucket"), or athle yet ("salt-water cup"), also called athle-thlu ottee ("salt water belonging to") is a different type of the cylindrical open basket, more elongated in form, and averaging in height of sides about one and a half times the diameter of the bottom (Plate XII, Figs. 2, 4, 5). The walls are either straight or slightly expanding, at the will of the weaver. It is always fitted with a twisted-root handle of the average depth of the basket itself, by which it is hung to the house-wall when not in actual use. It was confined to the use of the man alone. More often it is of the finest weave and most elaborate ornamentation, as if the wife had taken pride in this display of her best energies in behalf of her lord. A noticeable feature often seen in its decoration is the attachment of some foreign element, as a tail-feather of the flicker, a dentalium-shell, or colored beads, which are not used in any other type of basket. As the name indicates, it was used as a salt-water drinking-cup. The custom prevailed among the men in former days of rising early,—as the Tlingit express it, "before the raven cries,"—and noiselessly going down to the salt water and filling the basket, which was secreted under the blanket and carried behind some projecting point or into the forest back of the house, and four swallows were taken from it. This was done successively for four mornings at a time, and sometimes during every day through six months or a year, to bring good fortune in hunting, fishing, gambling, trading, or to guard against the coming of sickness to the household. Salt water was also drunk from this vessel to purify the body when fasting, and it was prescribed by the shaman upon particular occasions of his practice. With the changes of later years, these customs have lapsed; and when this little basket is seen, it is but a reminder of the days when the Tlingit followed in the ways of his forefathers, in the strict observance of the teachings of the bird creator Yehl̓.  

Type 8. — Chetle tar-ka‘te (literally, "the spoon-bag") is of open-work, quite similar to the preceding in proportions, but somewhat larger (Plate X, Fig. 1). It is fitted with a twisted-root handle to hang on the wall, and is used to hold the family eating-spoons of horn. Very often the walls are woven in alternate bands of the close and the open weave. The oldest specimens show no sign of ornamentation, but to-day baskets may occasionally be seen in which the solid bands are worked in color and design. The use of this basket was universal, and was prompted from a sanitary point of view, as the spoon was seldom washed after meals. In a closely woven basket the grease contained in the spoon soon cakes on the walls, while the open work permits a free passage for air, and is readily cleaned.  

Type 9. — Thleetle ("a rather flat sea-worm that lives under bowlders along the shore at tide-water") is the name of a rather long, elliptical basket or bag (Plate XI, Fig. 7). It is supposed to represent this animal. It may be of the close or open weave, with open top or fitted with a cover. The type is not modern, and was employed as a case for objects of value. It was often made to hold particular objects, and so its proportions and size are variable. Such cases are not
infrequently found among the effects of the shaman. They contain the rattle, charms, or the down of sea-birds.

**Type 10.** — Kishot ("crossing") is the general name applied to any open-work basket with reference to the weave, and not to the shape (Plate XIV, Fig. 5); but more often it is taken to indicate a modern structure of fair size, frequently called toox kus-see ("small base"), with widely expanding walls, which is very attractive in appearance, but weak, and unsuitable for use. It is more often a combination of open and close work, the latter in color and embroidery. The walls may be built up on either a circular or a flattened elliptical base. In the latter case it is fitted with a broad plaited handle. Such baskets are made for sale only, and have no place in the house.

**Type 11.** — Khart ("will not hold water") is the name of a strainer. It is a coarse, open-weave basket, made of the inner root-strand, and unornamented. It occurs in both conical and cylindrical forms. The former has a depth about equal to the diameter of the opening; that of the latter is somewhat less. The warp is often single, and proportionately heavier than when doubled. The woof is a two-ply twine in the regular weave. It takes the character of a gradually increasing spiral from the centre outwards and upwards, and the lines of the spiral are from one to two centimetres apart. In the bottom, outside, is a loop of braided strands, which serves to empty the basket. It is employed as a strainer in trying out fish-oil. After the free oil has risen to the surface of the water, the boiled fish is dipped out and put into the basket, which is laid on a grating fitted over a box. On top is placed a thick tray-like board, slightly concave on the underside, which is heavily weighted. Thus the remaining oil and water are pressed out of the fish, and drip into the box. It is also used to scald and cook berries in.

**Type 12.** — Tarth ("spread out") is a broad, shallow, basin-like basket, the low sides curving outwards and upwards from the flat bottom (Plate XIV, Fig. 3). It is always in the weave khark-ghee-sut (No. 2), in which a single plaited woof-strand is let in between the lines of regular twining. Therefore it has a rough, unfinished appearance. While sometimes plain, it is more often ornamented in concentric bands of the strawberry weave (No. 6); and the border is finished off in several circles of the regular weave, the warp-ends being turned under on the outside. This is the work-basket of the basket-weaver, and contains the few tools used, the material, and the unfinished work.

**Type 13.** — Kut-tuts-ar yet ("beating-or-shaking-under vessel") is so called from its use as a berry-screening vessel (Plate XIV, Fig. 4). It is also placed under the berry-bushes, and is filled by shaking the fruit off into it, or by drawing the hand along the stems, thus taking off berries and leaves, which fall into the basket. It is similar to the preceding in form,—a low, spread-out, plaque-like basin, in which the upward trend of the warp is continuous from near the centre. It shows no dividing-line between the bottom and the sides, the one imperceptibly running into the other. This is most marked in small specimens; for
when placed on a flat surface, they tilt to one side. Great variation of size exists in this type. They are either very small (hardly 25 cm. in diameter) or very large (from 60 to 100 cm. across). The weave in the ordinary basket of this kind is also khark-ghee-sut. Generally the basket is plain, but among the Chilkat I have seen beautifully woven and embroidered small baskets of their own and of Yakutat workmanship. These baskets may have two or four loop handles. Their most frequent use is for screening berries. This is done by holding the basket in both hands to the height of the chin, shaking it laterally, and at the same time bouncing the berries into the air and blowing through them to carry away the leaves, twigs, bits of moss, and bark. This basket is essentially Chilkat, who gather more berries than any other tribe. When this kind of basket is found elsewhere, some connection with the Chilkat can be traced. It is carried to the berry-fields folded in or hung to the basket carried on the back; and when the season is over, it is dipped into the river, folded in halves or quarters, and packed away in the larger baskets until again required.

Covered baskets are of several varieties. Their sphere of usefulness is rather limited, and it seems possible that they may be recent inventions. They were used by women as work-baskets and storage-bags for trinkets and small articles of value. However, they are not necessarily the product of to-day, nor were they made for barter, as the well-worn, faded specimens, that are occasionally brought to light from long-forgotten corners in old houses, bear witness.

**Type 14.**—This is the more common and possibly the oldest type (Plate XV, Figs. 3, 4). It is called tu-dar huck ("noise inside") because a number of tiny pebbles or shot are enclosed in a small chamber in the cover of the basket. The sound produced when rattling them is likened to the noise of the stones on a shingle beach, as they roll one over another with each receding wave. It is a cylindrical basket, the walls varying in height from one-half to two-thirds of the diameter; but sometimes the height of these baskets is one and a half times the diameter. They vary greatly in relative proportions and size. The exposed surface of the sides and the cover are wholly worked in color and embroidery. The oldest baskets show the regular close weave throughout. In later work this has been supplemented on the bottom, and around the rim concealed by the cover, by the weave khark-ghee-sut. The embroidered area is necessarily in the regular weave. The edge of both basket and cover is seldom finished otherwise than by trimming off the warp-ends flush with the weave, as the parts protect each other.

**Type 15.**—Tu-dar-hook ah-yhum-r-r tun-nee, another variety of the woman's covered basket, is elliptical in form (Plate XIV, Fig. 2). In weave, and ornamentation of sides and cover, it is similar to the preceding; and as to proportions, the height of the walls is one-half of the lesser axis. On the under side, near the outer edge, the top is fitted with a woven ridge or band a little smaller than the inside of the basket itself, while the slightly projecting edge of the cover rests on the rim of the basket. The edge of the basket is turned over, and
sometimes encloses a whole section of root or twig, which stiffens the rim and serves as a protection to the top. The top is generally attached to the basket by a hinge of root. This kind of basket is rare, and seems to find little favor with the weavers of to-day.

Type 16. — Qwutle qwut ("round or egg-like belly") is a more ornamental form, urn-shaped, the small circular base expanding into gracefully rounding sides, which are drawn in at the mouth. Over this fits a cover, as in the cylindrical basket. The illustration (Plate XIV, Fig. 1) is from a basket more than fifty years old. I have never seen just the same shape in another. The curves of the sides, towards the mouth, are generally regular, without the pronounced shoulder here observed. The type looks as if it might have been suggested by the familiar preserve-jar of the Chinese. This might readily have come about a century ago, in the early days of Russian occupation and of the fur-trade with the East, when the supply-vessels brought back tea, rice, and other food-products, and possibly ginger and other preserves.

Type 17. — Yun-nah kar-ar-kee ("top to lap over") is the larger size of double basket (Plate XII, Figs. 1, 3), which consists of two very slightly tapering cylinders, fitting snugly one within the other. The length is about two diameters of the bottom. The basket proper is generally of the finest conceivable weave, embroidered throughout in straw. The border is regularly finished by turning under the ends of the warp-splints. The case or cover is of a noticeably coarser though extremely regular weave. Frequently the frog-back or skip-stitch is applied at intervals, forming ornamental patterns and lines on the regular weave. In the past this basket seems to have been more particularly the property of the shaman, which may account for the extreme fineness of work, as everything pertaining to the shaman was characterized by some special feature. It was used to hold bird-down and charms; and it is also said to have been utilized by him as a drinking-vessel during periods of practice and fasting.

Type 18. — Ut tu-qu'nu-see tar-ka'te ("shot-bag") is a smaller size (Plate XIII, Figs. 1-3) of the preceding type. It is more variable, in both size and form, ranging from a capacity of several ounces to two or more pounds. It is more tapering, the basket proper often bulging a little above the bottom to give the cover a better hold. The inner case is straw-embroidered throughout its length; and in the finest specimens the edge is finished off by turning under the warp-strands on the inside, but in most cases they are trimmed off flush with the weave. The cover is sometimes plain, in close or frog-back weave, or it is as elaborately embroidered in straw as the inner basket. These little cases were used to hold shot, and were carried in a leather wallet suspended around the neck. They were in general use among the Central Tlingit, — the Hoohnah, the Sitka, and the Hootz-ah-tar; while pouches of skin, horn, and intestine were preferred by the other tribes.

Type 19. — Tuck tar-ka'te ("bite-bag") and mus-shu't tar-ka'te ("chewing-bag" or "cheek-bag"), are different names applied to the diminutive, flat double
tobacco-case (Plate XIII, Fig. 5). Like the preceding, it is not a perfect cylinder. A slight taper is necessary for the two parts to fit perfectly. Its diameter is almost double its height, and, like the shot-bag, one or both of the cases are embroidered or woven in colored root. It was carried in a little skin bag suspended around the neck, and was used to hold a mixture of roasted finely pulverized clam-shell, the dried leaf of a plant of the Nicotine family, and the ashes of the inner bark of the yellow cedar (Chamaecyparis Nootkatensis). This was rolled into a little pellet, placed between the lower gum and the lip, and allowed to remain until all the strength had been drawn out. This was not swallowed, but was expectorated. In more recent times the tobacco-leaf has been substituted for the native plant.

Several varieties of hats (Types 20–23) are made of spruce-root basketry and of similar weaves. Their range, however, is more extended than that of the baskets. They were generally used by the coast tribes from Puget Sound to the Aleutian Islands, and it is difficult to say with whom they originated.

**Type 20.**—The common type, called sarh ("hat") or khart sarh ("root hat"), was worn by either sex, more particularly in canoe-travel. It was in the form of a frustum of a cone, with a rather pronounced flare of the lower portion. It was divided by weave into the crown, which was of the three-strand woof, rope-like twine for strength and rigidity (and often the doubled warp-strand was still further increased by a third section in thickness); and the rim, which was of a coarser strand in the regular close-twined weave, interspersed here and there at regular intervals with stitches of the frog-back weave to form geometric lines and figures. Generally the hat was painted, more as a protection and to render it waterproof than for ornamental purposes. Persons of high rank had the whole hat painted in totemic design. I have seen coarse hats that were wholly worked in the two-ply twined weave, but they form exceptions. The border-finish of hats of this character was made by cutting off the warp and strengthening the outer edge by means of a three-strand plait or a four-strand braid through the outer woof-strand of the last row of twined weave. A band to fit the head was woven on the inside of all hats.

**Type 21.**—A much larger, more finely woven, and elaborately painted hat (Type 21), known as sarh klin ("large hat") or kum-tu-gee-hit sarh ("painted hat"), was worn by the wealthier class on festive occasions. Owing to its greater spread, it was proportionately shallow.

**Type 22.**—The smallest, finest, and most valued hat was the shar-dar ("around the head") and khuke (the name of the cylindrical ornamentation rising above the crown). This was a ceremonial head-dress greatly esteemed by the coast people (Plate XVII). The older Tlingit believe that it originated among the Tsimshian, from whom they learned to weave it. Its construction is a lost art among the Tlingit; and while there are many basket-makers who understand the several weaves here employed, yet no attempt is ever made nowadays to reproduce it. It commands a fancy price, and is seldom to be had. Indeed, the root-weaving
tribes of the north devote their whole attention to making baskets, and they purchase their hats from the more southern Tlingit and Haida. This hat is possibly the most elaborate piece of work in spruce-root. The fine character of the thread used in the construction of the cylinders; their expansion and contraction; the weave, which is like that of the crown in the three-strand woof-twine of rope-like appearance,—would claim admiration, even if produced by the most perfect machinery. In the weave the cylinders were shaped and woven around exact forms of partially decayed red cedar, hollowed out to render them as light as possible, which were sometimes removed after completion, but were generally left in place. These cylinders were indicative of rank and social standing, and are constantly seen on the totem-poles and house-carvings. I believe they were generally woven in one piece with the hat. The many long rings that are found attached to other head-dresses and to hats may have simply been torn off and otherwise utilized. The crowns of these hats were always painted in totemic designs with mineral colors,—black, red, blue, and rarely white. The cylinders were more often colored in native blue, and from the hole in the top an ermine-skin was hung.

Type 23. — Shar-dar yar-ar-kee ("around-the-head work") is essentially a Tlingit type of head-dress worn by the shaman (Plate XVI), and it might be denominated a "war-bonnet;" not that he wore it in actual war, but in his practice when contending with hostile spirits. In weave it is a continuous broad band, slightly wider at the top than at the bottom; so that when it is flattened out and creased, the outward flare comes more in front, giving it a clumsy appearance. The top is sewed together, and is surmounted by a wolf or fox tail, or by the mane of the mountain-goat combined with one of the former. The entire exterior surface is ornamentally embroidered in straw and color. The hat itself gives the name to the peculiar step-like design which is believed to represent the profile of the mountain as it descends in successive ridges to the water, and which constitutes one of the most popular designs in basketry ornamentation. Another and perhaps the most striking feature of this hat is the animal design which is almost always embroidered on either side. This is practically the only instance of a realistic design. The people can offer no explanation for it, except that it is the shaman's property, which to their minds is sufficient. No other piece of basket-work is as rare as this hat, as the shaman class was very limited, and the same article often descended through successive generations of practitioners.

Spruce-root mats are woven in two shapes, — tawlth ("flat") and khuke too-gu ("basket-bottom"). The former is oval, and is said to have been used originally as an eating-dish for dried berries, roots, etc., and to place near guests at feasts to put the horn spoon on. The latter is circular, like the bottom of the basket. It is said to be a product of later days. Both of these are woven the same, and ornamented in weave, colored root, and embroidery, and are pleasing in effect.

The cradle (tooke) was simply constructed by cutting a larger cylindrical basket in halves perpendicularly, inverting the two parts, and sewing them
together (Fig. 314). On the inside a bent spruce or cedar branch was fastened to stiffen the parts. It acted as a frame. While in use, the whole was covered with several folds of skin or cloth, and filled with soft tree-moss. It formed the home of the baby for several years.

Cradles, although rude structures of no intrinsic value, are seldom to be had. The old superstition still prevails that the cradle must never be used but once. When no longer required, it is hidden away by the mother in some hollow tree in the depths of the forest or in a cleft in the rocks on the mountainside, and allowed to remain there. If it should be found by one evilly disposed, injury to the cradle would re-act on the child.

Odd pieces of basketry, such as rattles, cartridge-boxes, cases for paint-brushes, and ornaments, are occasionally seen. Of late years, kettles, bottles, jars, and various articles of civilization, have been imitated, or covered with weave. An old basket is sometimes used as a canoe-bailer, and then it takes the name khuke sheen ("basket ladle or dipper").

Ornamentation.

Ornamentation in basketry is universally practised by the Tlingit; and, excepting the fish-trap and the oil-strainer, few pieces of weave are considered unworthy of some slight decoration, even should it be but a single line of color or a different weave along the border.

The antiquity of the decorative art is wholly unknown. In the narratives of several of the early explorers of the eighteenth century the beauty of the basketry is mentioned, and engraved plates of specimens indicate that color and embroidery were well established at that early period. These old baskets show a fineness of workmanship and an elegance of embroidery seldom if ever equalled to-day, although with age and wear the colors become almost indistinguishable. The baskets assume shades of brown and buff; and the stem of the maiden-hair fern and the root-stock of the _Equisetum palustre_ alone retain their colors.

Three distinct methods were employed in basketry ornamentation, — by weaving, by the attachment of foreign objects, and by the application of color laid on as paint. The first method is most universally practised, and characterizes Tlingit work. In its simplest form it consists of the combination of two or more types of stitches, as illustrated in the Chilkat weave and the rim of the conical hat, whereby series of parallel lines and geometric figures are produced in the plain root. The next step was presumably the introduction of color into the warp-strand. The culminating effect was reached by overlaying with threads of grass-stem or root-stock, which were twined around the structural weave, and
which added to the strength of the basket. A basket ornamented in this intricate and delicate manner is called shark tu ku'hk-ee ("straw basket") or yu'd-dar shark ("face of straw"). These names particularly refer to the finest quality of grass-stem, known as kha-kar shark, which is never artificially colored, and presents in its natural state a clear, slightly buff-tinted, glossy surface. This is most effectively used to overlay in part a colored-root field. It shows through only at the exposed points, and gives the impression rather of color laid on a plain field. The effect is still further increased by the addition of colored straw.

In this, as in all other branches of native art, the form is so adapted to the decorative field as to produce the best results. This adaptation accounts for the conventionalized systems of decoration which are reproduced with such regularity on the different types of baskets. The open cylindrical form, through its various sizes, is marked by encircling bands of color and embroidery. In the medium and smaller sized baskets these generally occupy from one-half to three-quarters of the depth of the side. They are arranged in two principal zones, alike in character of design, and separated by a narrow band of widely different figures, averaging about one-third the width of these zones. The whole is so placed as to appear to the best advantage, leaving below a margin of plain root wall greater than the one above. The largest baskets are decorated with proportionately narrower bands placed well up on the sides. They have the character of stripes. The broad, plain field of root below these stripes is worked in either two or four vertical lines of designs, which extend from the bottom to the ornamental band. These are generally very handsome, and appear only on the finer old baskets of different sizes. Occasionally an old basket is found that is ornamented in three bands, which cover the entire surface, or which may be separated by equal intervals of plain root.

The elongated cylindrical drinking-basket (athle yet) shows the same type of ornamentation, but of greater width. Often the vertical design is found above the bands as well as below.

The double baskets, including the shaman's basket, the shot-basket, and the tobacco-case, are in most instances embroidered over the entire outer surface of the inner basket, while the outer case is ornamented in plain root weave, although often the cover is also worked in straw.

The covered basket of the type of the woman's work-basket is embroidered, throughout the exposed surface of the outer walls, in color and straw; while the top is more often worked in concentric circles of colored root and embroidery. Around the bottom of the side and the bottom of the cover, narrow lines of like design occur, so that the cover and the basket have one feature in common to identify them if separated.

The plaque-like work-basket of the basket-weaver is seldom ornamented otherwise than in the strawberry weave arranged in concentric circles. Only some very old small specimens are embroidered in circles of straw and colored-root figures along the entire inner surface.
Mats are highly ornamental, and are worked in much the same way as the basket-cover. The shaman's hat (shar-dar yar-ar-kee) is ornamented over the entire surface in straw-embroidery and colored root. The peculiar features of its decoration have been previously noted.

Drinking-baskets of individuals are sometimes decorated by attaching a few beads, dentalium-shells, or feathers of the flicker, about the rim or the bottom. This custom has gone out of use, and such decoration is found only on baskets made by past generations. The shaman's hat (shar-dar yar-ar-kee) was always surmounted by fur, generally the tail of a wolf or a fox. The cylindrical ornaments surmounting the conical hat always had an ermine-skin attached through the central opening in the top. Conical hats were decorated by the application of color laid on as paint. The common type was simply daubed over with color and grease to render it waterproof. Hats worn by persons of high rank, and such as were exhibited on ceremonial occasions, were artistically painted in totemic characters. These were painted in black, red, and blue, and sometimes in white.

The origin of the Tlingit designs can only be surmised. The people of to-day simply follow conventionalized forms which have been transmitted through generations of weavers. In many instances they do not recognize the symbolism of their own handiwork. It has been noted that in the paintings on conical hats of root, graphic representations of totemic characters alone occur. In all other forms of basketry the ornamentation is woven, and is always geometric in character, and never of totemic significance. The only exceptions to this rule are the shamans' war-bonnets (shar-dar yar-ar-kee) and an odd basket or so. In this basketry, decoration differs fundamentally from all the rest of Tlingit art, which delights in flowing lines, and has for its principal object the display of the family crest. The cause for the development of angular, geometrical forms does not lie in technical difficulties, since on shamans' hats animal figures prevail, and many modern baskets are decorated with representations of fishing-scenes and figures of men and animals.

Just as remarkable as the occurrence of angular lines is the absence of a totemic significance of these forms. The life of this whole coast is colored and rendered picturesque by the ever-present totem. The painted house-front, the carved ancestral column, the grotesque canoe-figure, implements of war and of the chase, festival clothing and ornaments, food-dishes and household articles, down to the least important trifles of personal use,—all carry the emblem of the family in one form or another. I have seen the crutches of a cripple carved throughout with his crest. Nevertheless ornamentation on basketry has no totemic importance, even though the motives may symbolize some well-established character.

In this connection I might remark that bead-work often appears in basketry designs, although it is not confined to geometric characters. This work is all of more recent days, as beads were first procured in trade from Europeans, and their use in ornamentation has always been limited.
But more pertinent is the embroidery of the Athapascan in split quills, which generally takes geometric forms and presents several patterns similar to those found in basketry. Indeed, as its name implies, one of the old designs is taken directly from this work. This style of ornamentation, although little practised, has always been known to the Tlingit. This is due to the fact that many of their families originated in the interior, and followed the water highways to the coast; furthermore, in more recent years they have continually traded and intermarried with the tribes of the interior. Therefore it is possible that this work has had its influence upon basketry ornamentation.

As might be expected among a people living so close to nature, whose sustenance is drawn from the sea and the woods, animal and natural subjects occupy a first place in decorative motives; while articles of dress and ornamentation, and implements, go to make up the remainder. Generally it is some prominent feature of the object represented that is indicated, rather than the whole; and only two or three designs, when interpreted from the native standpoint, fail to express to us their full meaning in outline. Some designs have been copied directly from the work of others, as the Greek fret, known as khu won kus-sar-ya'-yee ("the fancy border of the blanket"), which has been borrowed without change from the Hudson Bay Company's ornamental blanket made especially for native trade; or the alternate colored squares representing the checker-board (dar-war tar-ye'e dtay-ye'e). Probably other patterns have been so appropriated; but, from their similarity to familiar forms, they have been renamed, and so cannot be identified. Some of the simple figures of little character, such as the crossing of two lines at right angles, the turning-back of a line on its own part, etc., may have occurred accidentally in the natural course of experiment, and have been named as their outlines suggested; but certainly a number of the more intricate designs would justify the belief that they were the result of much thought in the endeavor to reproduce the object as nearly as possible in geometric form. Figures have been doubled in some cases, and new motives have come about by the combination of parts of others. The Tlingit seldom apply a design singly on a plain field. In most instances it occurs within a decorative zone, in conjunction with other motives or with complementary forms; i.e., the negative part of the design, which is cut out of the background by the colored design. Now, the idea exists with the people, that originally the main figure which it was desired to indicate—the one which we call the design, and which gave its name to the basket—was embroidered in the fine natural straw, on a field of plain or colored root. Under these conditions, the intervening spaces, or complementary forms, were of secondary value and without meaning; but at the fancy of the weaver, in the course of time the complementary figures were embroidered in straw, and took the first place as designs proper, while the original character became of secondary importance. Then followed the work in colored straw, until to-day each line in root or straw carries its meaning to one versed in this art. Nevertheless the pattern in the natural straw is paramount.
Not all designs can be equally well adapted to the decorative field. Some patterns lend themselves equally well to all shapes and sizes of baskets, while others will admit of contraction or expansion only within certain limits, which accounts for the more frequent appearance of certain motives on certain types. No particular design is attached to any particular form, except in the case of the shaman’s war-bonnet, on which the step-like character is seldom wanting.

Neither are the designs tribal or individual. They are common to all. It is true that in certain localities and at certain periods a preference for some patterns always seems to have existed. Individuals also have their preferences. Indeed, in the latter case it is commonly seen; and it is a great advantage to the weaver to work over the same lines until the process becomes mechanical, just as a painter copies the same picture again and again, producing better results at a less cost of labor and time.

Color in design has no significance except in the rainbow motive, and here the only requirement is that at least three, sometimes four, colors should appear in succession; in all other instances the motive may be in any shade. But as in design, so in color, individuals acquire the habit of using some colors to the exclusion of others. In the days of the vegetable dyes this was more a variation of shade than a difference of color, as the latter were few in number.

The accuracy with which designs have been preserved and transmitted through so many generations is evidence of the conservatism of primitive people. Most of the patterns of the past may be seen in the work of to-day, although occasionally an old basket comes to light, unique in character of figure. This shows that some designs must have been lost in the course of time.

Among some of the more advanced weavers, I have seen rude sketches of designs drawn from memory, and copied from the baskets of others, but more often the design is worked wholly from memory.

The modern tendency to produce new figures is born of the rivalry in trade. With the increased demand for baskets, patterns of carpets, oil-cloth, and fabrics seen in the store-windows, are being copied; and the old characters are being combined to form attractive although meaningless figures, and so symbolism in design will gradually be lost.

Under existing circumstances, the future of basketry is not difficult to foresee. With the changed condition of life resulting from education and intercourse with our people, native industries and customs must gradually disappear. The production to-day is possibly greater than ever before, but the older women and those living outside of the influences of civilization are the principal producers. The younger generation learns to read and write, but seldom learns to weave; and so the time is not far distant when Alaska must follow in the footsteps of all other basket-producing countries.

Now, this is unfortunate. Alaska, with its grandeur of scenery, climate, and extended inland channels, will ever attract tourists, all of whom will wish to carry away some souvenir of native workmanship. To-day the supply does not meet
the demand. It is well that the Tlingit should receive an elementary education; he cannot escape civilization; and that he should learn the white man's ways is self-preservation. To compete with the white man in his own crafts is not to his advantage. Some will succeed, for the Tlingit is intelligent, patient, and industrious, so far as he has learned the value of time; but in this one point he drops by the wayside. Heredity is strong; and after laboring faithfully for a season, the woods and the waters call him with a voice too strong to resist; and off he goes to live the life of his forefathers, rejoicing in that independence that civilization knows nothing of. He is not yet fitted for continuous work; and so it is to his advantage that he should labor in his own field, and that native arts and industries should be preserved and encouraged,—not only the textile arts, but painting, carving, and metal-working. In all of these branches he shows remarkable ability both in conception and technique, handicapped as he is with primitive tools made from bits of stone, bone, shell, or such pieces of metal as he may pick up. Now, if these natural talents were fostered under more favorable conditions of life, with modern tools, a good livelihood would be assured him from the resident as well as from the visiting whites.

List of Motives.

Design 1. — Thlukh qwar-ye‘-tee ("the mouth-track of the woodworm") is shown by a continuous zigzag, wide-spread and low, horizontally arranged, and graphically illustrating the irregular, halting course of the worm as it eats its way through dead wood (Fig. 315). In its simplest form it occurs generally on circular fields, on basket-covers and mats, and as a line of separation between other figures. When occupying the first place as a design in the decorative zone of the larger berry-baskets, it is worked in parallel colored lines, and is most graceful and pleasing in effect.

The woodworm occupies an important place in legendary lore. Its frequent occurrence in the crest and upon festival paraphernalia marks an epoch in the family history of the Con-nah-ta-tee, who originated in British Columbia, just below Fort Simpson. They migrated northward in very early days, and have now reached Chilkat. The story tells of the little daughter of the chief, who played one day in the forest, and found a worm in the decayed trunk of a tree. She took it home and cared for it in secret. In the daytime she fondled and suckled it; and when evening came, she made a soft bed in the pulp of a fallen log, where she hid it for the night. With such fostering care, it grew rapidly in size and strength, until it became a menace to the village. It would crawl about at night, boring through the house-walls, destroying the food dishes and chests, and eating up the winter supply of grease and dried fish. Finally the people settled upon its destruction. The little mistress was carried off to pick berries on the mountain-side. Then the villagers, armed with clubs and knives, set upon
the great worm, and bruised and hacked it until it died. Its life trickled away in milky rills, which united to form a stream whose discolored waters have ever continued to flow. To this day they mark the scene of the event that led to the division of the family in its subsequent migrations northward.

**DESIGN 2.**—Tsutsk gu-nar-see ("the intestine of the sooty song-sparrow," *Melospiza fasciata rufina*) is a pattern that I have never seen reproduced in basketry. The illustration (Fig. 316) is copied from a drawing found among a number of basketry designs in the possession of an old woman at Sitka. She and others assured me that in the past this served as a border-decoration. It differs from the preceding figure in the closeness of the lines, forming a double series of acute angles. It was always placed singly in a horizontal band.

**DESIGN 3.**—Hahtle thlu'-ku ("the lightning," caused by the opening and closing of the eyes of the mythical Thunder-bird) is another one of the convergent patterns, distinguishable by its diagonal arrangement and its division into sections (Fig. 317). Its outline is very suggestive. It is likewise one of the old designs, and is not found on the basketry of the day. It was found as a rude sketch with the preceding figure, preserved by an old Sitka weaver, and is said to have occupied a prominent place in the past.

**DESIGN 4.**—Tla-thlu' ("butterfly") is one of the best-defined and most uniform motives (Fig. 318). The only element of doubt is what special feature of the insect is expressed. Some explain it as referring to the many-colored markings of the wings; others, as indicative of its halting, uncertain flight. As the name is simply "butterfly," it would seem that the outline of the insect with expanded wings was pictured. Singly the pattern is not so attractive as when backed by alternating lines of straw and color. Fig. 318, *d*, presents a highly conventionalized although a very old form, in which the horizontal connecting-line is wanting. It is always placed horizontally, and is best adapted to a greater circumference, as it will admit of contraction only within certain limits. Consequently it seldom occurs on the smaller types of baskets. I am inclined to credit its origin to the Yakutat people, and I believe it is one of the oldest, as it is one of the most universal, of motives. It is found very often on the largest specimens of berry and feast baskets that have been preserved in families through many generations. To-day it is employed by the Hootz-ah-tar tribe on fully two-thirds of all their work.

**DESIGN 5.**—Kou'sh-tar kus-see'-tee ("the trail of the land-otter," *Lutra*
canadensis) at first glance appears less readily interpreted. In the early spring, when the animal runs over the brittle snow-crust, its feet break through, and sink deep into the yielding mass; the heavy tail drags low behind, and leaves a broad, straight groove. This track is represented in the design Fig. 319. It is practically one of the obsolete designs found occasionally on older baskets, but never met with on the work of to-day. It was certainly of Yakutat origin, and adapted only to larger baskets. Its arrangement in horizontal sections shows much ingenuity. In this manner is expressed the character of the tail-line, which in nature half obliterates the footprints, and which would be lost if the zigzag formed a continuous band.

Design 6.—Hootz kus-see'-tee ("the footprint of the brown bear," Ursus sitkensis) is fairly realistic, considering its expression by means of straight lines and angles (Fig. 320). It is usually arranged in one or more horizontal bands encircling the basket, thus representing the trail of the bear. It illustrates the instinctive habit of this sagacious animal in following in the old, deep-worn tracks on its way to and from accustomed feeding-grounds.

In the diagonal bisection of a rectangle, this figure and its complement form reversals. It is not frequently represented in combination with other forms. The older baskets show the motive in the natural, and the interval in colored, root (Fig. 320, a); in later work horizontal stripes of color are introduced in the design (Fig. 320, b), as if to indicate the claws; while the most ornate and more recent idea (Fig. 320, c) presents both characters in stripes, as if indicating two trails running in opposite directions.

The oldest specimens of basketry bear this design; and its popularity, transmitted through generations of weavers, may in part arise from its adaptability to all sizes and types of baskets, including those of circular form. Among the Yakutat and associate tribes this figure is known as kitch-u, from its resemblance to the woman's gambling-die.

Design 7.—Shuh-tuck ou-hu' ("the tooth of the larger tropical shark"). These sharks frequent the warm waters of the southern coast; while in Alaska only the ground-shark, the dog-fish, and other small-toothed varieties of the Squalidae, occur. These large teeth have always been highly esteemed by the coast people for ear-ornaments, and are said to have been obtained in trade from tribe to tribe, through a stretch of one or two thousand miles of coast, long before the arrival of Europeans.

The shape of the tooth is clearly defined (Fig. 321, a), and in many instances the serration of the edges is indicated in color (Fig. 321, b). The greater
axis is always in a horizontal plane, and the figure is placed singly with several complementary forms in the same decorative section. The Tlingit, having no personal knowledge of the fish itself, make no attempt to picture the succession of teeth as they occur in nature. This is a very old motive, which I find occurring more among the Sitka and the Gun-nah-ho tribes, both in the work of to-day and in that of the past.

**Design 8.**—Ku klate-ar ku-ou ("the tail of the snow-tail"). The forked tail of the Arctic tern (*Sterna macrura*) is a characteristic feature of this noisy little fellow, that darts hither and thither, following with ceaseless chatter the fisherman in his canoe. The open jaws are placed horizontally (Fig. 322). The figure is always used with one or two other angular forms, which go to make up a rectangular section in the ornamental field. Among the Yakutat I have heard the term ut-kut-see ("the open jaws") applied to it, but it is more generally recognized under the former name in different localities.

**Design 9.**—T'chu'nate koutch tar-ou' ("the feather-wings of the arrow") requires little explanation. Its compactness, and proportion of greater length to breadth, distinguish it from approximate forms. It always appears horizontally (Fig. 323), generally in a succession of units, and seldom if ever associated with any other design in the same field of ornamentation. Sometimes a narrow medial line, indicating the shaft, connects the several figures, increasing considerably their decorative value. By the Yakutat all angular figures of this class are given the name of show-ou tar nu-ku ("the outside of the tent-shell," the *Limpet*, which this outline suggests). The design seems to be of more recent origin, judging from its absence on older baskets, and its more frequent occurrence on the narrow decorative bands of modern open-work baskets and on modern mats and basket-covers.

**Design 10.**—Thluhl k-yar-ne ("the leaves of the fire-weed," *Chamaenerion angustifolium*) is an excellent example of plant conventionalism. The symmetry of the lanceolate leaves, and their parallelism standing out diagonally from the stalk, are well expressed in the successive rhomboid figures horizontally placed (Fig. 324, *a*). When they are subdivided into lines of color (Fig. 324, *b*), the character and decorative value of the figure are still further increased. The plant is of common occurrence, covering old village sites and clearings along the beach, and in its midsummer bloom presents a sea of color which could not fail to have attracted canoe-travellers as they skirted the shore.

**Design 11.**—Kitch hon-ar-ghart ("the rainbow;" literally, "the wings of
different colors”) is the only figure that depends upon color in its particular arrangement. It is made up of rhomboids of equal size (Fig. 325), in which black or purple, red, and generally green, alternate with the natural straw. A more natural and artistic effect is obtained on the small double shot-baskets when the rhomboid is drawn all around the basket and appears as a spiral. Both of these forms are old and well recognized, and also pleasing, but they are seldom met with in the baskets of to-day.

**Design 12.**—Utu-tihk-kha (“the backbone’’), or, as others call it, tsar tuts-ssark-a (“the hair-seal’s ribs’’), is a very old and attractive figure, which is occasionally met with on old berry-baskets (Fig. 326). It is arranged in sections following each other through the decorative zone.

**Design 13.**—Kohk-thla’-ku (“the peculiar flake-like appearance of the flesh of a fish cut along the line of the greater axis”) is represented by convergent lines serially placed (Fig. 327). These, in the original design, were narrow strips of color, separated by broad intervals of straw; but in later work these more natural proportions have not been preserved, and now the difference in color alone distinguishes them. Like other angular figures, this is known to the Yakutat as “the outside of the tent-shell” (the Limpet), while many connect it with the “tree-shadow,” which will next be described. It is generally associated in the same ornamental section with the “shark’s tooth” and the “tern’s tail,” the three forming a most pleasing combination in outline and color.

**Design 14.**—Ars suck har ha’-yar-ku (literally, “the echo of the spirit-voice of the tree reflected in shadow’’). The Tlingit endows all nature with spirit-life, which manifests itself in various ways. The master of the tides, hidden away in the caverns of the sea, rears his head suddenly in anger, and sweeps through the narrow rocky channels in the resistless bore or swift swirl, carrying destruction in his wake, and silently disappears. The voice of the glacier is many times given back from the mountain-side, until it loses itself far up the valley in the heart of the great ice-spirit. The brilliant scintillations of the aurora, chasing each other through the northern skies, are but the warriors greeting their friends from the blessed abodes of rest. And so the graceful tree-life comes forth in the evening, to rest upon the quiet waters until driven home by the ruthless storm-spirit, which is the enemy of shadow-life. The idea is the unconscious expression of the poetry of primitive life.

In its elementary form (Fig. 328, a), this figure approaches so closely the preceding design, that only the weaver can interpret the meaning; but its extended form (Fig. 328, b) as a vertical zigzag admits of no doubt, and truthfully pictures a water reflection distorted and broken by the tremulous rippling surface.
This motive is among the oldest and best-recognized throughout the area of spruce-root basketry. It appears to equal advantage on all sizes and types of baskets, but it is most effective when repeated in straw and root along drinking-cups. In addition to this figure, the Yakutat people include under this design the parallel upright bars of color and straw (Fig. 328, c) which are often used in the ornamental bands of the berry-basket to separate figures or sections. By others these are recognized as tsaté ou-hu’ (“steps,” or, literally, “steps’ teeth”).

**DESIGN 15.** — Keté ou-hu’ (“the teeth of the killer-whale,” *Orca orca*) represents truthfully the saw-like jaw of this voracious animal (Fig. 329); but its use is limited, as it appears only as the complement of the “tree-shadow” or the lozenge when arranged in a vertical series; and by many it is recognized only as an ornament, and not as a character proper.

**DESIGN 16.** — Yehlh ta-ka’ (“the hood of the raven,” *Corvus corax principalis*) is an ornamentation in the skip-stitch in the natural root, found more frequently on the rim of the conical hat and in the ornamental border-band of the Chilkat basket than as a design in straw and color. The illustration (Fig. 330) is taken from a large old berry-basket of Yakutat origin, which in early days had found its way to Kodiak.

In the employment of horizontal lines under different limitations, four motives are produced, none of which are in general use to-day. Although the several arrangements are quite dissimilar, yet their significance is not clearly established in the mind of the present generation, thereby leading to confusion in the names. I have gone over this subject with a number of the more intelligent, older basket-weavers of different tribes and different localities. Their interpretation is as follows.

**DESIGN 17.** — Qwun kheet-see’-tee (literally, “the tying-about the skin trousers or leggings”) refers to the embroidery of split porcupine-quill on caribou-skin trousers, and more particularly the ornamental garter below the knee. This consists often of series of broken lines of different lengths, which are accurately reproduced in this pattern (Fig. 331). Split and colored quill-work is characteristic of the Athapaskan tribes of the interior. It is little practised by the Tlingit; but they have become familiar with its uses through trade, intercourse, and intermarriage. It occurs frequently on clothing used at ceremonial dances and upon festive occasions.

**DESIGN 18.** — Yan-nar-ate kah tuck-tar-see (“the wild celery,” *Heracleum lanatum*, cut up in lengths for chewing) is made up of a series of parallel lines of
equal length, horizontally placed, separated by vertical bars or open spaces (Fig. 332). In the early spring, after months of dried fish and oil diet, nature craves a change, and the first edible roots and green sprouts are eagerly seized upon. The women and children go out and gather this plant, cutting the stems into convenient lengths, and upon reaching home assemble in groups on the shore and make a feast on the succulent stem, which requires no preparation beyond stripping off the prickly skin.

**Design 19.** — Khartse kut-r-ka-dee (“the stick fish-weir”) presents a number of narrow parallel lines encircling the basket, backed at intervals by broader vertical bars (Fig. 333, a). The former indicate the fence-like sections of split spruce rods, and the latter the upright stakes or cross-pieces to which they are secured, the whole representing the barriers placed in streams for the capture of such salt-water fish as run in from the sea periodically to deposit their spawn in fresh water. In another form of this design (Fig. 333, b) there are rows of short horizontal lines in alternating positions. The uprights are omitted. This is possibly an older pattern, which, owing to its plain character, never seems to have attained any importance, as it is found only on narrow borders or on small baskets.

**Design 20.** — Klake-ar-ton (“the cross-piece of the fish drying-frame, on which rest the small rods which carry the split fish” literally, “one straight”) is a simple continuous, horizontal line in straw or color (Fig. 334), paralleled by others for decorative effect. It is the plainest of ornaments, and occurs as a line of separation, on borders, or on the little double basket.

**Design 21.** — Woush nuh-kha kha’khee (“joining together”) is a pattern of indefinite significance, which, however, seems to have a recognized place in designs, and is occasionally found on old baskets. From its arrangement horizontally in pairs (Fig. 335), it is called by some ut-ku’s see yar-a’r-khee (“footprint work” or “footprint embroidery”).

**Design 22.** — Shuck kuhk (“the strawberry [Fragaria chilornsis] basket”) is classed as a weave (see p. 242), while it is a simple design formed in the construction of the basket by the twining of two woof-strands of different colors, which in the gradual spiral of weave present a series of units alternating in color both in the line of the warp and the woof, forming parallels of color diagonally. It symbolizes the seed-covered face of the berry, which grows in abundance on the sand-dunes and glacial moraines of the shores near Mount St. Elias and Mount Fairweather, and along Cross Sound and Icy Strait. Its decorative value is held in small esteem; and its principal use is on mats and covers and
as a border-figure, or in concentric circles on the plaque-like work-basket of the woman.

**Design 23.** — Yulth thlu-thlee’te nu’-ku ("the outside of the smaller scallop-shell," *Cardium cerbis*). In this case the ribbed appearance of the exterior is due to the use of two woof-strands of different colors, which by one skip-stitch in every circumference of weave produces vertical lines of alternating color (Fig. 336). It is in general use on mats and basket-covers, often in combination with the strawberry weave. Thus both appear to great advantage, the variegated effect of the one being in strong contrast with the regularity of the other. These two characters in combination are recognized all along the coast, and occur also in old specimens of Haida work from the Queen Charlotte Islands.

**Design 24.** — Kah-ghu’n kar-ha’r-ku ("the spawn of the stickleback") is a design produced by the alternation of one plain and one embroidered stitch, placed so that the colored stitches of the successive rows form diagonal lines (Fig. 337). It is often associated with rhomboids, forming either the line of division between them or used as a decorative edging.

The granular appearance of the pattern is suggestive of the large egg of this tiny fish. The general effect of this design is light, and it tends to relieve the solid appearance of blocks of color. Its origin is generally attributed to the Yakutat, although its use is general by all the people.

**Design 25.** — Klaok shar yar kee’-kee ("the half of the head of the salmon-berry," *Rubus spectabilis*) is represented by isosceles triangles variously placed (Fig. 338, a, d, g). The sections of the lozenge divided longitudinally (Fig. 338, b), or quartered (Fig. 338, c), are known under this name, and even the whole lozenge is so designated by some. When it appears as a complementary form of the "butterfly" pattern, the apex of the triangle is cut off without altering the explanation of the design.

The antiquity of this design is well assured, and its simple form and elasticity permit of its use as a complement of so many other designs, that on the basketry of all periods and throughout the whole area it is by far the most common character.

This motive is peculiar, in that the relative arrangement of the units may form a secondary character under a specific name, while still retaining their individuality. When the triangles are placed in echelon on a plain field or marked in color (Fig. 338, d), the pattern is called kut-kha’r-nee ("the spear barb," such as is used in sealing and salmon-spearing.) The arrangement in a single row between two horizontal lines (Fig. 338, e), which gives two series of
units in reverse order, is often termed kar-tlu'ckt-jar ("the drop"), and is supposed to represent water-drops as they collect on the eaves of a house or a projecting rock. The grouping of several rows of triangles in a broad band (Fig. 338, f) around the baskets of the Yakutat is known as klau shar yhut-tee ("small sand-hills"). These occur frequently all through their country, scattered over the old terminal moraines of glaciers. Among the Sitka tribe I have heard the name of kee ou-hu' ("the teeth of the killer-whale") applied to this arrangement. In all these combinations the triangle itself is always the half-head of the salmon-berry.

**Design 26.** — Kin-da'r-kar ("the largest labret or mouthpiece worn by the older women") is a representation of the labret with slight exaggeration (Fig. 339). The labret was generally worn by Tlingit women. At the age of puberty the young girl was secluded, and confined in a darkened hut or behind a partition within the house for a period of from six months to a year, according to her social position. Upon re-appearing, with much ceremony the lower lip was pierced, and in the aperture a small pin of bone or metal was inserted, which marked her as of marriageable age. With increasing years the pin gave place to a larger, button-like ornament, which, with the relaxation of the muscles of the mouth, was replaced by still larger ones, until finally a large, saucer-like button could be inserted, which distended the lip, standing out like a great tray. This was considered both as a mark of distinction and as a form of beauty.

![Labret Pattern](Fig. 339)

![Halibut-tail Pattern](Fig. 340)

![Tadpole Pattern](Fig. 341)

**Design 27.** — Tchartle ku'-ou ("the tail of the halibut," *Hippoglossus hippoglossus*), in its regularity of outline, is capable of simple execution in geometric form. For the sake of symmetry it is always represented double (Fig. 340), and is placed horizontally in sections throughout the decorative band. It is not used today, and marks the work of the middle of the last century.

**Design 28.** — Kluck-ki'sh ("the tadpole") is of rather uncertain significance. It was found on a very old basket, and was submitted to several basket-weavers for identification, with varying results. Generally it was classed with the lozenge form, which will be described later; but one old basket-maker at Yakutat insisted that it represented a succession of tadpoles, the tail of one merged into the head and body of the one succeeding (Fig. 341).

**Design 29.** — The lozenge is of indeterminate significance, and is given different interpretations according to its size and to locality. Any small lozenge, either solid or in outline, is known to the coast tribes from Icy Strait to the Copper River as ut-tu-wa'r-kkee ("an eye") from its shape. Among the Sitka and Hootz-ah-tar people small solid colored lozenges (Fig. 342, a) are generally called kar-tlu'ck-jar ("a drop of any liquid just at the instant before it detaches..."
itself"). When arranged in outline one within another (Fig. 342, \( \delta \)), it is called de-gar ("the scoop-net used in the taking of the candle-fish"). The large lozenge, and more particularly when two or all four of the angles are flattened (Fig. 342, \( \epsilon \)), is called everywhere sig-ga-dee' tee'shee ("the beaver-skin stretching and drying frame"). The skin of the beaver, like that of the bear, the deer, and the seal, is cut along the under side, and stretched on a rude frame of two rods, held apart by cross-pieces, which approximate to the spheroidal shape of the skin. The lozenge, when divided into sections, loses its identity, and becomes the salmon-berry figure.

Design 30. — Naste or Kon-naste ("the cross") is accredited to the Orthodox Russian Church as a design of more recent years. This word seems to have resulted from the attempt to pronounce "Christ," the letter \( r \) being a difficult sound for the Tlingit to produce. They will to-day speak of the church as Kon-naste hit ("Cross-house"); for the Russian Church, which was the first church seen by them, was always surmounted by a cross. They also say "Jesus Kon-naste" for "Jesus Christ." In its simplest form this design follows exactly the lines of the Greek cross (Fig. 343, \( a \)); but more commonly, when employed as a principal figure on the broad band of the large basket, it is distorted to correspond to the decorative field, the horizontal arms being distended, and the body proportionately shortened (Fig. 343, \( \delta \)). When thus shown, the solid color is relieved by the superimposition of a smaller cross of ordinary proportions on the figure. The Latin cross is occasionally met with, and as an ornamental figure often two crosses are joined one above the other (Fig. 343, \( \zeta \)). This pattern is known as wou'sh-ka-de kon-naste ("the double cross," or, more properly, "towards each other").

Design 31. — Yehlh ku'-ou ("the tail of the raven," *Corvus corax principalis*), which is a regular and intricate design made up of crosses, half-crosses, and open arms enclosing each other (Fig. 344), is universal. In the minds of the people it is not connected with the preceding figure. It seems to be purely symbolic in character, and bears no trace of resemblance to the natural object. It is of frequent occurrence on the finest old baskets, and varies within reasonable limits. It seems perfectly natural that the raven should be represented in basketry, as it
is the most prominent figure in every other branch of art; and, aside from superstitious and religious motives, no picture of native life is complete without these familiar birds dancing over the house-top or collected on the shore in groups, full of individuality in form and pose, and offering numberless suggestions to the artist.

**Design 32.** Kha'-tu (literally, "to turn up," referring to the short arms at the end of the body of the design) is a name applied to both the ceremonial club and the war-pick of cruciform character (Fig. 345). Properly, the figure should stand upright; but when placed horizontally, it is recognized as the same character by many, although I believe this to be a mistake. In conjunction with the cross, this figure appears doubled as a complementary form, and is called wou'sh-ka-dee kha'-tu ("the double kha'-tu").

**Design 33.** Kon-naste ar-kee'-kee ("the half-cross") and wou'sh-targhon yah kon-naste ("double around the cross") consist of a half-section of a cross divided vertically, or of a nest of rectangular figures open at one end (Fig. 346). It can hardly be called a conventionalized design, and includes the kha'-tu when horizontally placed. It is used with good effect on the large berry-baskets, and was more popular in the past than at present.

**Design 34.** Ee-na ("the split stick through which the roasted root is drawn to scrape off the bark") is a composite figure, made up in part of the two preceding designs (Fig. 347). This too is an ornamental character of some antiquity, but not in general use, and scarcely recognized by the majority of weavers.

**Design 35.** Shon ghe-kulth kah ka'ch-ul-tee (literally, "old-person-hand-back-of-tattooed") is possibly the most interesting, as it is one of the most ornamental and widely used characters in basketry. It illustrates an old custom of the Tlingit, the existence of which has been denied by some of the early writers, and confirmed by others, but described by none. Tattooing was never practised by the Tlingit to the degree met with at present among the Haida. It was a mark of position, and was little used by the common people. It does not seem to have had any totemic significance. Only the back of the hand and the adjoining part of the fore-arm were tattooed. The design, Fig. 348, was tattooed on the back of the hand, a being placed on the metacarpals of the fingers in the position in which it is represented in the illustration, b being placed on the metacarpal of the thumb. Besides this, there were three lines across the wrist, resembling a bracelet. Above these, rows of sixteen dots were arranged on the fore-arm, running from wrist to elbow-joint. There were six such rows,—three on the left side of the arm, three on the right side,—with an interval between
the groups of rows. The design was copied from the hand of a very old woman
of the Hootz-ah-tar tribe from Admiralty Island, who was the last of the people
to show this mark. For almost twenty years I had searched the Tlingit country
in vain for evidences of this custom, when one day, in conversation with some
people, an old half-blind woman held out a trinket to me, and on her withered
hand and arm the blue lines of the picture were clearly visible. The origin of
these figures is wholly forgotten by the present generation, who know them only
as basket designs. The main figure resembles in form the double kha'tu, but it
is always broader and represented in double lines. The pattern on the thumb
is known under the same general name, but it is also called kunel-sak nath-see
(“the squirrel’s tail”). It is of secondary value, both as a motive and as an
ornament. It always appears in vertical position, and is therefore appropriate for
narrow objects, such as the little double shot-basket. The use of these figures
is very general; and the former seems to be held in particular esteem, and in its
arrangement in two colors is very attractive in the broad band of the large baskets.

DESIGN 36.—Sha’r-dar yar-a’r-kee (“the work or embroidery around the head,”
i.e., on the wooden helmet, and also on the basket-work hat or war-bonnet worn
exclusively by the shaman) was characterized by a peculiar step-like pattern (Fig.
349), which was believed to have been copied from the profile of the mountain
(shar) as it descends to the water in step-like plateaus or benches,—a form so
commonly met with in Alaska. The regularity of this figure does not permit of its
use with other forms on basket-bands. It generally consists of many groups of parallel lines. Its interpretation is invariably the same, and therefore it may be one of the oldest patterns that has been transmitted unchanged through generations, and its adaptability to all forms and sizes of baskets has greatly increased its value and use.

DESIGN 37.—Guth-lu’h-ku—a word from the tongue of
an older race that descended the Copper River and peopled
these shores before the coming of the Tlingit—is a design
scarcely less popular than the preceding one. It is equally
old and widely distributed. It refers to the flow of the
tide in its wave-like motion (Fig. 350), and indicates either
a floating object which appears and disappears successively,
or the irregular, winding line of drift and seaweed along a
flat shore, left by the receding waters. This is the Yakutat
explanation of the pattern, while to the other Tlingit it is
known as sarh-shar tootsee (literally, “the labret of the woman’s root hat”), the
continuous line representing the hat, and the small enclosed parallelogram or
square the “labret” or crown of the hat. This design is represented as a single
line or is backed by several others (Fig. 350, a). Sometimes it is divided into single figures arranged in horizontal sections (Fig. 350, b). It is always placed horizontally. Fig. 350, c, illustrates the design on a much-worn basket found in a rock cave on Chatham Strait, where the remains of an old shaman had been laid to rest. The variant in this specimen is easily recognized.

**Design 38.**—Sha'rar kuhk ("the ceremonial root hat surmounted by the ornamental cylinders of fine work") is a very faithful representation of this head-dress, which is peculiar to the Northwest coast (Fig. 351). The illustration is from a tiny double shot-basket found at the Hootz-ah-tar village of Angoon, on Admiralty Island, and its single occurrence would mark it rather as an individual experiment than as a characteristic design.

**Design 39.**—Kheet-see'-tee ("tying or winding around") is the general name of a number of motives made up of tiny rectangles placed in echelon, with their longer axis in a horizontal plane (Fig. 352). It illustrates the wrapping of a string around a body, as seen from one side. This design is believed to have been copied from the split porcupine-quill work of the Athapaskan tribes, which was reproduced by the Tlingit in very early days in decorative bands across the body of skin armor. These are called khe'ka: therefore the design is sometimes called khe'ka kheet-see'-tee.

In its simplest form (Fig. 352, a), klake da kheet-see'-tee ("one tying"), the line of single echelon is employed to show the winding-around of a string in one direction. The backing in colors is simply decorative.

Ut kheet-see'-tee ("tying"), khark kheet-see'-tee ("middle tying"), woush-ka-dee' kheet-see'-tee ("double tying"), are different names applied to the double echelon (Fig. 352, b), the angle pointing up or down. It is either single or a continuous zigzag, and illustrates the winding of two rings in opposite directions.

From these, two other arrangements have naturally developed which must be credited to the Tlingit of a later day. They are of less frequent occurrence.

**Design 40.**—Khin nehl khart-see ("the flight of the gray goose," *Anser albiros gambeli*) is shown in the double echelon (Fig. 353), horizontally placed, which pictures both the wedge formation in outline and the birds in the units of design.

**Design 41.**—Ta'r-wark kus-see'-tee ("the footprints of the Canada goose," *Branta canadensis*) is the doubling of the preceding figure to form a lozenge (Fig. 354), or a crossing of lines at regular intervals, which serve to indicate the many footprints of a flock of geese feeding on a mud flat, and the crossing and recrossing of their tracks. This is a rare design, and by some it is referred to the fish-net design.
All four of these motives (Nos. 39-41) are light and graceful, and lend themselves readily to narrow fields. The first two may be found on fully three-fourths of the larger old berry-baskets, and occupy the central band of ornamentation between the two broad zones, and are hardly less popular on basket-covers and mats.

**Design 42. — Kishst ("crossing") is an old design, which is rendered in several quite distinct forms.** The simple crossing of two lines (Fig. 355, a) is often found as a central line of separation between other figures.

As shown in Fig. 355, b, it has no significance; but Fig. 355, c, an older and more ornate form, is known to some as kah-ghon' kus-see'-tee (literally, "the feet of the sun"), symbolizing the beams as they radiate from under a cloud.

**Design 43. — Gwulth ha cou'tch-ee ("the young fronds of the fern as they come up from the root and curl around").** The centre represents the root-bulb, and the curling radii the leaves (Fig. 356). This is only adapted to circular fields, such as basket-covers and mats.

**Design 44. — Kon ta'r-yee (literally, "the porpoise-board").** This name refers to the different colors of fat and flesh when cutting through the under part of the larger porpoise. This design too (Fig. 357) is limited to a circular field, and is generally shown in two colors.

**Design 45. — Woush kate kut-lu't-tee ("one within another") is an ornamentation that I once saw on an old basket (Fig. 358). It may have been copied, or it might readily have been suggested by the piling of one chest or box on top of another, as is often done for economy in storage. I would class it rather as an ornamental figure than as a design.

**Design 46. — Khu wou kus say-yay-ee (literally, "blanket-border fancy picture").** This design (Fig. 359) refers to the ornamental colored borders of the old Hudson Bay Company's blankets made for Indian trade. Sometimes these designs are called khu wou ottee ("belonging to the blanket-border"), and are simply copies of well-established patterns, which produce very pleasing effects when occupying the ornamental zones of the cylindrical basket. They are wanting on the oldest specimens of Yakutat work, but they go well back into the past century.
DESIGN 47.—Dar-war tar-yee dta-ye (literally, "checkers-under-board") or dar-war kus-see dta-ye ("checkers-foot-board") is presented in squares alternating in color. The illustration (Fig. 360, a) is from an old and small type of berry-basket of Yakutat origin, that was found at Kodiak. Fig. 360, b, is from an equally old berry-basket found on Prince of Wales Island. The game of checkers has long been popular with the Tlingit. They play much as we do, but the checkers partake more of the appearance of chessmen. They are carved figures, divided equally in sex. Each one is named, and personates some natural or artificial object. This game was introduced many years ago, for the present people have no record of the event, and believe it to be of their own invention.

DESIGN 48.—Khark kha'rt-se ("a crotch") is a figure of little ornamental value (Fig. 361), which is supposed to represent a tree-crotch, such as would be used for the uprights of the fish-drying frame or the tent-post.

DESIGN 49.—Within the past few years, since baskets have so increased in demand, and weaving has become a well-established commercial industry, in the endeavor to outdo each other, numerous meaningless combinations have arisen, and copied figures from carpets, oil-cloth, china, etc., have been introduced, which bid fair to amalgamate with the older characters, and destroy their individuality completely. Fig. 362 represents a modern design copied from oil-cloth or from cheap prints. Originally it had no name, but it is classed with "the head of a salmon-berry cut in halves" (see also Fig. 338). The design has not been in use more than three or four years.

DESIGN 50.—Hit kuhk ("house-basket") is an odd design, which occurs on a very old shaman's drinking-basket from Chilkat (Fig. 363). I believe it to be an experimental figure, which may be accounted for by the custom of the shaman of surrounding himself with odd forms. The grave-house where the spirit-doctor is laid away after death is here represented. It is one of the familiar features of this north land,—little wooden huts perched up on rocky islands and promontories, which the native never passes without some slight offering or muttered promise.

DESIGN 51.—This is a new combination of two well-recognized old designs, arranged with much artistic sense to form a continuous and pleasing pattern (Fig. 364). The triangle is the design of "the head of the salmon-berry cut in halves." The double cross within the rectangle is but a variant of the "cross" design. The age of this figure is hardly more than six or eight years, but it has found much favor among the Hoonah and Sitka because it has sold readily.
EXPLANATION OF PLATE V.

Fig. 1.—Small berrying-basket (Type 1). Design: on outer band, half-cross (No. 33); middle band, butterfly (No. 4) and head of salmon-berry (No. 25); below, crotch of tree (No. 48). Hoonah tribe, Icy Strait.

Fig. 2.—Small berrying-basket (Type 1). Design: butterfly (No. 4) and head of salmon-berry (No. 25). Chilkat tribe, Klukwan. Made at Sitka.

Fig. 3.—Small berrying-basket (Type 1). Design: on broad bands, leaves of the fire-weed (No. 10) and footprints of brown bear (No. 6); on narrow, middle band, tying (No. 39). Chilkoot branch of Chilkat tribe, Dashu.

Fig. 4.—Large berrying-basket (Type 2). Design: on broad bands, checker-board (No. 47); on narrow bands, beaver-skin stretched on frame (No. 29). St. Paul, Kodiak Island. Made by the Guth leuk tribe.

Fig. 5.—Large berrying-basket (Type 2). Design: on outer bands, footprints of black bear (No. 6); on middle band, butterfly (No. 4) and head of salmon-berry (No. 25). Hootz-ah-tar tribe, Killisnoo, Admiralty Island.

Fig. 6.—Large berrying-basket (Type 2). Design: on outer bands, butterfly (No. 4) and head of salmon-berry (No. 25); on middle band, tying (No. 39); below, stalks of celery (No. 18). Chilkat tribe, Klukwan. Made by Yakutat.
The Basketry of the Tlingit.
EXPLANATION OF PLATE VI.

Fig. 1.—Large berrying-basket (Type 2). Design: on wide bands, raven's tail (No. 31) separated by double war-axe (No. 32) and head of salmon-berry (No. 25); on narrow, medial band, tying (No. 39); below, woman's hat (No. 37). The last design does not appear distinctly in the illustration. An old family basket found in the possession of Chartrich, chief of the Kar-qwan-ton of the Chilkat, Klukwan. Made by the Yakutat.

Fig. 2.—Large berrying-basket (Type 2). Design: on the two wide bands, the eye (No. 29) and stalks of the wild celery (No. 18); on narrow, medial band, tying (No. 39). Chilkat, Klukwan. Made by the Yakutat.

Fig. 3.—Stationary berrying-basket (Type 3). Design: on broad bands, raven's hood (No. 16) and head of salmon-berry (No. 25); on narrow, middle band, tying (No. 39). St. Paul, Kodiak Island. Made by the Yakutat.

Fig. 4.—Stationary berrying-basket (Type 3). Design: on broad bands, shaman's hat (No. 36) and waves (No. 37); on narrow, middle band, tying (No. 39); below, leaves of the fire-weed (No. 10) and footprints of brown bear (No. 6). St. Paul, Kodiak Island. Made by the Yakutat.

Fig. 5.—Large berrying-basket (Type 2). Design: on broad bands, trail of the land-otter (No. 5); on narrow, middle band, tying (No. 39). St. Paul, Kodiak Island. Made by the Yakutat.

Fig. 6.—Large berrying-basket (Type 2). Design: of unknown significance. The diamonds on the broad bands may represent the stretched beaver-skin (No. 29); and inside, the double-bladed spear. The narrow, middle band has the design of tying (No. 39). Below are two sets of figures,—one of unknown significance, the other representing birds. This is the only old basket of realistic design that I have seen. Sitka.
The Basketry of the Tlingit.
EXPLANATION OF PLATE VII.

FIG. 1.—Large berrying-basket (Type 2). Design: on the two broad bands, leaves of the fire-weed (No. 10) and footprints of brown bear (No. 6); on narrow, middle band, tying (No. 39); below, shadow of tree (No. 14) enclosing the eye (No. 29). Chilkat tribe, Klukwan. Made by the Yakutat.

FIG. 2.—Large berrying-basket (Type 2). Design: on the two broad bands, embroidery on trousers (No. 17); on medial band, butterfly (No. 4) and head of salmon-berry (No. 25). St. Paul, Kodiak Island. Made by the Yakutat.

FIG. 3.—Large berrying-basket (Type 2), also used as a feast-basket. Design: on broad bands, dice (see No. 6) and shadow of tree (No. 14); on narrow, middle band, tying (No. 39); below, raven’s tail (No. 31) and shadow of tree (No. 14). The basket was found in the family of Kah-jock-tee, hereditary chief of the Am-khark-hit-ton family of the Hootz-al-tar tribe, Angoon, but it was made by the Yakutat. The basket was called khark kitchu ("between the dice").
The Basketry of the Tlingit.
EXPLANATION OF PLATE VIII.

Fig. 1.—Large berrying-basket (Type 2). Design: raven’s hood (No. 16) in plain root, characteristic of the Chilkat tribe. Chilkat tribe, Klukwan.

Fig. 2.—Large berrying-basket (Type 2). Design: on broad bands, tail of halibut (No. 27) and sun’s rays (No. 42); on narrow, middle band, tying (No. 39); below, shadow of tree (No. 14). Chilkoot branch of Chilkat tribe, Dashu. Made by the Hoonah or by the Yakutat.

Fig. 3.—Large berrying-basket (Type 2). Design: on broad bands, back-bone of fish (No. 12) and eye (No 29); on narrow, middle band, tying (No. 39). Chilkat tribe, Klukwan. Said to have been made by the Yakutat.

Fig. 4.—Large berrying-basket (Type 2), ornamented around the upper edge with pendants of dentalium-shells and beads. Design: on broad bands, woman’s hat (No. 37); on narrow, middle band, tying (No. 39). From the grave of a shaman of the Hootz-ah-tar tribe on Chatham Strait, between Point Parker and Hootz-ah-tar Head. Said to have been used as a cup for drinking salt water.

Fig. 5.—Stationary berrying-basket (Type 3). Design: on the bands, waves (No. 37); below, head of salmon-berry (No. 25). Chilkoot branch of Chilkat tribe, Dashu. Made by the Yakutat.
The Basketry of the Tlingit.
EXPLANATION OF PLATE IX.

Stationary berrying-basket (Type 3). Design: on outer bands, leaves of fire-weed (No. 10) and footprints of brown bear (No. 6); the vertical bars are called "steps;" by the Yakutat, "shadow of tree" (No. 14); on middle band, tying (No. 39). Gun-nah-ho tribe, Dry Bay. Height of basket, 52 cm. Cat. No 7078.
The Basketry of the Tlingit.
EXPLANATION OF PLATE X.

Fig. 1. — Spoon-basket (Type 8). Hootz-ab-tar tribe, Killisnoo, Admiralty Island.

Fig. 2. — Basket for holding tobacco and trinkets. The weave of this basket is strengthened by an extra woof-strand in the twist-stitch passing through the outer woof-strand. Killisnoo, Admiralty Island.

Fig. 3. — Small berrying-basket (Type 1). Design: butterfly (No. 4) and head of salmon-berry (No. 25). Hootz-ab-tar tribe, Killisnoo, Admiralty Island.

Fig. 4. — Small berrying-basket (Type 1), embroidered in straw and maiden-hair fern. Design: upper and lower bands, woman’s hat (No. 37); middle band, butterfly (No. 4) and head of salmon-berry (No. 25); below, raven’s tail (No. 31). Sitka.

Fig. 5. — Cooking-basket (Type 6), embroidered in straw. Design: upper and lower bands, leaves of the fire-weed (No. 10) and spawn of the stickleback (No. 24); middle band waves (No. 37). Chilkat tribe, Klukwan. Probably made by the Yakutat.
The Basketry of the Tlingit.
EXPLANATION OF PLATE XI.

Fig. 1. — Small berrying-basket (Type 2). Design: on narrow outer bands, footprints of brown bear (No. 6), leaves of the fire-weed (No. 10); on broad middle band, half-cross (No. 33); above and below horizontal bands, head of salmon-berry (No. 25). Found in a Russian family at Sitka.

Fig. 2. — Large berrying-basket (Type 2). Design: on narrow outer bands, the rainbow (No. 11); on broad middle band, woman's hat (No. 37). Chilkat tribe, Klukwan.

Fig. 3. — Large berrying-basket (Type 2). Design: on broad bands, shaman's hat (No. 36); head of salmon-berry (No. 25). Found in a Russian family, but procured originally at Neuchuck in Prince Williams Sound, Alaska. Made by Kayak or Yakutat.

Fig. 4. — Large stationary berrying-basket (Type 2). Design: on body of basket, lozenge (No. 29) and triangles (No. 25); on the bands, waves (No. 37). Made by a Yakutat woman who had married into the Chilkat tribe. Klukwan.

Fig. 5. — Spoon-basket (Type 8). Design: on ornamental bands, footprints of the brown bear (No. 6). Sitka tribe, Sitka.

Fig. 6. — Basket-cover in plain and colored straw embroidery, of the finest work and elaborate in ornamentation. Design: inner circle, head of salmon-berry (No. 25); outer circles, leaves of the fire-weed (No. 10). Found in a Russian family at Sitka, the basket itself having long since been lost.

Fig. 7. — Basket for holding shaman's rattle, wands, etc. (Type 9). Design: on upper and lower bands, blanket border (No. 46); middle band, butterfly (No. 4). Sitka tribe, Sitka.
The Basketry of the Tlingit.
EXPLANATION OF PLATE XII.

Fig. 1.—Double basket (Type 17). Design: shadow of tree (No. 14), embroidery on shaman's hat (No. 36), and tying (No. 39). Chilkat tribe. Height of basket, 14 cm. Cat. No. T2Ts.

Fig. 2.—Cup for drinking salt water (Type 7). Design: on upper and lower bands, embroidery on shaman's hat (No. 36); in the middle, tying (No. 39). Chilkat tribe, Klukwan. Height of cup, 8 cm. Cat. No. T2Ts.

Fig. 3.—Double basket (Type 17), cover in frog-back weave. Design: fish-net (No. 29).

Fig. 4.—Cup for drinking salt water (Type 7). Design: on broad bands, house (No. 50); on middle band, tying (No. 39). Chilkat tribe, Klukwan.

Fig. 5.—Cup for drinking salt water (Type 7), ornamented with tail-feathers of the flicker. Design: above, two bands of tattooing (No. 35) and cross (No. 30); below, part of the tattooing design (No. 35). Hoonah tribe, Gaud-ah-kan.
The Basketry of the Tlingit.
EXPLANATION OF PLATE XIII.

Fig. 1.—Double basket (Type 18). Design: on inner basket, shadow of tree (No. 14); on cover crossbars of drying-frame (No. 20). Hoonah tribe, Dundas Bay, Cross Sound.

Fig. 2.—Double basket (Type 18). Design: on inner basket, shaman’s hat (No. 36); on cover crossbars of drying-frame (No. 20). Sitka.

Fig. 3.—Double basket (Type 18). Design: on inner basket, shadow of tree (No. 14). The bottle-shaped form of this basket is rare. Hootz-ah-tar tribe, Killisnoo, Admiralty Island.

Fig. 4.—Double basket for carrying bird’s-down. Design: on inner basket, strawberry (No. 22), on cover, crossbars of drying-frame (No. 20). From the chief of the Dashiton family of the Hootz-ah-tar tribe.

Fig. 5.—Tobacco-basket (Type 19). Design: leaves of the fire-weed (No. 10). Hoonah tribe, Gaud-ah-kan.

Fig. 6.—Basket-dish for children (Type 5). Design: on band, butterfly (No. 4) and head of salmon-berry (No. 25); above and below, head of salmon-berry (No. 25). Hootz-ah-tar tribe, Killisnoo, Admiralty Island.
The Basketry of the Tlingit.
EXPLANATION OF PLATE XIV.

Fig. 1. — Jar-shaped work-basket (Type 16). Design: footprints of brown bear (No. 6). Sitka.

Fig. 2. — Elliptical work-basket (Type 15). Design: on sides of basket, footprints of brown bear (No. 6); on cover, leaves of the fire-weed (No. 10) and spawn of the stickleback (No. 24). Sitka.

Fig. 3. — Woman’s shallow work-basket (Type 12). Design: strawberry (No. 22) and scallop-shell (No. 23). Hootz-ab-tar tribe, Freshwater Bay, Chichagof Island.

Fig. 4.—Shallow basket for screening berries (Type 13). Design: inner and outer circle, the beaver-skin stretching-frame (No. 29); middle circle, single tying (No. 39). Sitka.

Fig. 5. — Modern open work-basket, made for sale (Type 10). Design: upper and lower bands, war-axe (No. 32) and shaman’s hat (No. 36); middle band, labret (No. 26) and shark’s tooth (No. 7). Yukutat. Height of basket, 23 cm. Cat. No. E 689.
The Basketry of the Tlingit.
EXPLANATION OF PLATE XV.

Fig. 1.—Modern basket, made for sale (Type 10). Design: head of salmon-berry or water-drop (No. 25). Hoonah tribe, Gaud-ah-kan.

Fig. 2.—Cartridge-case. Design: waves (No. 37). Hoonah tribe, Gaud-ah-kan. Hoonah tribe, Ga d-ah-kan. Height of case, 13 cm. Cat. No. 14*.

Fig. 3.—Trinket-basket (Type 14). Design: head of salmon-berry (No. 25), strawberry (No. 22), and scallop-shell (No. 23). Sitka tribe, Sitka. Height of basket, 18 cm. Cat. No. 9*

Fig. 4.—Woman’s work-basket (Type 14). Design: on middle band of side, half-cross (No. 33), and split stick (No. 34); on the cover, fern (No. 43); and on rim, head of salmon-berry (No. 25). Sitka.

Fig. 5.—Basket for holding shaman’s rattle, wands, etc. (Type 9). Design: crossbars of drying-frame for fish (No. 20). In the open cross weave, from a shaman’s grave-house. Hoonah tribe. Chilkat tribe. Height of basket, 48 cm. Cat. No. 9*.
The Basketry of the Tlingit.
EXPLANATION OF PLATE XVI.

Shaman's Hats (Type 23).

Fig. 1. — Design: on outer borders, shaman's hat (No. 36); on the middle band, the design of tying (No. 39); in front, leaves of the fire-weed (No. 10). Hoonah tribe. Height of front of hat, 22 cm. Cat. No. 7486.

Fig. 2. — Design: to the right, the shaman's hat (No. 36); in the middle, two wolves; below and to the left, single and double tying (No. 39). Hoonah tribe, Gaud-ah-kan. Height of hat, 26 cm. Cat. No. 2837.
The Basketry of the Tlingit.
EXPLANATION OF PLATE XVII.

Ceremonial Hat (Type 22).

The geometrical ornamentation on the rim is produced by skip-stitch (Weave 3) and represents the hood of the raven (No. 16); the crown is painted with a totemic design representing the raven. Chilkat tribe. Height of hat, 31 cm. Cat. No. 168.
The Basketry of the Tlingit.
EXPLANATION OF PLATE XVIII.

Baskets illustrating the ancient style of coloring.

Drinking cup (Type 7). Design: below, head of salmon-berry (No. 25) and labret (No. 26); on the lowest band, waves (No. 37); on the next, butterfly (No. 4) and head of salmon-berry (No. 25); on the third, waves (No. 37); on the rim, head of salmon-berry (No. 25). Height of basket, 11 cm.

Embroidered basket. Design: on broad bands, raven’s hood (No. 16); on narrower bands, shaman’s hat (No. 36). Height of basket, 21 cm.

Inner one of a double basket (Type 17). Design: on broad bands, lozenge (No. 29); between these, tying (No. 39). Height of basket, 15 cm.

Basketry of the Tlingit.

Plate XVIII.
Vol. IV. Anthropology (not yet completed).

*Fesup North Pacific Expedition.*


Vol. V. Anthropology (not yet completed).

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Vol. VI. Anthropology.

*Hyde Expedition.*


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**ETHNOGRAPHICAL ALBUM.**

*Fesup North Pacific Expedition.*


**BULLETIN.**

The matter in the ‘Bulletin’ consists of about twenty-four articles per volume, which relate about equally to Geology, Paleontology, Mammalogy, Ornithology, Entomology, and (in the recent volumes) Anthropology, except Vol. XI, which is restricted to a ‘Catalogue of the Types and Figured Specimens in the Paleontological Collection of the Geological Department,’ and Vols. XV, XVII, and XVIII, which are reserved for Anthropology.

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**AMERICAN MUSEUM JOURNAL.**

The ‘Journal’ is a popular record of the progress of the American Museum of Natural History, issued monthly, from October to May, inclusive,—eight numbers a year. Subscription, $1.00 a year; single numbers, 10 cents.

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A Table of the Geographical Distribution of American Relics in a Collection exhibited in the American Museum of Natural History, with Explanatory Text, by A. E. Douglass (Vol. VIII, 1896). 22 pp. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .......