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Pomo

Indian Baskets
AND THEIR MAKERS

By

CARL PURDY
Porno Indian Baskets

and

Their Makers

By

CARL PURDY.

Fort Ross Interpretive Association
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Jenner, CA 95450

Mendocino County Historical Society
603 West Perkins Street
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FOREWORD

The Mendocino County Historical Society wishes to thank Elmer Purdy of Ukiah and Mary Purdy Robinson of Redwood Valley, the surviving children of Carl Purdy, for permission to reprint *Pomo Indian Baskets and their Makers*.

Carl Purdy was known as the “Dean of Wild Flowers” to gardeners and flower lovers the world over.

Mr. Purdy was born in Danville, Michigan, March 16, 1861 and came west by wagon train to Virginia City, Nevada in 1865. He moved to Ukiah in 1871, where he became in turn, an insurance agent, Wells Fargo Agent, jeweler and farmer before he became established in the plant and bulb business. He had the honor of having ten native plants named for him and he gave the names to fifteen others.

His honors were many. He was an honorary member of the California Horticultural Society, the Horticultural Societies of Pennsylvania and Massachusetts; a fellow of the Royal Horticultural Society of England; received the Thomas Roland and Herbert Medals; and was Mendocino County's first Horticultural Commissioner. Much of the landscaping of the Panama Pacific International Exposition was done by Mr. Purdy, as well as the landscaping of the Ahwanee Hotel in Yosemite Park and the gardens of Phoebe Hearst. At “The Terraces,” his home east of Ukiah, he was visited by professional and amateur flower lovers from all parts of the world.

Much of his time was spent in studying the Pomo Indians of Lake and Mendocino Counties and for some years prior to 1900 he made an extensive study of the basket-making of these Indians. This little booklet gives many of the important facts he learned about their basket artistry.

All profits from the sale of this book will be placed in the Mendocino County Historical Society's Museum Fund as a Memorial to Carl Purdy.

Mendocino County Historical Society
603 W. Perkins Street
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FIFTY years ago the many wild, mountain-hemmed valleys of Lake and Mendocino counties were each the home of one or several small Indian tribes entirely independent of all others, and speaking a language at best only partly intelligible to their nearest neighbors. The Franciscan Fathers, who had gathered the tribes of the central and southern parts of California into the Missions, now California's most picturesque ruins, had never gained a hold on the secluded mountaineers.

The traders of the Hudson Bay Company, whose influence upon the Indians of the great Northwest is still so apparent, had not come so far south, while the Mexican soldiers who attempted to penetrate these fastnesses met with a reception so warm that it was still fresh in their memory when, in the year 1846, the United States succeeded Mexico as sovereign of California.
At that date these little tribes were scarcely more affected by civilization than when Columbus discovered the New World.

In the early 'Fifties, American settlers began to push into the beautiful valleys which had so long been their homes. At first they were not molested by the Indians, and it was only when unprincipled scoundrels had kidnapped their children by scores to be sold into slavery and otherwise most outrageously maltreated them that they rose and killed several of their worst enemies. The usual result happened. The Indians of the Clear Lake region fled to an island which stands among the marshes at the upper end of the lake, an ancient stronghold of theirs. They were pursued by soldiers and defeated. The peace then made has never been broken. The Indians returned to their homes, where they still live.

The tribes of northeastern Mendocino county were of a different race and more warlike character. Their resistance was more stubborn; and, according to the old settlers, there was a considerable period of frontier warfare. When the Indians of that region were conquered they were placed upon the Round Valley Indian reservation, where they now are.

The leading tribes of Mendocino county are the Sanelos of Sanel Valley, the Yokaias of Ukiah Valley, the Ballo Kai Pomo of Potter Valley, the Uki of Round Valley, and the Calpellas. Four tribes lived about the upper end of Clear Lake; of these, three are practically consolidated. In Big Valley, west of the lake, were the Kabenapo and the Talanapo. Most of these are
now collected in a mission near Kelseyville under the care of the Franciscan Fathers. At the southern end of the lake are the Lower Lakes, the Makhelchel of some writers. In northern Sonoma county the Wappos lived in Alexander Valley, the Gallinomeros about Healdsburg. Along the Mendocino coast were several other tribes, while the lesser valleys each harbored one. In all there were something like thirty of these little tribes, no one of which probably numbered over 500 people, each with its own chief and a language more or less distinct—as separate from its neighbor as France is from Italy. Often the Indians at one end of a valley could not converse with their neighbors at the other end; and, indeed, at this late day, the Indians

aboriginal to the two ends of Ukiah Valley (which is about eight miles long) find English the more convenient language when they meet.

In the language of the Indians of Upper Ukiah, Redwood and Potter Valleys, the word Pomo means "people," while in the northern Lake county Napo has the same meaning. Thus in the tongue of the former the Potter Valley Indians are the Ballo Kai Pomo or Oat Valley People; those of "Ukiah, Yokaia Pomo, or South Valley People; the lake tribes, *Shoke Pomo or Lake People. Similarly in Lake county, the tribes on the hilly edge of Big Valley were Kabenapo or Rock People. Those who

* Each of the tribes living in Ukiah Valley now claim the name Yokaia.
† Shoke means East Water.
lived down by the waters of Clear Lake were Talanapo or Pond Lily People, and that tribe which lived in the bushy region along Cache Creek were Khainapo or Wood People, etc. As will be seen all tribal names were descriptive with the suffix *People*.

Properly speaking, therefore, there is no such a tribe as the Pomos.

The name *Porno* was first used by Mr. Stephen Powers, whose studies of the California Indians from 1873 to 1876 were embodied in a most interesting volume of the United States Government Reports in 1876. Mr. Powers's use of the word was in designating a linguistic group rather than a tribe proper, and in that sense it is now accepted by the best authorities.

The customs, arts and physiognomies of all of the tribes I have mentioned are very similar, and while there is much difference in language there is sufficient likeness to make it certain that all were derived from the same stock. The name Porno in this sense is as good as any other, and is generally accepted, while all of their baskets are called *Pomos*.

The Indian words for weaves and classes of Porno baskets which are in use among many collectors are from the dialect of the Upper Yokai, Calpella and Potter Valley tribes (which are closely related). Among the other tribes altogether different words are used. Thus the word basket in Potter is "pi-ka," at Upper Lake "si-tol," at Lower Lake "kō-lob," at Cache Creek "kā-wāh." Throughout this article all Indian words are from the Potter Valley Porno unless otherwise stated.

Doctor Hudson's writings have made the basket collectors more or less familiar with these words, and there could be no possible excuse for changing. The spelling used is that recommended by the Smithsonian Institution. The arts, customs and legends of the Pomos are peculiarly interesting, and a most readable volume could be written with them as a subject. In the space at my command I can only give a suggestion of the wealth of material.

Each little tribe was an independent nation as to government, and few alliances were formed with their neighbors. The fact that distinct dialects were maintained at opposite ends of a small valley is sufficient proof that there was little intermarriage.

Until long after the white man came, their winter homes were domes of wickerwork, thatched heavily with grass or tules, and the older people still build such homes. The beautiful photograph on page 8 is of such a house still standing in good preservation in the center of Big Valley, Lake county, and was taken this spring. It so perfectly shows the manner

*The rule is that the first writer who uses a word from a savage race as a tribal designation, fixes the spelling. I therefore use "Porno" rather than "Pomo."
of construction as to make description unnecessary. In such a house three generations of a family lived and stored their food. The center was occupied by open fires, the smoke finding vent through a hole in the roof. Great storage baskets filled with acorns were stacked on the sides, fish hung on strings on the walls, and the whole family life went on within. The summer house was also of wicker work covered with boughs, and the tribe often moved several times a year, as acorns, fish or game, or dry quarters were the desiderata.

Their women carried great loads in the conical baskets, suspended in a net which had a broad band which passed across the forehead. When the woman bent forward the weight rested on the back and was steadied by the head. A great variety of seeds, bulbs and roots were used for food. The soap root "Chlorogalum," was used for laundry purposes, and also was beaten into a pulp and placed in streams and pools to
POMO INDIAN BASKETS.

stupify the fish. The great food staple of the Pomo tribes was the acorn; this, the great number of oaks of various sorts, which are such a scenic feature in the region they inhabit, furnished in abundance. Each winter village contained the sweat-house, an institution inseparable from their social and religious life. It was a circular excavation roofed with timbers to form a cone and covered with soil. The largest were thirty or forty feet across. In it their dances and other assemblages were held. The building portrayed on page 10 is a modernized adaptation of the plan. Few of the old-style sweat-houses are now to be found.

Their dances were of a medical or religious character, and the costumes and chants varied according to the occasion. I well remember a great dance which occurred in 1873. At the rancheria five miles south of Ukiah an immense sweat-house was built, and the Indians gathered there from far and near. For weeks dances took place day and night; the big building was crowded with savage faces; the dancers, in the middle, naked except for a feathered skirt about the waist and hideously painted, the barbaric musical accompaniment and the chants, now low and then rising to cries which could be heard for miles, made a scene to impress itself indelibly on the mind of the white onlooker. Dances still take place occasionally, and the costumes in the accompanying photographs are essentially the ancient ones, plus some extra clothing.

When a death occurred, the body, together with the most precious effects of the deceased and presents from friends, was burned. The house in which a death occurred was also burned. Cremation continued to be practiced until the late 'Seventies, and then gradually gave way to burial. They still burn or bury valuable articles with the deceased. The house is not now burned, but is almost always torn down and moved. This custom accounts for the very poor dwellings among the Indians, as compared with their quite valuable belongings of other sorts. The entire tribe joined in the cremation of the deceased, and the wild wails could be heard for miles. The near relatives mourned for a long period, using what sounds like a set formula of wails and cries repeated again and again.

They were inveterate gamblers. Their favorite game of chance was the grass game, and on it they risked every worldly possession. From Bodega Bay they secured clam shells from which they chipped white bits. These were first drilled, and then, by a laborious process, reduced to circular disks of different sizes. This was Indian money, or "kaia," and was strung according to size. It was and still is common currency...
among not only the Pomo tribes but their Indian neighbors. Many thousands of pieces are coined yearly, and the Indian money-maker is a familiar sight in every rancheria. Their currency was, if I may use the word, bimetallic. Nodules of magnesite were mined at a point on Cache creek, about five miles from Clear Lake. When subjected to a slow baking process colors something like agate were developed. It was then shaped into cylinders one to three inches long, and strung as "kaia" was.

Unless the student is thoroughly conversant with an Indian language, it is very difficult to learn their myths and legends in a way that is reliable. We have a sufficient glimpse at those of the Pomos to know that they were very interesting, as were their religious beliefs.

Physically the Pomos were rather fine specimens. Especially was this true about Clear Lake. Many of the men were six feet high, of powerful build, and weighing one hundred and eighty to two hundred and twenty pounds. The women were short and very broad. Probably the heavy loads they carried from childhood up had something to do with this.

Interesting as the customs of the Pomos are, they would hardly have been heard of away from the region they inhabit were it not that as basket makers they are wonderfully proficient.
Into the life of a Pomo, baskets entered every day from his birth to his death. He was cradled in a pappoose basket, and in it, hung by a broad band on his mother's brow, he made his early journeys. His home was a great thatched basket, his toys were baskets modeled after the large ones that he saw. He ate from a "da-la," or flat basket, and drank from a round "tci-mà." The seeds from which his meal was made were ground in a "mu-tci," or mortar basket, and his fish and meat were cooked in large mush bowls or "tci-mas," and a large "tci-mà" was his water-bucket. His fish was caught in a "baiyat-au" or fish-net basket, his meal was winnowed in winnowing baskets and screened in a "pa-se" or sieve basket. When he traveled, his belongings were carried in a "bu-qi," the conical burden basket, and these answered for every purpose for which we use a wheelbarrow or wagon. If he gardened, his fences were of wickerware, and he trapped birds and game in long cylindrical baskets. On Clear Lake the art of basketry applied to tules was used in making canoes.

Was it wonderful, then, that a people to whom baskets were so much should have exhausted their ingenuity in weaves and shapes, interwoven their mythology and superstition in the
meshes, copied nature in the designs, and lavished the richest treasures of the chase, together with their precious money and the brightest abalone shells from the distant sea shore, on those gift-baskets which marked the culmination of their art.

Such baskets were the pride of the owner and the envy of his friends; they were given to visitors, or on weddings, as the highest possible token of esteem. A woman who was particularly adept in their making had more than a local fame; and when their lucky possessor died his priceless baskets were placed on the funeral pyre to accompany, as they fancied, his soul to the other world.

In basketry the Pomo found an outlet for the highest conceptions of art that their race was capable of. Protected by their isolation from other tribes, they worked out their ideas undisturbed. With every incentive for excellence they had reached a height in basketry when the American first disturbed them which has never been equaled—not only by no other Indian tribe but by no other people in the world in any age.

These stolid Indian women have a knowledge of materials and their preparation, a delicacy of touch, an artistic conception of symmetry of form and design, a versatility in varying and inventing beautiful designs, and an eye for color which place their work on a high plane of art. They alone, of all races, adorn their baskets with feathers.

It was long before civilized people came to a realization of the beauty of the Indian baskets, and it was only about eighteen years ago that collectors began to seek them. The history of what some would call "the basket fad" is one of rapidly growing interest, and at the beginning of the twentieth century prices are willingly paid for the finest creations of fiber and feathers which seem fabulous when compared to those of a few years ago; yet which are not an overpayment for the skill and indefatigable patience shown in their manufacture. Such baskets will never be cheaper, but will rather appreciate in value as a greater number of people of taste and means come to observe their beauty and seek the best.

Before beginning to describe the materials used in Porno basketry, and the shapes, uses and designs of the baskets, I would emphasize the fact that by Porno baskets I mean the baskets of all of the thirty or more tribes grouped by Mr. Powers under that name; while all of the words which I use are from the dialect of the Ballo Kai Porno of Potter Valley, Mendocino county.

The Porno of today lives in the valleys occupied by his ancestors, on lands purchased by his tribe or occupied by the per-
mission of some white friend. He has his mission school and his church, owns a horse and wagon and often a buggy, dresses like a "dude" in civilized garb on gala days, lives in a cabin often neatly built, and has chickens and a garden. He works industriously as a day laborer, and often takes a contract to care for a crop for his white neighbors. A ride on the railroad is not a novelty to him. If he is young he often has white blood in his veins, and shows it. He is cheerful and happy, and by no means improvident. There are no "Ramonas" or "Alessandros" in his village, but occasionally one who has been sent to the Indian training schools in Nevada or Oregon. By the side of a neat cabin can be seen a house on the old model where his old mother and father live as their ancestors did, surrounded by all the aboriginal implements and devices. They are used to the new civilization, but prefer the old "savagery." They weave from the native fibers, and seek bulbs and plants still for food. Their daily bread is of acorns ground in a "mu-gi." If their sons and daughters prefer the white doctor, the medicine man is good enough for them.

The veneer of civilization is thin, and at times all throw aside its garb and in scant feathered skirts join in the barbaric dances and sing the weird songs of long ago.

**BASKET MATERIALS.**

All Pomo baskets are woven on a framework of slender willow shoots. Except for the coarsest "shakans," these shoots are peeled and cured carefully. The Pomos call them "bam" and from them several baskets are named as "bam-tush" and "bam-shibu." The willow tree is called "bam-kalle" or "bam tree."

The bams are the framework; the thread is obtained from the bark of shrubs and the roots of trees and grasses. The most important of these fibers is "ka-hum," which is the root of a sedge (Carex Mendocinoensis), which grows in deep, moist soil in most sections of the Pomo country. This sedge has long, slender, grassy leaves and a very long running root which is quite tough. The Indian women split these roots with their teeth and coil them in bundles which are dried ready for use.

When cured, "ka-hum" is of a light cream color, but deepens with age into the rich, creamy brown so much admired in old Pomo baskets.

Rarest and most valuable of all Pomo basket fibers is "Tsunish," the root of a Scirpus (S. Maritima), a grass-like plant growing among the tules on the border of marshy lands. When fresh, the root is a dark brown. The color is usually deepened
by placing it in a mixture of mud, ashes and charcoal for a period of from one to three days. The best is then nearly black. The deeper the color the more prized the tsu-wish. As the color is in the outer covering of the root only, it has to be split accordingly. The common brake, Pteris aquilina, a fern widely scattered throughout the north temperate zone, has a long running root. In this root certain black fibers are embedded in a white cellular structure. These the Pomo call "bis" and where tsu-wish is less common, as along the coast region, it is used for a dark thread. I found the Washoes of Nevada using the same fiber. The best basket-making Pomo tribes never employ it.

I have never known a Pomo to use the maiden-hair fern stems, so commonly used from Humboldt county north.

The rich, reddish brown in the coarser Pomo baskets is the bark of the "red-bud," Cercis occidentalis. The red-bud is a handsome shrub with large leaves, rather suggestive of the grave; and in the spring, before the leaves are developed, the shrubs are solid masses of bloom. The flowers are like those of a pea and are magenta in color. Red-bud is very common throughout eastern Mendocino and all Lake county. The split, peeled stems are also used as basket fiber. The Pomo name is "Millè." Other reddish brown barks may be used where Millè cannot be had, but the first instance of their employment has yet to come to my knowledge. The red-bud bark is stripped in long bands and coiled to dry.

The staple fiber for the lighter color in coarse baskets is obtained by digging the roots of the digger pine, (P. Sabinana), and tearing them into long strips. These are of rich creamy tint, exceedingly tough and pliable and rich in pitch, and are an ideal basket fiber. The Pomo name is "ka-li-shè." Where the digger pine is not found, the roots of other pines or Douglas spruce may be substituted, but these are not as good.

"Ka-hum," "Tsu-wish," "Millè" and "Ka-li-shè," for threads, with willow "bams" for framework, are practically the only materials used in Pomo baskets. Each is collected at the proper time, and (except the bams) coiled and hung up to dry. The smoke and dust of the house begin the process of deepening and enriching the color before the material finds its way into the baskets.

Given these materials, a small, very sharp knife, anawl, and a dish to hold the water in which the fiber is kept soaking to render it pliable as used, and the Indian woman is ready for work. The knife was formerly of obsidian or "bottle rock," fastened to a handle with sinew, and the awl a small bone from the deer's leg.

The Pomo ornament their finer baskets with "kaia" or Indian money, polished bits of abalone shells, and with various bird feathers. At an early date beads were sold to them by traders, and very naturally found a use in basket ornamentation. The favorite feathers are taken from the red head and yellow throat of the redheaded woodpecker and the green head of the mallard duck. The plumes of the male valley quail are also held in high esteem. The brilliant feathers of any bird are used effectively in decoration.

**On Weaves.**—It must always be remembered that the Indian basket is not plaited, as are those of most races, but woven. The willow bams are the warp, the thread the woof. The Pomo have in common use six distinct methods of weaving, and several more are more rarely seen.

**SOFT WEAVES.**

Of the six common weaves, four are soft, two hard. In the soft weaves the warp or framework is of slender bam ribs ascending from a common center at the base like the spokes of a wheel. The coarsest of these is the sha-kan, literally "fish basket." This is an open wickerwork basket. The ascending ribs are from a half inch to two inches apart. These are crossed at similar intervals by two similar willow bams which take a single or double twist around each other in each space. The sha-kan weave is the nearest approach to European wicker-work found among the Pomo, and is much used. Baskets of this weave may be plackets, round bowls, or tall storage baskets. Often conical burden-baskets are so woven. The quaint fish-traps and long quail-traps are made in this weave, as were the wicker-work fences and frame work for the old thatched houses. These are the only baskets made by the men. More often, willow bams are unpeeled in sha-kan, but in the finer baskets peeled willows are used and quite a pretty basket produced.
In this weave the ribs are of slender peeled bams ascending close together. The woof is of two threads passing alternately over and under the ribs and taking a half turn on each other in the spaces. At frequent intervals the last courses are pressed closely upon the preceding ones. The threads used are split evenly but are not usually trimmed. The two threads, which on casual inspection, seem to go around the basket, really form a spiral, beginning at the base and terminating at the top of the basket. When making such a basket the Indian woman prepares a number of threads and weaves rapidly. To work the design she often turns the millé thread over, as it is white on one side. Of course as the basket widens, the spoke-like ribs get farther apart, and whenever the space permits, an additional bam is sharpened and inserted. If at the top the basket is narrowed, this process is reversed and some of the ribs are cut out.

As the threads of the woof are used up new ones are inserted, and the loose end is always left on the inside. When completed, these loose threads are shaved off so neatly as to leave hardly a trace of their insertion, while the ribs are cut off evenly. The Pomo never puts a terminal binding on such baskets. A basket before it is trimmed makes a very interesting exhibit of Indian methods of construction.

When weaving, the woman sits flat on the ground, often holding some of the bams firmly with her toes to steady the basket while she works.

The usual materials used for the “bam-tush” are red-bud for designs, “ka-li-shé” for light ground, and willow bams. In fine pieces “ka-hum” is used for the light ground, and the threads carefully evened with the knife. A well made basket in the “bam-tush” weave is water-tight and very strong. It is the most useful of all Pomo weaves. Shallow placques, mortar baskets, and storage baskets are oftentimes in this weave. While baskets for use, they are often ornamented with beautiful designs carried out in “mille.” These designs are almost always in circular bands; very seldom in spirals, as is usual in the next weave.

This is lighter in construction but very similar to the “bam-tush.” The bams of the frame work are handled exactly the same, but the threads of the woof used, which alternately pass over two, and then under two, ribs at a time. This method gives the “chu-sét” a much smoother outer surface than the “bam-tush” and seems to make ornamentation easier. Bowls and conical burden-baskets, and very rarely placques, are made in this weave, and are ornamented with most beautiful spiral designs. I consider a fine “chu-sét” the most beautiful product of Pomo art. In working out the design the red-bud is thinner than the light material, and so the design shows in relief on the inside of the basket.

In this weave the basket is started as the “bam-tush” is. A short distance up, a bam is laid at right angles to the ascending ribs, and the thread of the woof is whipped over this stick, then between the ascending bams. The bams are added exactly as in the “bam-tush,” and as a “ti” stick is covered it is pieced out in a spiral ending at the top of the basket. When completed, the basket appears as a “bam-tush” inside and shows a spiral outside.

It would seem very difficult, indeed, to work out a really pretty design in such a weave, but a skillful worker will execute a very beautiful design nevertheless. The effects are particularly soft and a fine “ti” is highly prized by both Indian and collector. Bowls, placques, mortar baskets and storage baskets are made in this weave, and in very many placques or mortar baskets in the “bam-tush” weave a few courses in the “ti” are thrown in to give stiffness. The light thread is “ka-hum,” the red “mille.”

This is more properly an ornamental stitch. It is used on “bam-tush” baskets by substituting two sets of three threads each. The result is a very pretty cored appearance. It is rarely used, and a complete basket in it is rarer yet. No design can be worked in it, but as a course-band on a “bam-tush” it is decidedly effective.

This ends the list of the “soft weaves,” and we may now consider the

**HARD WEAVES.**

In the “Tsai” weave a single stick is coiled. The thread passes through an awl-hole between the alternate stitches below the preceding coil, then over both preceding coil and the loose stick above. Thus each stick alternates with the stitches above and below. In this way, beginning at the knob in the center of the base of the basket, coil after coil is built up until the end of the stick is sloped and neatly bound down on the upper margin. On each round one-half of the stitches are plainly in sight and one-half partly concealed. The “Tsai” is otherwise known as a “one-stick” basket.

The “Shi-bu” differs from the “one-stick” basket in having three sticks bound in a bundle for its framework. The thread passes through an awl-hole made in the upper edge of the coil just below. As each of the sticks runs out a new one is added. On a well-worked “three-stick” basket the
threads are all opposite, and completely cover the framework. Placques and any modification of the bowl, canoe or basin, are made in these two hard weaves, and they are the only weaves upon which feathers or other ornaments can be used to advantage. The "Shi-ba" is most highly esteemed by the Indians, and in it they can carry out the most intricate patterns, both in the fiber itself and in the beads or feathers with which it is ornamented. The most indefatigable patience is required in the manufacture of these baskets, as for each stitch an awl-hole must be made and the sharpened end of the fiber threaded through. The thread is shaved down to such perfect evenness that the eye can scarcely detect the shadow of a variation in its thickness. As the basket is woven, beginning at the bottom, the design is worked from the bottom upward. In working the design the fiber is cut and a new piece inserted at every change in color. In feather work each feather is plucked from the prepared skin of the bird, and neatly caught in a stitch, which is then pulled so tightly that the feather cannot be detached except by breaking it off. When "kaia" is used, a thread is carried along under the woof and the "kaia" threaded on as needed. Beads are usually put on in the same way, but on some beautifully beaded baskets the beads are strung on the woof itself.

Feathers are used in two ways on baskets by the Pomo. In the first way, they are secondary to the design, and only give a bit of color or a finishing touch to a basket with a pretty design. For this purpose the quail plume and the red feathers from the woodpecker's head are almost the only ones used. The red feathers are oftener placed regularly but thinly on the lighter-colored fiber on the upper half of the basket, and the quail plumes scattered, or below three crests of "kaia" on the upper edge of the basket. These the Indians do not consider feathered baskets at all.

In the feathered basket proper, there is little or no design in the fiber, and the basket is closely covered with feathers. The Indians divide fully-feathered baskets into two classes, the "ta-pi-ca" and the "e-pi-ca." The "ta-pi-ca" (literally RED BASKET) is what is known among basket collectors and dealers as the "SUN" basket. The name sun basket is, I suppose, owing to a misinterpretation of the Indian word. In Pomo "da" is sun, "ta" is red. I have asked the name of this basket fully a hundred times, of as many Indians, and in all parts of the Indian country, and the name and interpretation are uniform, allowing for dialect, "ta-pi-ca," "ta-si-tol," "tan-kolob," all mean "red basket," with a sometimes secondary meaning of "pretty basket."
In former days, the "ta-pi-ca," or "red basket," was always made in one pattern, shown in the oldest specimens, i.e., a saucer-shaped basket closely covered with the red feathers, profusely decorated with pendants of "kaia" and abalone, with a close circle of "kaia" around the top, surmounting another close circle of quail plumes, and often with a string of "kaia." This, then, is the original "ta-pi-ca"; but for some years past it has been beautifully varied by using the red feathers for a ground color and working in a design in other colors. More rarely other feathers than the red are used for a groundwork. The use of any other than red feathers is an innovation, though a charming one.

The Indian (Ballo Kai Pomo) name for a feathered basket of any other shape than the one described is "e-pi-ca," or "feathered basket," and this whether the red feathers and the pendants are used or not.

I have still to meet an Indian who knew of such a thing as a "moon basket"; and I repeat and emphasize the statement that I have never met an Indian who knew of or used the terms "sun" or "moon basket." Their is no serious objection to their use by basket collectors or dealers, but the names are not Indian.

The "ta-pi-ca" is most highly prized by the Indian. A fine specimen takes months, or even years, of the most patient and painstaking work of the woman, and long hunts by her man. Thirty to fifty feathers to every lineal inch are placed so perfectly that the surface of the completed work is like red plush, and exquisitely perfect. I saw one which required two hundred and forty quail plumes as a finishing touch, and was fully two years under way.

The real acme of Pomo art is not, however, in these beautiful but barbaric feathered baskets, but rather in the "chuset," "tsai" and "shi-bu" bowls and canoes which combine so perfectly symmetry of form, soft colorings, and intricate designs—perfect works of art from whichever point of view.

Perhaps the most interesting phase of the study of Indian basketry is that of the names and meaning of the designs with which the baskets are ornamented.

Next to a study of Indian myths and legends, this study requires a knowledge of their language, at least of a good number of nouns. If this knowledge extends to several dialects, the results obtained are much better, for if under such circumstances the facts obtained are corroborative they are thereby proved beyond reasonable doubt.

During the last three years I have made this branch of Pomo basketry a particular study. I have a greater or less knowledge...
of five dialects and a smattering of several others. Whenever opportunity offers I propound the question in regard to any basket at hand: "What is this design?" in the dialect of the person addressed. In this way, giving them no clue whatever to my previous knowledge, I have had the names of some designs dozens, if not hundreds, of times, from individuals separated by both distance and language.

In some cases every witness agrees; in others, the great majority. The field is a wide one, and I have by no means exhausted it; but as to some I feel I can speak with the weight of evidence strongly in my favor.

Whether the Porno woman first ornamented her baskets with some mark and later gave it some name suggested by its form, or whether she deliberately copied nature, we may never know. Personally, I have no doubt that all of the designs originated in an attempt to copy nature, and were afterwards gradually conventionalized until in some instances it requires a vivid imagination to recognize in a design any semblance of the object whose name it bears.

I have never seen in any Porno basket a portrayal of an event, or any attempt whatever at "picture writing," and I am perfectly convinced that there is not in existence a Porno basket which is in that sense a "history basket." Moreover, I see in the baskets of other tribes designs identical with or similar to those I know in the Porno, and must say that I view all such interpretations with a degree of distrust. Before beginning the study of Porno designs, I had been given by others certain names for designs, which I accepted as correct and helped to disseminate; but I am sorry to say that I find that in several instances I have never had these names from a single Indian source, after as many as a hundred inquiries among different tribes, inquiries more frequently made in these instances because these were mooted points. It does not necessarily follow that these designs may not be known by the names formerly applied, among some small tribe, but the evidence is indisputable that among

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the leading Porno tribes these designs have never been known by those names. One peculiarity of Porno designs is that there is seldom a name for the entire design on a basket. As a matter of fact, the Porno woman has at her command a large stock of simple or root designs, each with a well known name. These she varies, amplifies and combines in a purely artistic manner. She is not trying to write a history of an occurrence, or to embody a religious belief. Her sole aim is to create something beautiful. She is an artist, not a priestess or historian. Before
her basket is started she has in her mind's eye a clear picture of it as completed; she counts no stitches and has no pattern before her. She may have as her ideal a design she has seen, or she may have evolved a new combination; but whether it takes a year or twelve years, she keeps the plan clearly in view. For the combination of root designs she has no name, and could not well have. If you question her, she will analyze the intricate pattern into its constituent parts, the names for which are common property. She does not know it as a whole, but only as a composite. Again, her art is not a stationary one, a slavish copying of others, but rather a progressive one, each woman aiming to excel in the beauty of her product. How successful they are in this attempt to vary and beautify, an examination of a well selected collection of Pomo baskets will show. Scarcely two are alike, and when we consider how few original designs are used, we cannot but find our admiration for their artistic ability growing very rapidly. The probabilities are that no new root designs are being evolved. This is very strongly indicated by the fact that as a rule the designs are known by the same names by different tribes, an indication that the root designs were already well known before the original people separated into the present many tribes.

We may now proceed to a consideration of some of the designs most commonly used among the Pomas. Perhaps the commonest is simply a triangle. This has been interpreted erroneously as a "hill" or a "red hill." Throughout Lake county and among the Sanel and Yokala Pomas this is the butterfly, the idea being of a butterfly with folded wings. Some very beautiful designs are worked out with this alone.

The Calpella and Ballo-kai Pomas call it da-to-i-ka-ta or the "old design," indicating that they have borrowed it. In one small tribe it is "big arrow head." In some way it enters into three-fourths of all Pomo baskets, and the name butterfly is by far most commonly used. The design called "lightning pattern" by collect-

A Chus-net Bow. (Plate 13)

Ka-cha - "Arrow-points." (Plate 13)
ors is never known by that name among the Pemos. In every tribe it is tsi-ö-t-sö, or “zigzag.” In its various modifications it is used very frequently by them. To squares or rhomboids, however arranged, they give the name bu-shë-më-a, or “deer-neck,” the idea being the angle between the deer’s head and shoulders and neck; rather a fanciful idea, but one which seems to have taken deep root, for every tribe has it. The mark like a quarter note in music is the Pomo’s idea of a quail plume. In Ballo-kai Pomo this is chi-kakh. It is most tastefully used and in some of its adaptations is the prettiest of all.

Alternate checks of white and color in a circular design is universally called bai-yä-kan, or “holes in a fish-trap.” The idea is from the alternate light and dark in a fish-trap basket of unpeeled willow.

Acute triangles, however arranged, are arrow-points, or kë-cha; plate 19, shows how beautifully they can be used. The same design is used halved, and with a very broad base is kë-cha-më-to, or “big arrow-head” (plate 26).

Plate 27 is a design known throughout Lake county as ka-wil-in (Lower Lake) or ka-na-di-wa (Upper Lake) the turtle design. Very similar is that known about Clear Lake as ka-na-di-wa-koi, or turtle neck.
An odd idea is embodied in a design known as ka-tuni-tah i-bah, or "lizard tail," executed thus [ ], the idea being of a lizard's tail cut off and wriggling.

A common, and one of the finest, Pomo designs in plate 17, is known widely as bu-di-le: bu is the Indian word for the bulbous plant known as Brodiaea, used as food by the Pemos, and di-le is forehead. Indians have frequently given me the translation "potato head," but I have never got any clue to the connection between the name and the design.

Plate 15 is a very common design among the Pemos, and, when well executed, one of the most beautiful. Among basket collectors it has long been interpreted as a "hill with pine trees." Inquiry of Indians on numerous occasions has elucidated but
A very pretty design, often found on coarse bowls, is a representation of a spotted snake, plate 11. The Yokaias and Sanels call it sa-kal-le or garter snake; the Calpella and Ballo-kai Pamos have the very odd name of ho-do-du-du, also the name of a spotted snake.

Deer teeth, snake, water scorpion, grasshoppers' shoulders and ant, and many other designs, I have met, but I have not good material for illustration at hand. The figures of men and animals are rather rarely used. They have been made for a very long time, but are more frequently made of late years.

**BASKETS AND THEIR USES.**

The Indian has a name for each weave (which also may be applied to the form most commonly made in that weave) and other names according to the use.

The flat baskets which we generally call plagues are used by the Indians as we used plates and platters, also as winnowing baskets, and as receptacles for cooked food, dried fish, or other household goods. I have heard that the Pamos sometimes use flat baskets in a gambling game, but have never seen one so used. The generic name for all plagues of whatever weave, is dala, the Indian equivalent of our word "plate." They speak of a dala as a bam-tush dala, a ti dala, a tsai dala, etc., according to the weave.

The bowl-shaped baskets found an infinite variety of uses with the Pomo. They were his water vessels, and the smaller ones his drinking cups. After heating rocks and then brushing away the coals he could place on them large baskets filled with meats or mush and thoroughly boil the food, or he would heat rocks and throw into the baskets of food, and so cook it. The larger bowls were used for receptacles for clothing, acorns, etc., as...
were the open wicker-work sha-kans. The Pomo name for a bowl-shaped basket used for food was chi-maa, literally "mush-basket." The name of the weave might be prefixed, but as often bam-tush was used alone as the name of a tight bowl.

One of the most interesting of all baskets was the mu-chi, a basket made like a dala but with a strong rim of willow, and with a circular hole in the bottom. This basket was placed over a stone and used as the mortars of the Southern tribes are. The Indian woman sat flat on the ground and held the mu-chi firmly in place by putting a leg over each side while she wielded a heavy stone pestle with both hands.

The mu-chi was usually in the bam-tush weave, with several ti courses to give it added strength. In its construction it was woven in a perfect cone, and when completed the bottom was cut out and strong fiber woven in to prevent the loose ends from wearing. The meal when ground in a mu-chi was screened in a sieve called pase. This was a basket made in the ti weave, only the ribs and ti courses were far enough apart to leave a fine mesh. The pase answered its purpose admirably.
The conical burden baskets were called bu-gi and the net which supported them was called ka-bu. Originally the head net was made of native flax, but at the present time hop twine
is almost universally used for it. The ka-bu is sometimes orna-
mented profusely with kaia and beautifully woven.

Three-stick baskets of whatever form are called shi-bu or chi-
bu, according to the dialect, and one-stick baskets tsai. These
names are used regardless of whether the baskets are round or
oblong in shape. The commoner baskets of these weaves were
used as mush bowls or receptacles, but finely woven and orna-
mented baskets were the treasures of the family, carefully pre-
served, presented to guests (who were always expected to re-
ciprocate), or at weddings, and placed with the deceased on the
funeral pyre. At the last they all found their end in the latter
way.

A curious use of basketry was in the ba-tu or seed beater, a
long-handled basket used to beat seed from plants into burden
baskets. The ba-tu was wielded with one hand while the other
held the burden basket in a proper position to catch the seed.
The ba-tu was woven like a bam-tush, but of willow sticks. It
was reinforced by willow sticks passing across the middle to
the rim on each side and tied down with fibers.

As with nearly all Western Indians, the Pomo infant was
wrapped in swaddling clothes and tightly laced in a pappoose
basket. The pappoose basket of the Pomo is a neat piece of
weaving, but was never so ornate as those of the Klamaths and
many other tribes.

Ukiah, Cal.